

The Relationship between the Resilience, Prenatal Stress, and Confidence for Childbirth: Focused on Pregnant Woman

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Abstract

Objectives: This study attempts to provide the base materials for developing the program managing stress of pregnant woman. **Methods/Statistical Analysis:** The tools used for data collection are standardized 25 questions in resilience measurement, 26 questions of stress measurement before childbirth and 15 questions of childbirth confidence. To find out the general characteristics of subjects, prenatal stress and confidence, it was analyzed by getting frequency and percentage with descriptive statistics. To find out the correlation between resilience, prenatal stress, and confidence for childbirth, the correlation analysis of Pearson was used. **Findings:** The age of targets was 32.2 years old in average. Resilience of whole subjects was an average of 63.2 points and looking at each subordinate scope, toughness was 18.57 points from the total of 32 points, endurance was 18.70 points from the total of 32 points, optimism was 13.58 points from the total of 20 points, control was 7.50 points from the total of 12 points, and spirituality was 4.89 points from the total of 8 points. Prenatal stress was 78.8 points in average, and looking at for each sub-area, stress for fetus was 27.4 points, stress for themselves was 33.1 points, and stress related with spouse was 18.3 points. Confidence in childbirth appeared as an average of 42.0 points. If we look at analysis of correlation between resilience of subjects, prenatal stress and confidence in childbirth, resilience had negative correlation with prenatal stress, resilience had positive correlation with confidence in childbirth and prenatal stress had negative correlation with confidence in childbirth. **Improvements/Applications:** The research on resilience of pregnant women should be made actively in the future, and developing the program enhancing resilience of pregnant women as nursing intervention is needed.

Keywords: Confidence for Childbirth, Pregnant Woman, Prenatal Stress, Resilience

1. Introduction

Pregnancy is an important event in the development process of women and the normal physiological process, there are many physical and psychological changes during pregnancy^{1,2}. In addition, subsequent delivery is the developmental crisis experienced in their lives, and at the same time it is considered as one of the most dramatic and meaningful event among events women experience³. This pregnancy is a normal physiological process of women, but the changes in physiological systems due to the pregnancy always has the potential to cause dangers or reduce the general health status for pregnant women and fetus. So it can

be called as the physiologically stressful period that women experience^{4,5}. Women experience a variety of changes by being pregnant, and the change can be different depending on the individual, and there are physical, psychological and socio-economic role-conflicts. And these changes cause stress that threatens the health of the pregnant woman^{6,7}.

Stress that pregnant women go through acts as the dynamic force need for surviving and well-being to certain extent, but when too much changes in lives in short period of time which can't afford the spare for the adaptation or big life events which are extremely burdensome occur, pregnant women have hard time adopting due to the severe stress⁸. Stress of pregnant women is the natural emotional change

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experienced by fulfilling the role as parents for the first time, but this stress affects the attachment with fetus and the development of neonatal period and infancy after⁹.

Therefore, by grasping what sub-areas of resilience reduces the stress before childbirth and effects significantly for increasing the confidence in delivery, I would like to provide base materials for developing program for the intervention for preventing stress and increasing confidence in delivery using this.

Resilience is the ability to react flexibly by adjusting the level of self-control in stressful situations, and it is the dynamic ability to maintain and improve the psychological balance¹⁰. People with resilience have the ability to adjust the level of tension and endurance depending on the situation, and they can adapt successfully by flexibly reacting to the situational needs which change in a unfamiliar situation. On this point, resilience of pregnant women is expected to strengthen positive emotions than negative emotions, such as stress or depression when they have to solve a variety of complex issues in clinical trials. As for the ability to cope with stress, the self-resilient group cope more effectively than less self-resilient group¹¹, they are reported to have the increased resistance to stress¹². And those facts support this. Therefore, the importance of resilience which can absorb the effect by controlling the effects of stress for pregnant women who are constantly exposed to stressful situation and methods to increase this should be searched.

Also, the confidence in childbirth means the confidence of pregnant women which can does well the normal vaginal delivery by successfully performing various actions required for the delivery process¹³. The confidence of delivery for mothers hospitalized in the delivery room had the negative correlation with the anxiety, so the higher the confidence of delivery was, the lower the anxiety was¹⁴. Stress for pregnancy and the confidence for delivery had close correlation, and it was seen that stress for pregnancy and the confidence for delivery had negative correlation¹⁵. It is important to overcome fear and anxiety latent in the mind for dispelling excessive anxiety of pregnant women for labor and delivery¹⁶.

