

Effects of Social Support and Life Stress of Women in Climacterium on Meaning of Life

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Abstract

Background/Objectives: This study is intended to provide basic data on the development of nursing intervention programs to solve the stress of life, the social support, life stress and meaning of life for Climacterium women.

Methods/Statistical analysis: The study was conducted by Climacterium women in W city in Gangwon province, collecting data from February 11 to February 22, 2019, and a total of 173 people.

Findings: The study found that Climacterium women's social support was significant in age, education, marriage, occupation, and monthly income, and that life stress was significant in age, education, marriage, and monthly income. The meaning of life was significantly higher in education, marriage, occupation, and monthly income. Social support for Climacterium women showed a negative correlation with life stress, and a significant static correlation with the meaning of life. Economic problems, which are a lower factor of life stress of Climacterium women, have been a factor that has a significant negative impact on the meaning of life.

Improvements/Applications: Since Climacterium women play a pivotal role in family life, it is necessary to develop a support program that can measure the level of life and fully play a pivotal role in society as a whole.

Keywords: *Climacterium women, Social support, Life stress, Meaning of life, Gangwondo*

Introduction

The climacteric period of women brings about substantially physical, psychological and social changes in terms of developmental steps. Since the blood concentration of estrogens reduce due to the decline of ovarian function, physical and mental symptoms appear in this period^[1]. In addition to physical and mental symptoms, they experience life crisis due to life stress within family life if they do not adapt to it as children grow up, land jobs or go independent for marriage in terms of society^[2]. When faced with stress, social support not only cope with positive stress, but help the environment change to be able to cope with

individual crisis through interaction within the social system of life of women in climacterium. This life stress can affect their whole life and bring about a diverse range of maladaptive symptoms, which consequently could influence on the meaning of life. The meaning of life is cited to serve as a positive factor that grants welfare even in case of stressful situations or accidents that trigger extreme level of stress^[3-4]. The loss of life meaning that could lead to climacteric crisis is one of critical issues for regaining their physical, emotional and psychological conditions since most of them have devoted to family life and child-rearing and centered the meaning of life in family rather than themselves after they got married^[5]. Therefore, research is needed to be carried out to prepare for methods to regain climacterium that affects the meaning of life in a positive way and to remove their life stress and enjoy healthy life.

The present study is thus intended to lay foundations to explore entire life stresses and enhance the meaning

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of life they experience by examining variables that social support and life stress affect the meaning of life they feel.

Method

The present study is narrative research to identify the association among social support, life stress and meaning of life of women in climacterium. It presumed that their social support and life stress affect the meaning of life. We set a study model as shown in Figure 1 based on this premise.

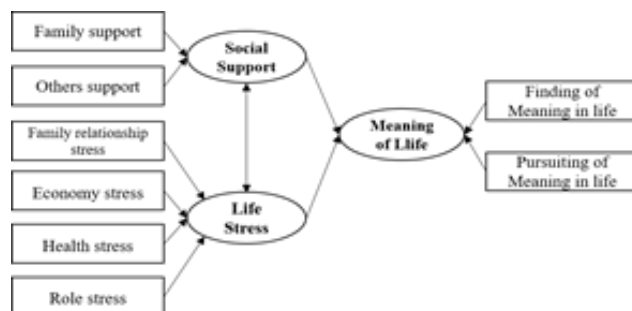


Figure 1. Research Model

Subjects in this study were women in climacterium who reside in W city, Gangwon-do. We collected data from February 11 to February 22, 2019. We explained the purpose and reason of our research to women who consented to participate in our study by visiting home, business and educational centers where subjects remain. We needed 166 subjects to determine the number of samples by using G*power 3.1 program^[6] needed for regression analysis shown as effect size=.15, level of significance $\alpha=.05$, and power=.095. Questionnaires were administered to 180 subjects and eventually analyzed data from 173 subjects except for seven non-responded or ineligible questionnaires among collected papers.

For data analysis, we used SPSS v.23 program. ANOVA was employed to analyze the mean difference among demographic features, social support, life stress and life meaning of study subjects. Scheffé test was conducted for post analysis. Pearson's correlation coefficient was adopted to see the association among social support, life stress and life meaning of study subjects according to demographic features. We employed multiple regression and analyzed outcomes to identify the effects of their social support on life stress and life meaning.

Instrument

1. Social support

We used an instrument applied by^[7]. This instrument consists of 13 questions as scales to measure social support of women in climacterium. Questions include seven regarding family support and six on subscales. Each question consisted of five-point Likert scale ranging from 1 point "never" to 5 point "highly." As scores are higher, they are likely to receive more social supports from family, friends, neighbors and groups. Reliability coefficient shown in^[7]'s research turned out Cronbach's $\alpha=.943$ and the coefficient in this study presented Cronbach's $\alpha=.953$. For sub-sectors, family support was Cronbach's $\alpha=.926$ and support from other people showed Cronbach's $\alpha=.938$, respectively.

