Original Article

Unplanned and Risk Pregnancy, Domestic Violence and the Psychosocial Health Status of Pregnant Women in North-East Turkey

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Abstract

Background: The aim of this study was to examine the psychosocial health status of pregnant women according to domestic violence, unplanned and risk pregnancy and some demographic variables such as marital status, education levels.
Aim: the aim of this study was to examine the psychosocial health status of pregnant women according to domestic violence, unplanned and risk pregnancy and demographic variables.
Methods: 137 pregnant women who accepted to participate in the research were screened in obstetrics clinics between September 2013 and March 2014, Giresun, Turkey, using "Questionnaire" and "Pregnancy Psychosocial Health Assessment Scale". The data was evaluated by using descriptive statistics such as frequencies, percentages, means, Standard deviation and Kruskal Wallis ve Mann Whitney U Test.
Results: Psychosocial health scores for pregnant women decreased in statistical significance according to extended family structure, exposing to domestic violence, having unplanned pregnancy and risk pregnancy, low educational status of women, low educational status of partner, and being married non-officially are ($p<0.05$).
Conlusion: Mental health nurses and midwives should be trained in the detection of psychosocial health status and must be able to give psychosocial support and care for those identified as at risk during pregnancy.

Key words: Pregnancy, Psychosocial health status, Domestic violence, Unplanned and risk-pregnancy.

Introduction

Because of biological, physiological and psychosocial changes, pregnancy have been accepted as a crisis period for women (Kuğu & Akyüz, 2001). If women are not supported as emotionally, they can have serious adaptation and mental health problems (Gözüyeşil, Şirin & Çetinkaya, 2008). A pregnant woman's psychosocial health is a significant predictor of woman and newborn outcomes. Psychosocial stress during pregnancy can result in preterm birth and low birth weight (Schetter, 2011).

Pregnancy is a risky process in terms of psychosocial changes and mental illness. A study of Marcus et al. (2003) showed that a substantial number of pregnant women had significant symptoms of depression. Nierop et al. (2008), in their study of investigating buffering effects of psychosocial resources of pregnant women on psychological stress responses found that higherpsychosocial resources lower psychological stress responses during pregnancy. Moreover in a study by Lau & Yin (2011), it was demonstrated that pregnant women having poor mental health-related quality of life had higher stress levels.

On the other hand, domestic violence can negatively affect the physical and psychosocial health status of pregnant women. In a study of

women exposing to domestic violence, Bacchus, Mezey & Bewley (2004) found higher postnatal depression scores were significantly associated with domestic violence and obstetric complications. This is accordance with Jeong et al. (2013), who reported that the history of physical and sexual violence in pregnancy was aasociated with depression. Predictive factors for domestic violence during pregnancy were low educational status, unemployed, low montly income and unplanned pregnancy (Coutinho et al., 2015). Moreover, the statistically significant correlation was found between experience violence anda ge, level of education, marital status and the occupational activity of examined women by Makara-Studzinska et al. (2013).

The evaluation of psychosocial health status of pregnant women is very important. The psychosocial health status of those and risk factors should be determinated and those who were at risk should be given preventive mental health services (Gümüşdaş, Ejder-Apay & Özorhan, 2014). Health care professionals, mental health nurses and midwives in particular should be trained in the detection of psychosocial health status during pregnancy (Gourounti, Anagnostospoulos & Sandall, 2014). Nurses and midwives must be able to recognize psychosocial adjustment and give psychosocial support and care for those identified as at risk during pregnancy (Jomeen 2004). Consequently, the aim of this study was to examine the psychosocial health status of pregnant women according to domestic violence, unplanned and risk pregnancy and some demographic variables such as marital status, education levels.