2. Proposed Work

This study is a descriptive research study to examine the relationship between self-resilience of pregnant women, stress before childbirth and confidence in delivery. The subjects of this study were limited to pregnant women who are in S province, are primiparous mothers, and don't have

physical illness during pregnancy. They are pregnant women who are receiving prenatal care in obstetrics from 14th, March to 15th, April in 2015, and they are pregnant women who don't have pregnancy-related complications and understand and agreed to the purpose of this study. For data collection for this study, structured questionnaire was used. For general characteristics of subjects, age, religion, education level, income level, and marital period were investigated.

For measuring resilience, Korean version of standardized Corner-Davidson resilience measurement composed of 25 questions was used¹⁷. Each item was evaluated in 0-4 point, and the higher the score is, the greater resilience was meant. They were composed of five sub-factors of perseverance, patience, optimism, sense of control, and spirituality, and Korean version of standardized Corner-Davidson resilience measurement (K-CD-RISC) shows a high validity.

In this study, Cronbach's α appeared as .941. Prenatal stress was used as a scale for measuring the stress during pregnancy and it used the thing¹⁸. For stress of pregnant women, there are total of 26 questions that are 9 questions for stress for fetus, 11 questions for stress for themselves and 6 questions for stress related to spouse. And they are measured with Likert 5 point's measurement, and 'not worried at all' is 1 point, 'always worried' is 5 points. And the lowest is 26 points and the highest is 130 points, and it is evaluated that, the higher points are, the higher stress is. The reliability value of Cronbach's was 0.953 in this study. For confidence in childbirth, the measurement of confidence of childbirth of 15 questions and 1~4 point's measurement was used. And the range of scores was from 15 points to 60 points, and the higher scores indicate the higher confidence in childbirth and it evaluates the current confidence of oneself¹⁹. Cronbach's a reliability value in this study was 0.970.

To find out the general characteristics of subjects, prenatal stress and confidence for childbirth, it was analyzed by getting frequency and percentage with descriptive statistics. To find out differences according to general characteristics of subjects, self-resilience, prenatal stress and confidence degree for childbirth, independent samples t-test and whole arrangement variable analysis were conducted. For post-test, Scheffe statistic was used. To find out the correlation between resilience, prenatal stress, and confidence for childbirth, the correlation analysis of Pearson was used. The result of this study is as follows.

The age of targets was 32.2 years old in average, and cases of not having religion were most common as 42.1%. And for education, college graduates appeared as the highest as

50.5%. For the income, less than 2 million~3 million was most common as 42%, and for the period of marriage, 12 to 24 months were most common as shown in Table 1.

Resilience of whole subjects was an average of 63.2 points, and looking at each subordinate scope, toughness was 18.57 points from the total of 32 points, endurance was 18.70 points from the total of 32 points, optimism was 13.58 points from the total of 20 points, control was 7.50 points from the total of 12 points, and spirituality was 4.89 points from the total of 8 points as shown in Table 2.

Table 1. Demographic Characteristics.

Characteristics	Category	N	%
Age	≤ 25	10	4.1
	26-30	80	32.6
	31-35	94	38.3
	36-40	58	23.7
	> 40	3	1.3
Religion	Christianity	80	32.8
	Roman Catholic	30	12.3
	Buddhist	29	11.7
	Atheism	103	42.1
	others	3	1.1
Educational grade	≤ High school	46	18.6
	College	52	21.4
	University	124	50.5
	≥ Graduate school	23	9.5
Income	<200 million won	6	2.3
	200-300 million won	103	42.0
	301-400 million won	94	38.5
	> 400 million won	42	17.2
Period of marriage	< 12 months	34	13.9
	12-23 months	86	35.0
	24-35 months	70	28.6
	36-47 months	43	17.4
	≥ 48 months	12	5.1

Table 2. Resilience of subjects

Characteristics	M	SD
Resilience	63.20	15.35
Toughness	18.57	6.23
Endurance	18.70	5.42
Optimism	13.58	3.73
Control	7.50	2.35
Spirituality	4.89	1.23

Table 3. Prenatal stress of subjects.

Characteristics	M	SD
Prenatal stress	78.8	12.78
Stress for fetus	27.4	7.42
Stress for themselves	33.1	8.31
Stress related with spouse	18.3	5.15

Table 4. Confidence for childbirth of subjects.

Characteristics	M	SD
Confidence for childbirth	42.0	7.64

Table 5. Correlation between resilience, prenatal stress and confidence for childbirth.

	Resilience	Prenatal stress	Confidence for childbirth
Resilience	1		
Prenatal stress	-0.683	1	
Confidence for childbirth	0.753	-0.572	1

Prenatal stress was 78.8 points in average, and looking at for each sub-area, stress for fetus was 27.4 points, stress for themselves was 33.1 points, and stress related with spouse was 18.3 points as shown in Table 3.

Confidence in childbirth appeared as an average of 42.0 points as shown in Table 4.