2. Life stress

Questionnaire through which 20 items were extracted and arranged from instrument on life stress of women in climacterium developed by^[8] was used in the present study. Questions were 20 questions regarding four sections encompassing five questions on family relationship, five questions on economy, five questions on health and other five questions on role. Individual question consisted of five-point Likert scale ranging from 1 point "never serious" to 5 point "very serious" depending on life stress experiences. As scores are higher, it indicated higher level of life stress put on women in climacterium. Reliability coefficient shown in^[7]'s research exhibited Cronbach's $\alpha=.914$ and the coefficient in this study was Cronbach's $\alpha=.955$. For sub-sectors, family support was Cronbach's $\alpha=.944$, economy was $\alpha=.954$, health was Cronbach's $\alpha=.918$ and role presented Cronbach's $\alpha=.895$, respectively.

3. Meaning of life

An instrument on the meaning of life was developed by^[9] and the meaning of life scale (MLQ: Meaning in Life Questionnaire) used by^[10] was restructured. Questions consisted of five-point Likert scale ranging from 1 point "never" to 5 point "highly yes." As scores are higher, it refers to stronger motivation for pursuing the meaning of life, grants and perceives more meanings to subjective life. Reliability coefficient shown in [10]'s research exhibited Cronbach's $\alpha=.880$ and the coefficient in this study was Cronbach's $\alpha=.923$

Results

1. Frequency analysis on demographic features of study subjects

Results of analyzing the frequency of demographic features among 173 participants regarding age revealed that 85 participants in 46 to 50-year-old primarily accounted for 49.3%, whereas 12 people in 40 to 45-year-old were least. For academic background, 81 participants were graduates accounted for 46.6%, while nine under elementary school accounted for 5.5%. For marriage year, 11-15 years accounted for 32.9% (57), while 16-20 years accounted for 8.2% least (14). Part-time job or temporary work accounted for 37% (64), followed by regular job (23.3%, 40), housewife (19.2%, 33), professional (12.3%, 21) and self-employment (8.2%, 14) among entire respondents regarding occupation. Less than four million won accounted for 27.4% (47) regarding monthly income, while less than a million won accounted for 12.7% least (22). Regular menstruation or climacterium primarily accounted for 35.6% (62) regarding menstruation status.

2. Difference among social support, life stress and meaning of life according to demographic features

Distribution analysis was conducted and Scheffé test was later performed as post-analysis to examine the difference of each variable. The mean difference of age revealed that social support ($F=8.68, p<.001$) and life stress ($F=3.40, p<.05$) were statistically different. Post-analysis showed that social support was the highest in a group ranging 40-year to 45-year-old compared to other groups. The 40-year to 45-year-old group showed higher life stress than a 51-year to 55-year-old group.

The mean difference of academic background revealed that social support ($F=7.66, p<.001$), life stress ($F=15.53, p<.001$) and meaning of life ($F=2.95, p<.05$) were statistically significant. Post analysis suggested that a “graduated from more than graduate school” group showed higher social support than other groups. In contrast, a “graduated from elementary school” group showed the highest level of life stress compared to a “graduated from high school” group and “graduated from university” group.

Meanwhile, the mean difference of marriage year presented results that social support ($F=9.01, p<.001$), life stress ($F=4.11, p<.01$) and meaning of life ($F=2.85, p<.05$) were statistically significant. Post analysis

suggested that a “16-20 years” group showed higher marriage years than other groups. On the other hand, a “single” group showed higher marriage years than a “less than five-year” group.

The mean difference of occupation revealed that social support ($F=6.72, p<.001$) and meaning of life ($F=2.82, p<.05$) were statistically significant. Post analysis showed that a “self-employment” group presented higher social support than other groups.

The mean difference of monthly income suggested that social support ($F=4.41, p<.01$), life stress ($F=3.77, p<.01$) and meaning of life ($F=5.79, p<.001$) were statistically significant. Post-analysis specifically revealed that a “less than three million won” group showed higher social support than a “less than two million group” and a “more than four million won” group. A “less than two million group” showed higher level of life stress than a “less than three million group.” A “more than four million won” group showed higher meaning of life than a “less than three million won” group and a “less than two million group.”

3. First hypothesis

‘Social support of study subjects will give negative effects on life stress.’

As shown in Table 1, the influence over life stress of control variables were statistically significant ($F=11.617, p<.001$). It indicates lower life stress as their academic background and social support are higher and the first hypothesis is supported.

