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Comparison of Women with Risk-free and High-Risk Pregnancy and Family Resilience

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Abstract

System theory argues that every family is a system and all experience certain developmental risks/challenges which affect the balance of the family. Pregnancy can be considered as a developmental risk and a challenge that a family may encounter. The first aim of the study is to reveal the factors that contribute to their resilience during the process of pregnancy especially when they experience problematic situations. The second aim is to compare whether certain factors change in accordance with group type (risk-free and high-risk pregnancy). One-hundred ninety-two participants took part in the study, (Age Mean= 28.65, SD= 5.90). There were 105 women in risk-free pregnancy and 87 in high risk pregnancy group. Together with demographics, an open-ended questions was asked. The results of content analysis include two basic themes which were social support and beliefs systems. There were six categories under the theme of social support (spouse support, family support, relative support, friend support, doctor support, and child support). Meanwhile, there are two categories under the theme of belief systems (religious belief and positive outlook). The comparison based on social support and positive outlook showed no difference among the groups. Only significant difference was evidenced in religious belief among the groups, high-risk pregnant women emphasized more religious belief. Finally, according to age and abortion experience, significant differences were found among groups. First, high-risk pregnant women were older than risk-free group, second, high-risk pregnant women emphasized greater number of abortion experiences. The findings were discussed in the light of relevant literature.

Keywords: family resilience, content analysis, high-risk pregnancy, risk-free pregnancy

Although women describe the process of pregnancy as a pleasing condition, changes and necessities during this period, and the social context in which pregnancy occurs increase women's anxiety and stress (Guardino & Schetter, 2014). The sources of this anxiety and stress might vary such as concern for the baby's state of health, impending childbirth and future parenthood responsibilities (Lobel, Hamilton, & Cannella, 2008). It is found out that being a younger woman and a single mother, living in a disadvantaged neighborhood, an unintended pregnancy, and having long-term physical and psychological health problems are correlated with prenatal anxiety (Henderson & Redshaw, 2013). While the process of pregnancy is a condition that causes physiological, familial, occupational and emotional distress that requires adjustment; for women with low income, the requirements are perceived to be even harsher (Norbeck & Anderson, 1989; Ritter, Hobfoll, Lavin, Cameron, & Hulsizer, 2000).

Whereas having a child in the family is a source of stress, in some conditions (such as high-risk pregnancy), stress increases even more (Kemp & Hatmaker, 1989). High-risk pregnancy is described as any condition that negatively affects the health of the mother or the fetus and both of their well-being (Cunningham et al., 1997).

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These conditions include diabetes, congenital malformation, premature labor, and pre-eclampsia that can cause problems in fetus' development, liver failure, intracranial haemorrhage in women, and disordered blood clotting, all of which increase the risk in pregnancy and cause miscarriages (Lee, Ayers, & Holden, 2012). In the studies carried out with pregnant women who have risky pregnancy, it is found out that depression and anxiety levels of these women are higher compared to women without any specific pregnancy risks (Thiagayson et al., 2013). While spiritual well-being of pregnant women who are given bed rest due to their high-risk pregnancy is found to be lower compared to women with risk-free pregnancy, their level of anxiety is higher than women with risk-free pregnancy. In both groups, it is concluded that the higher spiritual well-being, the less anxiety and depression become (Dunn, Handley, & Shelton, 2007).

Regarding the ways in which pregnant women cope with stressful situations they experience, Hamilton and Lobel (2008) stated that spiritual coping is the most frequently used technique. Yali and Lobel (2002) emphasized that optimism and positive appraisal during pregnancy decrease emotional distress. Studies indicate that social support is a predictor of a better psychological and physical well-being during and after pregnancy. Rini and his colleagues (2006) discovered that women who perceive themselves as receiving more effective spousal support during pregnancy have lower anxiety. Likewise, Virit and his colleagues (2008) observed that depression decreases in response to the increase in social support (from family, friends and spouse). Another study revealed that spousal relationships which are supportive during pregnancy provide a significant contribution to the well-being of the mother and the baby after the birth (Stapleton et al., 2012). In the study which compared the processes of high-risk and risk-free pregnancies, Gumusdal, Ejder Apay, and Ozorhan (2014) demonstrated that women with both high-risk and risk-free pregnancies receive support during their pregnancies and this comes mostly from their spouses. Giurgescu, Penckofer, Maurer, and Bryant (2006) proposed that high levels of social support provided for women with high-risk pregnancy have a direct effect on preparation to motherhood and increase positive interpretation of the condition they are in. Beside this, praying is found to be the most frequently used coping strategy during high-risk pregnancy. Likewise, more optimistic women experience a decrease in their distress since they consider their pregnancy to be easily manageable (Lobel, Yali, Zhu, DeVincent, & Meyer, 2002).