If we look at analysis of correlation between resilience of subjects, prenatal stress and confidence in childbirth, resilience had negative correlation with prenatal stress, resilience had positive correlation with confidence in childbirth and prenatal stress had negative correlation with confidence in childbirth. And these were statistically significant. In other words, if resilience was increased, prenatal stress was decreased and confidence of childbirth was increased as shown in Table 5.

3. Conclusion

The research on resilience of pregnant women should be made actively in the future, and based on this, developing the program enhancing resilience of pregnant women as nursing intervention is needed and the research to verify this is needed for managing stress of pregnant women and enhancing confidence in childbirth.

In addition, various measures are being prepared currently to evaluate resilience, and also, biological

methodologies such as brain imaging and molecular biological techniques are being developed continuously. So the potential for developing research for resilience in the future is thought to be very high (Jeong Yeongeun, Chae Jungo, 2010). From the psychopathology perspective, active researches for resilience should be made for the enhancement program of resilience, for not only patients, but also the general public and high-risk group for stress.

4. References

- Hong JH. The Effects of Pregnancy and Husband's Social Support on Women's Depression and Self-Esteem. Unpublished Master's Thesis, Hoseo University, 2005.
- Min S. The Effect of the Family Delivery on Postpartum Depression and the Maternal Attachment, Indian Journal of Science and Technology. 2016; 9(25):1–6.
- Lee KS. Experience of the Women who Succeeded Natural Birth after Cesarean Section – Based on the Deliveries at the Midwife's Clinic. Journal of Qualitative Research. 2003; 4(2):20–29.
- Reeder SJ, Martin LL. Maternity Nursing, 14th Edition. Philadelphia, J.B. Lippincott Co: US, 1987, p. 260–61.
- Kim YA. A Study on the Relationship among Stress, Social Support and Compliance of Prenatal Care in Immigration Pregnancy Women, Master's Thesis, Kyeongsang National University, 2008.
- Kwon JH. A Test of a Vulnerability–Stress Model of Prepartum Depression. Korean Journal of Clinical Psychology. 1996; 15(1):33–43.
- Kim MH, Choi SY. The Comparative Study for Pregnancy Stress, Anxiety and Birth Outcomes of Pregnant Women under 35 Years Old and over 35 Years Old. Journal of the Korean Data Analysis Society. 2014; 16(4):2177–90.
- Hong SH, Kim KH. A Study on the Stress of Pregnant and the Coping of Pregnant. Korean Journal of Family Welfare. 2001; 6(2):115–28.
- Kang SK, Jung MR. The Relationship between Pregnant Woman's Stress, Temperament and Maternal-Fetal Attachment. Korean Journal of Human Ecology. 2012; 21(2):213–23.
- Block J, Kremen AM. IQ And Ego-Resiliency: Conceptual and Empirical Connections and Separateness. Journal of Personality and Social Psychology. 1996; 70(2):349–410.
- Kim YH. The Relation of Daily Stress and Ego-Resiliency to the Happiness of Children and Adolescents. Korean Journal of Youth Studies. 2010; 17(12):287–307.
- Jang KM. The Relations of Ego-Resiliency, Stress Coping Style, and Psychological Growth Environment. Korean Journal of Youth Studies. 2003; 10(4):143–61.
- Kim KJ. The Effects of Doula Touch Delivery Education on Self-Confidence Delivery, Knowledge of Childbirth, Couple Satisfaction. Journal of the Korea Academia-Industrial Cooperation Society. 2013; 14(6):2880–88.
- Kwak EJ. The Effects of Pre-Delivery Music Therapy Program on the Reduction of Anxiety and Stress of the Primigravida. Journal of Korean Music Therapy Association. 2006; 8(2):1–21.
- Shim JS, Lee YS. Effects of a Yoga-Focused Prenatal Program on Stress, Anxiety, Self Confidence and Labor Pain in Pregnant Women with in Vitro Fertilization Treatment. Journal of Korean Academy of Nursing. 2012; 42(3):369–76.
- Ban JY, Kim DY. The Effect of the Art Therapy Program Based on Picture Diary on the Pregnant Women's Delivery Psychology. Journal of Korean Art Therapy Association. 2003; 10(2):173–99.
- Connor KM. Assessment of Resilience in the Aftermath of Trauma, Journal of Clinical Psychiatry. 2006; 67(2):46–49.
- Ahn HL. An Experimental Study of the Effects of Husband's Supportive behavior Reinforcement Education on Stress Relief of Primigravidas. Journal of Korean Academy of Nursing. 1985; 15(1):5–16.
- Lee MK. Effects of San-Yin-Jiao (SP6) Acupressure on Labor Pain, Delivery Time in Women during Labor. Journal of Korean Academy of Nursing. 2003; 33(6):753–61.