Table 1. The Effect of Social Support on Life Stress of Research Subjects (N=173)

Variables	B	β	t	TOL	VIF	
Age	-.111	-.108	-.53	.155	6444	
A.b	-.297	-.325	-3.23**	.627	1595	
M.y	.024	.044	.298	.296	3374	
Occ	.003	.005	.045	.544	1840	
M.i	-.019	-.028	-.25	.488	2050	
M.s	.133	.125	.78	.246	4060	
Social support	F.s	-.035	-.038	-.29	.386	2591
	O.s	-.450	-.564	-3.87***	.300	3329

Cont... Table 1. The Effect of Social Support on Life Stress of Research Subjects (N=173)

R ²	.592
Adj. R ²	.541
F	11.61
p	.000***
D-W	1.728
*p<.05, **p<.01 ***p<.001	A.b: Academic background, M.y: Marriage year Occ: Occupation, M.i: Monthly income M.s: Menstruation state, F.r: Family relationship Eco: Economy, D-W: Durbin-Watson

R ²	561
Adj. R ²	.490
F	7.92
p	.000***
D-W	1.618
*p<.05, **p<.01 ***p<.001	A.b: Academic background, M.y: Marriage year Occ: Occupation, M.i: Monthly income M.s: Menstruation state, F.r: Family relationship Eco: Economy, D-W: Durbin-Watson

4. Second hypothesis

‘Social support of study subjects will affect the meaning of life positively.’

Family support and supports from other people as subfactors of social support did not affect the meaning of life significant. Therefore, the second hypothesis was rejected.

5. Third hypothesis

‘Life stress of study subjects will affect the meaning of life negatively.’

As shown in Table 2, The independent variable explains the independent variable as 56.1%, which was statistically significant (F=7.926, p<.001). Monthly income (p<.01) showed positive impacts on the meaning of life. Stress from economic problems (p<.01) gave negative effects on the meaning of life. This implies that higher monthly incomes means higher meaning of life. As life stress is higher due to economic problems, it can be said that the meaning of life is low. Thus, the third hypothesis was adopted.

Table 2. The Effect of Life Stress on Meaning of Life of Research Subjects (N=173)

Variables	B	β	t	TOL	VIF	
Age	.009	.008	.038	.170	5.877	
A.b	-.035	-.035	-.28	.464	2.155	
M.y	.180	.306	2.00	.303	3.297	
Occ	.073	.099	.83	.512	1.955	
M.i	.315	.429	3.38**	.441	2.266	
M.s	-.108	-.117	-.68	.242	4.139	
Life stress	Fr	-.108	-.132	-.93	.354	2.825
	Eco	-.443	-.525	-2.70**	.188	5.331
	Health	.056	.057	.240	.124	8.074
	Role	-.108	-.104	-.62	.251	3.982

Conclusion and Proposal

This study is intended to examine the effects of social support and life stress of women in climacterium on the meaning of life.

First, the difference among social support, life stress and meaning of life according to demographic features of women in climacterium revealed that social support was statistically significant different in terms of age(p<.001), academic background(p<.001), marriage year(p<.001), occupation(p<.001) and monthly income(p<.01). Life stress was statistically significant different in terms of age (p<.01), academic background (p<.001), marriage year (p<.01) and monthly income (p<.01). Meaning of life was statistically significant different in terms of academic background (p<.05), marriage year (p<.05), occupation (p<.05) and monthly income (p<.001).

Second, the correlation among social support, life stress and life meaning of women in climacterium suggested that social support and life stress showed negative correlations, while social support and meaning of life showed significantly positive correlations.

Third, regression analysis of their social support, life stress and meaning of life exhibited that social support gave negative effects on life stress, while no effect on meaning of life.

Fourth, higher level of stress from economic problems as a subfactors of their life stress functioned as a variable that significantly affects the meaning of life adversely.

In short, we would like to propose as follows based on the above findings.

First, subject scope needs to be expanded to generalize and apply results as the present study tested women in climacterium who reside in some small and medium-sized cities in Gangwon-do. In addition, a

continuous follow-up study is proposed to reduce life stress and enhance the meaning of life among ordinary middle-aged women in family and society.

Second, specific and verifiable evidence should be prepared by studying medium variables that their social support and life stress can affect the meaning of life and by establishing local governance.

Third, women in climacterium play pivotal roles in family life such as education in family and drive to boost energy in the society. Thus, support program to play pivotal roles in the society needs to be developed and national policy should be established to estimate the level of life and construct social support system for efficient handle.

Ethical Clearance: Not required

Source of Funding: Self

Conflict of Interest: Nil

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