In this study, as pregnancy is a condition that occurs in a social context, the distressing and stressful situations that pregnant women experience are discussed according to system theory. System theory argues that every family is a system and this system is affected by certain risks/challenges which affect the balance of the family. One of these challenges is the process of including one member into that system; that is the process of pregnancy. Developmental risks are expected risks in family life cycle. From this perspective, pregnancy can be considered as a developmental risk and a challenge that a family may ever encounter. Considering the fact that pregnancy is a process that influences the whole family, why some women adapt better than others when they face stressful situations is evaluated within the context of Walsh's (2012) family resilience theory. Walsh (1998) expressed that family resilience is a family's coping and adjustment process as a functional entity.

She emphasized three dimensions; that are, belief systems, organizational patterns and communication processes. Walsh (2012) mentions key processes of family resilience which contribute to the cohesion of the family. She states that belief systems of the family, organization patterns and communication processes provide recovery by means of supporting optimal coherence, decreasing risks and protecting from stress during problematic times. Firstly, *family belief systems* consist of making meaning of adversity, positive outlook, transcendence and spirituality. Making meaning of adversity is defined as the sense of wholeness and seeing the experienced problems as manageable by means of normalizing the problematic situation. Positive outlook contains hope, courage, optimism. Transcendence and spirituality consist of religious belief and performing their rituals, humanism beyond religious belief. Secondly, *organization patterns* are based on flexibility; which means the ability to adapt challenges and the ability to establish a new sense of balance. The third dimension of family resilience is family communication processes that involves clear and suitable messages and is collaborative problem-solving which contains participating in the decision making process, creative brain storming, structured conflict resolution (Walsh, 2012). In this regards, the first aim of the study is to reveal the factors that contribute to their resilience during the process of pregnancy especially when they experience problematic situations. The second aim is, to examine whether certain factors (mostly demographic) change in accordance with group type (risk-free and high-risk pregnancy). In accordance with these aims, the answers to these questions are investigated: 1. What are the factors that contribute to pregnant women' resilience? 2. Are there differences between risk-free and high-risk pregnant women according to their resilience? 3. Are there differences between risk-free and high-risk pregnant women according to some demographic variables?

Method

Participants

The participants are 192 pregnant women. 105 of them are risk-free (54.7%), and 87 of them are high-risk pregnant (45.3%) who are under examination by Zekai Tahir Burak Maternity Hospital (located in Ankara, the capital city of Turkey). Inclusion criterion of participants are being pregnant, married and having at least 18 years of age. The mean age of the participants was 28.65 years (range=18-45, *SD*=5.90).

Materials

The participants were asked to indicate their age, education level, income level, duration of pregnancy, number of children, existence of woman and husband's job, existence of an abortion experience and husbands' education level. Education level was expressed by choosing one of the response alternatives from 1 (illiterate) to 7 (graduate study), and monthly income level was chosen from 1 (1000TL and below) to 6 (5000TL and above). Duration of pregnancy was indicated as number of weeks, abortion experience was indicated as 1=Yes or 2=No, having child was indicated as 1=Yes or 2=No and having a job was indicated as 1=Yes or 2=No. Lastly, participants were asked an open-ended question, "What helps you to overcome adversity situations that you encountered during pregnancy?"

Procedure

Prior to the study, all the required permissions were obtained from the Ethical Committee of Zekai Tahir Burak Maternity Hospital, Ankara. Participation to this study was voluntary. Participant's answers were kept anonymous and used only for research purposes. Informed consent of the participants was taken and confidentiality of responses was assured. The participants were given demographic information form and an open-ended question.

Results

Descriptive Statistics

Demographic variables and related statistical findings of risk-free and high-risk pregnant women were presented in Table 1.