Methods

Design and Sample

The aim of the study is to assess the psychosocial health of pregnant women according to domestic violence, unplanned and risk pregnancy and some demographic variables such as marital status, education levels. Since the entire population was taken as the sample group, no sampling method was used. 137 pregnant women who accepted to participate in the research were screened in obstetrics clinics between September 2013 and March 2014, from the two study sites, Giresun Woman and Child Illness Hospital and Giresun Ada Hospital. There was not any inclusion or exclusion criteria.

Instruments

"Questionnaire" and "Pregnancy Psychosocial Health Assessment Scale" were used in the data collection. Questionnaire included 19-items, such as the pregnant women's age, marital status, educational status, structure of family, the age and educational status of the wife, which aimed to investigate their socio-demographic variables, as well as questions about whether the pregnancy was planned, whether the pregnancy was risky, whether exposure to domestic violence.

The psychosocial health of pregnant women was assessed by the 46-item Pregnancy Psychosocial Health Assessment Scale, PPHAS (Yıldız, 2011). PPHAS determines psychosocial health under 6 topics which are characteristics of 'pregnancy and marital relationships', 'anxiety and stress', 'domestic violence', 'psychosocial support needs', 'family' and 'physical and psychosocial changes related to pregnancy'. While 29 item of scale rated on a Likert-type scale ranging from 1 (too much) to 5 (ever), 17 item of scale rated from 1 (ever) to 5 (too much) (total range, 46 to 230). Each of the participants was given an explanation about the details of the study before obtaining consent for them to participate in the study. The questionnaire and scale were administered and filled out by the researchers by a face-to-face interview. Each interview lasted 20-25 minutes.

Ethical Consideration

Permission was sought from the Hospital Directors of both hospitals before conducting the study. The study was conducted according to the ethics guidelines set out in the Declaration of Helsinki. The aim of the study explained to the pregnant women, verbal contents of them were obtained.

Data analysis

Data was entered into the computer using the Statistical Package for Social Sciences (SPSS version 16.0). The data was evaluated by using

descriptive statistics such as frequencies, percentages, means, Standard deviation and Kruskal Wallis ve Mann Whitney U Test. $p<0.05$ was accepted for statistical significance in all analyses.

RESULTS

The socio-demographic characteristics of the pregnant women

The women mean age was 28.18±6.34 (range 18-45). The socio-demographic characteristics of the pregnant women are summarized in Table 1. 70.1% (n=96) had nuclear family structure, 76.6% (n=105) were unemployed and 34.3% (n=47) were primary school graduates.

The majority of pregnant women(81.0%, n=111) were living in town. In this study, more than half (67.2%, n=92) of pregnant women perceived at average level their socioeconomic status. 40.9% (n=56) reported that their partners were secondary school graduates and 91.2% (n=125) of their partners were employed. 99.3% (n=136) were married. Less than half (46.7%) of pregnant women were married during less than 5 years. The average age of partners was 32.59±6.37 (range 6-48). The average age of first marriage was 21.21±5.03.

The characteristics related to pregnancy and domestic violence

Women were screened in the clinical settings at an average of 34 weeks of gestation (SD 6.41), with a range of 8–41weeks. Table 2 showed the characteristics related to pregnancy and domestic violence.

The participants were asked whether they planned their pregnancies and 71.5% (n=98) of pregnant women stated that they didn't plan their pregnancies. Although 57 pregnant women stated that thay had risk pregnancy.

The participants were also asked whether they exposed to violence from their partners and 57 (41.6%) pregnant women stated that they had been exposed to domestic violence. The over half of pregnant women (52.6%, n=30) exposed to domestic violence during less than 5 year.

The psychosocial health scores of pregnant women according to demographic variables

Table 3 shows the comparison of pregnant women's demographic variables and psychosocial health scores. As shown, a significant difference was found between the family structure and the subtitles 'pregnancy and marital relationships', 'psychosocial support needs' and 'family characteristics' when the pregnant women's family structures and subtitles of the PPHAS was compared ($p<0.05$).