Table 1 Demographic Variables According to Pregnancy Type

	Risk-free Pregnancy				High-risk Pregnancy			
Variables	**M**	**SD**			**M**	**SD**		**%**
Age	27.28	5.38			30.34	6.10		
Number of Children	1.31	.58			1.49	.67		
Week of pregnancy	34.25	6.44			30.3	8.7		
Education Level								
Less than High School			30	15.7			36	18.8
High School			50	26.2			36	18.8
Undergraduateand more			25	13.1			14	7.3
Income Level								
Less than 2.000TL			71	37.8			56	29.8
2001- 3000 TL			18	9.6			16	8.5
3001 and more			14	7.5			13	6.9
Husband'Education Level								
Less than High School			30	15.8			34	17.8
High School			45	23.7			28	14.7
Undergraduate and more			30	15.8			23	12.2
Women's Job								
Yes			25	23.8			19	21.9
No			71	67.6			66	75.9
Husband's Job								
Yes			102	97.1			85	97.7
No			3	2.9				2.3
Abortion experience								
Yes			21	20			47	54
No			80	76			38	43.7
Having a child								
Yes			53	50.2			50	47.6
No			51	58.6			35	40.2

As seen in Table 1, the mean age of risk-free pregnant women was 27.28 (*SD*=5.38), and the mean age of the high-risk group was 30.34 (*SD*=6.10). Moreover, the age range of women with high-risk group was 27-35, and the age range of risk-free group was 18-26. Education level of women ranged from 1 (illiterate) to 7 (graduate study) with a mean of 4.90 (*SD*=.96) for risk-free and 4.53 (*SD*=1.05) for high-risk pregnant women. Monthly income ranged from 1 (1000TL and below) to 6 (5000TL and above) with the mean of 2.26 (*SD*=1.19) for risk-free, and for high-risk pregnant women was 2.38 (*SD*=1.19). Education level of husband has a mean of 4.90 (*SD*=.99) for risk-free pregnant women and 4.66 (*SD*=1.19) for high-risk group. Number of children has a mean of 1.31 (*SD*=.58) for risk-free and 1.49 (*SD*=.67) for high-risk pregnant women.

Content Analysis

The data acquired from the open-ended question was analyzed by using content analysis. To ensure the reliability of the study, inter-coder reliability had been calculated and found as 98%. The results of content analysis include two basic themes which are social support and beliefs systems. There are six categories under the theme of social support (spouse support, family support, relative support, friend support, doctor support, and child support). Meanwhile, there are two categories under the theme of belief systems (religious belief and positive outlook). Table 2 shows themes and categories.

Table 2 Themes and categories

Themes	Categories	Frequency	Percentage
Social Support	Spouse support	103	53.4
	Family support	51	26.4
	Child support	24	12.5
	Relative support	5	2.6
	Friend support	4	2.1
	Doctor support	4	2.1
Belief Systems	Positive Outlook	43	22.4
	Religious Belief	30	15.6

As seen in Table 2, the first theme, "social support" was expressed by 191 participants (99.1 %). 103 participants (53.4%) expressed that they had support from their spouses, indicating the first type of support. The second type of support was family support with 51 participants (26.4 %) emphasizing that they received support from both of their own and spouses' parents. The third one is support from their children, and this type of support was stated by 24 participants (12.5 %). Receiving support from friends was stated by 4 participants (2.1%) while 5 participants (2.6%) expressed that they received support from relatives; and 4 participants (2.1%) mentioned receiving support from doctors.

The second theme, "belief systems", includes positive outlook and religious belief. Positive outlook was expressed by 43 participants (22.4 %). Within the context of positive outlook, participants stated that they coped with situations by thinking about being a mother, thinking positively, being patient, being courageous and thinking about the existence of the baby. Religious belief was expressed by 30 participants (15.6 %). Participants stated that they coped with stressful situations by their faith in God, praying, performing religious rituals and having religious conversations with preachers.

Group Comparisons

Various comparisons have been conducted between risk-free and high-risk pregnant women on Walsh's dimensions. The comparison based on social support showed no difference among the groups, $X^2_{(3)}=3.19$, $p \geq .36$. Two groups did not differ on positive outlook either, $X^2_{(1)}=1.47$, $p \geq .22$. Only significant difference was evidenced in religious belief among the groups, $X^2_{(1)}=4.66$, $p < .05$;high-risk pregnant women emphasized more religious belief.

Finally, according to age and abortion experience, significant differences were found among groups. First, high-risk pregnant women were older than risk-free group, $t(182)= 3.61$, $p < .05$; second, high-risk pregnant women emphasized greater number of abortion experiences, $X^2_{(1)}=23.69$, $p < .05$.