The mean scores of 'anxiety and stress', 'domestic violence', 'psychosocial support needs' and 'family characteristics' varied in pregnant women according to exposing to domestic violence ($p<0.05$). The mean scores of those who exposed to domestic violence were lower than those who didn't expose to domestic violence.

The PPHAS score mean was 178.97±18.7 for unplanned pregnancies, and 191.10±17.2 for planned pregnancies. There was a statistically significant difference between unplanned pregnancy and the subtitles 'pregnancy and marital relationships' and 'family characteristics' ($p<0.05$). Compare with women who had planned pregnancies, those who had unplanned pregnancies had lower subtitles score means. The PPHAS score means of women who had risk pregnancy were lower than those not having. A significant difference was found between the risk pregnancy and the subtitles 'pregnancy and marital relationships' and 'anxiety and stress' ($p<0.05$).

Moreover, the mean scores of 'pregnancy and marital relationships', 'anxiety and stress' and 'domestic violence' varied according to the educational status of partner. As a result of the statistical analysis, it was determined that mean scores of those whose partners had secondary school education were lower than those whose partners we high school and above education graduates ($p<0.05$). Additionally, there was a statistically difference in the mean scores of 'pregnancy and marital relationships', 'psychosocial support needs' and 'family characteristics' according to women's

educational status ($p<0.05$). The mean scores of women who had primary school education were lower than women who had high school and above education.

Examining the marital status, it was observed that in subtitles of 'domestic violence' and 'psychosocial support needs', the mean scores of the pregnant women who were officially marriages were higher than themean scores of those who were religious marriages. The *difference between two groups* is *statistically significant* ($p<0.05$).

Table 1. The socio-demographic characteristic of pregnant women (n=137)

Socio-demographic characteristic		N	%
Family structure	**Nuclear**	96	70.1
	Extended	41	29.9
Women's educational status	**Primary school**	47	34.3
	Secondary school	37	27.0
	High school	33	24.1
	University	20	14.6
Women's employment status	**Employed**	32	23.4
	Unemployed	105	76.6
Place they live in	**Village**	26	19.0
	Town	111	81.0
Perceived socio-economic status	**High**	41	29.9
	Average	92	67.2
	Low	4	2.9
Educational status of partner	**Literate**	6	4.3
	Primary school	28	20.4
	Secondary school	56	40.9
	High school	21	15.3
	University	26	19.0
Employment status of partner	**Employed**	125	91.2
	Unemployed	12	8.8
TOTAL		137	100.0

Table 2. The characteristics related to pregnancy and domestic violence (n=137)

		N	%
Unplanned pregnancy	**Yes**	39	28.5
	No	98	71.5
Risk pregnancy	**Yes**	42	30.7
	No	94	68.6
Domestic violence	**Yes**	57	41.6
	No	80	58.4
Duration of violence, y	**< 5**	30	52.6
	5-10	14	24.6
	>10	13	22.8

Discussion

The first finding of present study revealed that PPHAS mean scores of pregnant women who had large family structure were lower compared to those who had nuclear family structure. This finding is not congruent with previous report that Kaye et al. (2006) found that having nuclear family structure was accepted as a psychosocial risk factor during pregnancy in terms of low health outcomes. But in line with our finding, there are several studies that investigated the relationship between family structure and psychological support (Senturk et al. 2011, Jeong et al. 2013). They claimed that having lower emotional support from the husband increased the incidence of depression in extended families. This finding may be related to decision-making processes and traditional child-rearing attitudes in extended families in Turkey.

A second prominent finding of the present study pointed out that PPHAS mean scores of pregnant women exposing to domestic violence were lower. In agreement with our results, prior research found that domestic violence was significantly associated with high psychosocial stress (Woods et al. 2010). Tiwari et al. (2008), in their study of 3245 women applying antenatal clinics and using the scales of intimate partner violence, postnatal depression and health-related quality of life survey, found that 296 (9.1%) reported abuse by an intimate partner in the past year. Women in the psychological abuse group had a higher risk of postnatal depression and lower psychosocial health.

The third prominent finding of the present study indicates that compare with women who had planned pregnancies, those who had unplanned pregnancies had lower PPHAS score means. Weobong et al. (2014), in their study of 21,135 women having antenatal depression found that one of the psychosocial determinants for mental health was unplanned pregnancy. Also domestic violence is a risk factor for unwanted pregnancy. Both abortion as a result of stress in abusive relationships and unwanted pregnancy affect the psychological adaptation of women to pregnancy (Kaye et al. 2006). Likewise, Karaoglu et al. (2005) found that unwanted pregnancy were determined to be the one of main predictors of poor psychosocial health during pregnancy.

The fourth finding of present study revealed that PPHAS score means of women who had risk pregnancy were lower than those not having. In a study of women who had high-risk pregnancies, Thiagayson et al. (2013) found antenatal depression and anxiety were highly prevalent in high-risk pregnant women. These findings were not congruent with previous report that Dulude et

al. (2002), in their study of examining the effects of high-risk pregnancy on the psychological well-being found that there weren't no differences in the average psychological scores of high and low-risk pregnancies.

The fifth prominent finding of the present study indicates that the mean scores of 'pregnancy and marital relationships' of women whose partners had secondary school education were lower than those whose partners we high school and above education graduates (Table 3).In contrast to the present study, Ergönen et al. (2009) found that the rate of domestic violence was noted highly among husbands of women who graduated from university compared to other graduates. Again Karaoglu et al. (2005) found that low education level of husband were determined to be the one of main predictors of poor psychosocial health during pregnancy.

On the other hand, the mean scores of 'anxiety and stress' and 'domestic violence' were lower among partners of women who graduated from high school compared to partners who were university graduates. Additionally, the mean scores of women who had primary school education were lower than women who had high school and above education (Table 3). These are accordance with Lau & Yin (2011), who reported that pregnant women who had a lower level of education had higher levels of perceived stress. In several studies which were carried out by Kaye et al. (2006) and Gourounti, Anagnostopoulos & Sandall (2014), it was demonstrated that having lower education was accepted as a psychosocial risk factor related to mental illness during pregnancy.

Finally, in the present study examining the marital status, it was observed that 'domestic violence' and 'psychosocial support needs'mean scores of the pregnant women who were officially marriages were higher than themean scores of those who were religious marriages. This is accordance with Keskinoglu et al. (2007), who reported that non-official marriage was risk factor in terms of adverse obstetric and neonatal outcomes in adolescent pregnant women. This finding may be related to marital satisfaction. Prior research found that while low marital satisfaction was significantly associated with low psychosocial outcomes during pregnancy, marital status was not (Gourounti, Anagnostopoulos & Sandall, 2014). Again, in a study of Sagrestano et al. (2004) found that more frequent violence was associated with less satisfaction with support from and more negative interactions with the baby's father.

Conclusion

In summary, extended family structure, exposing to domestic violence, having unplanned pregnancy and risk pregnancy, low educational status of women, low educational status of partner, and being married non-officially are psychosocial risk factors for pregnant women. These psychosocial risk factors can effect negatively on the physical and psychological health of mother and newborn. Thus the evaluation of psychosocial health status of pregnant women is very important.

Recommendations

These points can be suggested as results of this study: mental health nurses and midwives should be trained in the detection of psychosocial health status during pregnancy. They must be able to recognise psychosocial adjustment and give psychosocial support and care for those identified as at risk during pregnancy. The psychosocial care units should serve in all obstetric clinics of hospitals and psychosocial care team should cover special mental health nurses and midwives.