Discussion

In compliance with Walsh's family resilience theory, two different themes (social support and belief systems) and their subcategories have emerged. In the categories under the theme social support, "spousal support" is the most expressed type of support. The second one is "family support", and "support from their children" is emphasized as the third one. Other types of support, namely support from relatives, friends and doctors, are expressed by very few of the participants. "Spousal support", which is the most expressed type of support in this study, is also indicated by the results of other studies (Giurgescu, et al., 2006; Gumusdal et al.,2014; Rini et al.,2006; Stapleton et al., 2012). It is emphasized that anxiety levels decrease in women who perceive themselves as receiving more effective spousal support during pregnancy (Rini et al.,2006), couple relationships which are supportive during pregnancy have a significant contribution to the well-being of the mother and baby (Stapleton et al., 2012), high levels of social support to women with high-risk pregnancy have a direct effect on preparation to motherhood (Giurgescu, et al.,2006), pregnant women, regardless of the type of pregnancy, received the most support from their spouses (Gumusdal et al.,2014).

Family support is the second emphasized type of support after spousal support. It is stated that depression decreases in response to the increase in social support during pregnancy (family, friends and spouse) (Virit et al., 2008). Support from children, which was not expressed in other studies but discovered in this study, is the third most emphasized type of support after spousal and family support. It can be considered that this results from children's desire to have siblings and the close relationship between the mother and the child. The fact that pregnant women with children receive help from their children during pregnancy can be interpreted as a condition that facilitates coping with their problems. Positive outlook and religious belief that emerged within the scope of this study are mentioned frequently by pregnant women. The results of this study are also supported by the findings of other studies. Hamilton and Lobel (2008) emphasized that spiritual coping is the most frequently used coping strategy during pregnancy while Yali and Lobel (2002) emphasized that optimism and positive appraisal during pregnancy decrease emotional distress.

This study examines whether there are any differences between groups in terms of social support, religious belief and positive outlook. While there were no differences between women with risk-free high-risk pregnancy on social support and positive outlook, there are differences in terms of religious belief. Women with high-risk pregnancy utilize religious belief more than the risk-free group. The finding of this study that both groups use positive outlook and social support frequently is also indicated and supported by the findings of other studies (Giurgescu, et al., 2006; Gumusdal et al.,2014; Lobel et al., 2002;Rini et al.,2006; Stapleton et al., 2012; Yali & Lobel,2002). Moreover, the finding of this study that women with high-risk pregnancy use religious belief more as a coping strategy is supported by other studies (Giurgescu, et al., 2006; Lobel et al., 2002). Eventually, it is observed that women with high-risk pregnancy have a higher average of age and a higher rate of abortion experience. The fact that high-risk pregnancy increases with age is also indicated by Gumusdal and his colleagues (2014). The ages of women with risk-free and high-risk pregnancy differ; the age range of women with high-risk pregnancy is 27-35 while the age range of women with risk-free pregnancy is 18-26. In another study, Hafez, Dorgham and Sayed (2014) also posited that high-risk pregnancy increase with the age of the mother, and they also found out that the percentage of women who experienced two or more abortions was high in high-risk pregnancy group.

To conclude, there were not widespread differences between risk-free and high-risk group in terms of the sources of support they get from their close social environment. However, the relief they get from their belief system made great difference. High-risk group reported its importance more than the comparison group. This brings about the necessity to learn more about one of the subfields of psychology that is called *Psychology of Religion and Spirituality*, emerged as the 36th subdivision by American Psychological Association. To study the cultural aspects of the spirituality would also be beneficial to understand how they would work to help pregnant women, especially when their pregnancy is risky. The findings concerning the links between high-risk pregnancy, age and the emphasis of belief were also striking. It is evidenced that age and risky pregnancy are positively correlated. As we know by heart, findings of correlation analysis are always arguable; one can never come up with cause-effect explanations. Therefore, we cannot argue that age increases the risk or the risk in pregnancy increases the emphasis on belief.

There may always be alternative explanations. For instance, here, the moderating effect of age can be examined in future studies. Age might increase the probability of high-risk pregnancy but it also may increase the attachment of people to their beliefs as they age. Future studies are highly recommended to enlighten these vacancies in the literature.

References

Cunningham, F. G.,Gant, N. F.,Leveno, K. J.,Gilstrap, L. C.,Hauth, J. C., & Wenstrom, K. D.(1997). Williams obstetrics.(21th Ed.). Stanford, CT: Appleton & Lange.Dunn, L. L., Handley, M. C., & Shelton, M. M. (2007). Spiritual well-being, anxiety and depression in antenatal women on bedrest. Issues in Mental Health Nursing, 28:1235–1246.