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Table 3. The psychosocial health scores of pregnant women according to demographic variables (n=137)

	Pregnancy and marital relationships $\bar{X}$±SD	Anxiety and stress $\bar{X}$±SD	Domestic violence $\bar{X}$±SD	Psychosocial support needs $\bar{X}$±SD	Family $\bar{X}$±SD	Physical /psycho-social changes $\bar{X}$±SD	Total score $\bar{X}$±SD
Family structure							
Nuclear	55.66±6.37	27.38±5.93	38.30±6.09	28.18±5.74	17.61±2.13	23.69±3.96	190.85±18.0
Large	51.05±8.74	26.25±5.66	37.05±3.97	25.85±4.17	16.10±2.92	23.57±4.07	179.88±21.5
	0.002	0.325	0.297	**0.009**	**0.004**	0.803	**0.006**
Domestic violence							
Yes	53.24±7.71	25.21±4.28	36.96±7.60	26.84±7.33	16.45±2.61	22.91±3.61	181.63±22.4
No	55.07±7.16	28.37±6.48	38.63±3.32	27.97±3.43	17.68±2.25	24.20±4.17	191.95±16.2
	0.120	**0.002**	**0.000**	**0.014**	**0.004**	0.063	**0.001**
Unplanned pregnancy							
Yes	47.74±8.47	26.82±5.50	37.25±3.78	27.61±7.90	15.94±2.48	23.58±4.19	178.97±18.7
No	56.94±4.95	27.14±6.02	38.20±6.14	27.45±4.08	17.65±2.31	23.69±3.92	191.10±17.2
	0.000	0.813	0.414	0.302	**0.000**	0.910	**0.002**
Risk pregnancy							
Yes	52.95±6.38	25.64±6.57	37.23±4.76	26.59±3.98	16.80±2.20	23.66±4.21	182.90±19.9
No	54.84±7.81	27.68±5.46	38.22±5.92	27.91±5.86	17.30±2.59	23.62±3.90	189.60±19.3
	0.039	**0.028**	0.635	0.199	0.159	0.956	**0.040**

	Pregnancy and marital relationships $\bar{X}$±SD	Anxiety and stress $\bar{X}$±SD	Domestic violence $\bar{X}$±SD	Psychosocial support needs $\bar{X}$±SD	Family $\bar{X}$±SD	Physical /psycho-social changes $\bar{X}$±SD	Total score $\bar{X}$±SD
Educational status of partner							
Secondary school	54.23±7.44	27.09±5.47	38.58±7.16	27.56±6.93	17.21±2.42	23.60±4.03	188.29±20.3
High school	55.42±5.85	23.09±4.18	37.00±2.54	26.57±3.70	17.52±2.29	22.76±3.85	182.38±14.0
University	58.34±3.80	28.42±6.46	39.03±1.88	28.65±3.83	17.53±2.31	23.84±4.22	195.85±13.5
	0.002	**0.015**	**0.006**	0.125	0.722	0.661	**0.043**
Women's educational status							
Primary school	50.30±9.05	27.39±5.87	36.60±5.14	26.52±7.53	16.06±2.81	23.19±4.02	180.09±23.6
Secondary school	54.94±5.27	26.50±5.35	39.02±8.73	27.50±3.82	17.13±2.15	24.44±3.70	189.56±18.2
High school	57.54±4.94	26.63±5.93	38.24±1.90	27.60±4.32	18.36±1.63	23.87±4.44	192.27±15.7
University	57.20±6.17	27.70±6.89	38.70±1.75	29.75±2.78	18.10±1.88	23.15±3.64	194.60±12.3
	0.000	0.860	0.161	**0.001**	**0.000**	0.343	**0.014**
Marital status							
Officially	54.37±7.46	27.04±5.83	38.02±5.59	27.62±5.41	17.20±2.48	23.69±3.98	187.97±19.6
Religious	51.33±5.50	27.33±8.50	34.00±2.64	22.00±2.00	15.66±2.08	22.00±4.35	172.33±13.5
	0.302	0.994	**0.025**	**0.018**	0.160	0.504	0.080