Giurgescu, C., Penckofer, S.,Maurer, M. C.,Bryant,F. B. (2006). Impact of uncertainty, social support, and prenatal coping on the psychological well-being of high-risk pregnant women. Nursing Research, 55(5), 356-365.

Guardino, C. M., & Schetter, C. D. (2014) Coping during pregnancy: a systematic review and recommendations, Health Psychology Review, 8 (1), 70-94, doi:10.1080/17437199.2012.752659.

Gumusdal, M., Ejder Apay, S., & Ozorhan, E. (2014). Riskli Olan ve Olmayan Gebelerin Psiko-Sosyal Sağlıklarının Karşılaştırılması. *Sağlık Bilimleri ve Meslekleri Dergisi, 1*(2), 32-42.

Hafez, S.K. Dorgham, L. Sh., & Sayed, S. A.M.(2014). Profile of High-risk Pregnancy among Saudi Women in Taif-KSA. World Journal of Medical Sciences, 11 (1): 90-97.Hamilton, J. G. & Lobel, M. (2008). Types, patterns, and predictors of coping with stress during pregnancy: Examination of the Revised Prenatal Coping Inventory in a diverse sample. Journal of Psychosomatic Obstetrics & Gynecology,29(2): 97–104.

Henderson J. & Redshaw M. (2013). Anxiety in the perinatal period: antenatal and postnatal influences and women's experience of care. Journal of Reproductive and Infant Psychology, 31:5, 465-478, doi: 10.1080/02646838.2013.835037.

Kemp, V.H., & Hatmaker, D. D. (1989). Stress and social support in high-risk pregnancy. Research in Nursing & Health, 12, 331-336.

Lee, S, Ayers, S., & Holden, D. (2012). Risk perception of women during high-risk pregnancy: A systematic review. Health, Risk & Society, 14 (6), 511-531. doi:10.1080/13698575.2012.701277.

Lobel, M., Hamilton, J. G., & Cannella, D. T. (2008). Psychosocial perspectives on pregnancy: Prenatal maternal stress and coping. Social and Personality Psychology Compass, 2(4),1600-1623.

Lobel, M., Yali, A. M., Zhu, W., DeVincent, C. & Meyer, B. (2002). Beneficial Associations Between Optimistic Disposition and Emotional Distress in High-Risk Pregnancy.Psychology & Health, 17(1), 77-95. doi: 10.1080/08870440290001548

Norbeck, J. S., & Anderson, N. J. (1989). Life stress, social support, and anxiety in midand late-pregnancy among low income women. Research in Nursing & Health, 12(5), 281-287.

Rini, C., Dunkel Schetter, C., Hobel, C. J., Glynn, L. M., & Sandman, C. A. (2006). Effective social support: Antecedents and consequences of partner support during pregnancy. Personal Relationships, 13, 207. doi:10.1111/j.1475-6811.2006.00114.x

Ritter, C., Hobfoll, S. E., Lavin, J., Cameron, R. P., & Hulsizer, M. R. (2000). Stress, psychosocial resources, and depressive symptomatology during pregnancy in low-income, inner-city women. Health Psychology, 19(6), 576-585.

Stapleton, L.R., Schetter, C.D., Westling, E., Rini, C., Glynn, L. M., Hobel, C. J., & Sandman, C.A. (2012). Perceived partner support in pregnancy predicts lower maternal and infant distress. Journal of Family Psychology, 26(3), 453-63. doi: 10.1037/a0028332.

Thiagayson, P., Krishnaswamy, G., Lim, M. L., Sung, S. C., Haley, C. L., Fung, D. S. S., Allen Jr, J. C., & Chen, H. (2013). Depression and anxiety in Singaporean high-risk pregnancies prevalence and screening. General Hospital Psychiatry, 35, 112–116.

Virit, O., Akbaş, E., Savaş, H. A., Sertbaş, G., & Kandemir, H. (2008). Gebelikte Depresyon ve Kaygı Düzeylerinin Sosyal Destek ile ilişkisi. Nöropsikiyatri Arşivi, 45, 9-13.

Yali, A. M., & Lobel, M. (2002). Stress- resistance resources and coping in pregnancy. Anxiety, Stress and Coping, 15(3), 289-309.