

Influence Factors on Subjective Health Perception of Middle-Aged Women

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Abstract

This study attempted to identify factors affecting the subjective health perception of middle-aged women. Secondary data analysis was conducted based on the first year of the 9th National Health and Nutrition Survey by the Korea Disease Control and Prevention Agency, and 969 middle-aged women aged 40 to 59 were the final analysis subjects. We set the following variables to increase the value of the paper: age, economic activity status, subjective body type perception, perceived stress, average daily sleep time, and daily sitting time. Data analysis was performed using the SPSS WIN 25.0 program, and descriptive statistics, t-test, correlation, and hierarchical multiple regression analysis were performed. Through this study, we found that subjective health perception was mainly influenced by perceived stress, subjective body shape perception, age, and daily sitting time. In order to increase the level of subjective health perception, it is necessary to provide necessary health management programs by age, and it is necessary to establish a management program that can change body shape perception into positive thinking.

Keywords: Health-related factors, National health and nutrition survey, Subjective health perception, Middle-aged women, Nursing care provision

1. INTRODUCTION

Recently, the average life expectancy in Korea has been increasing due to various factors such as the introduction of new medical technologies, social development, improvement in living standards, and changes in awareness of health. Middle age is a period in which people experience physical aging in the life cycle as the relative period of life becomes longer. Middle-aged women in this period face a crisis situation in which they must adapt to changes in the times and psychological changes, such as their children becoming independent, their own or their spouse's retirement and achievement in the workplace [1, 2]. In addition, due to physical and psychological changes caused by various changes such as physical aging and menopause, they experience a crisis due to new awareness and conflict about their roles in the family and society, and they tend to neglect their own health management when they prioritize childcare and housework for their children or grandchildren [3]. In this way, middle-aged women play a key role not only as wives and mothers but also in providing psychological stability to family members, so the health of middle-aged women is of great significance in terms of social life [4].

Subjective health perception is an overall evaluation of one's health status and is influenced by subjective and objective thoughts about physical and mental aspects and health and disease [5]. According to previous studies on factors affecting subjective health perception, which is used as an indicator for predicting health

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status, there are studies on subjective health status and influencing factors of middle-aged women [6, 7] and on physical activity and subjective health status of the elderly [8]. Age and subjective health perception of middle-aged women [9], The influence of stress level and body type perception on subjective health status [10, 11]. Subjective health status, which is used as an important indicator for predicting health level, needs to identify correlations between related factors to lay the foundation for efforts to promote the health of middle-aged women. Therefore, this study aims to identify factors affecting subjective health perception of middle-aged women. This can be used as basic data for extracting health management programs and socioeconomic factors for promoting the health of middle-aged women.

2. METHODS

2.1 Research Subjects and Data Collection

This study was conducted as a secondary analysis study using the first year of the 9th National Health and Nutrition Survey in 2022 by the Korea Disease Control and Prevention Agency after receiving approval from the relevant institution. In this study, only health survey data was used for analysis. The sample was extracted by stratification by gender and age, and weights were applied. The subjects of the study were women aged 40-39 years, and 969 people who met the purpose of the study and had no missing values in the analysis variables were finally selected out of the 1,042 people in the data. The variables used for analysis were age, economic activity status, subjective body shape perception, average daily sleep time, daily sitting time, and usual stress perception.

2.2 Research Tools

Age was directly entered by the subjects. Economic activity status was measured by presence or absence, and a higher number means no economic activity. Subjective body shape perception is composed of a 5-point Likert scale, and a higher score means that the subject is closer to obesity. The average daily sleep time and sitting time during the day were directly entered by the subjects, and a higher score means that the subject spent more time. The usual stress perception level is composed of a 4-point Likert scale, and a higher score means a lower stress perception level. Subjective health perception is composed of a 5-point Likert scale, and a higher score means that the subject perceives his or her health condition as worse.

2.3 Data Analysis

Data analysis was performed using SPSS WIN 25.0. Variables were analyzed using descriptive statistics such as mean, standard deviation, minimum, and maximum, and the relationship between variables was analyzed using Pearson correlation. Hierarchical multiple regression analysis was performed to identify factors affecting subjective health perception.

3. RESULTS

3.1 Subject Characteristics and Subjective Health Perception

The subjects' characteristics and subjective health perception are as shown in Table 1.

The subjects were middle-aged women with an average age of 49.46, and 63.1% were economically active. The subjective body shape perception score was 3.63 (5 out of 5), indicating that they perceived their body shape as close to obesity. The average daily sleep time was 6.67 hours, and the average sitting time per day was 0.31 hours. The daily stress perception score was 2.78 (4 out of 4), indicating a low level of stress

perception. The subjective health perception score was 2.85 (5 out of 5), indicating that they perceived their health as not being good.

Table 1. Characteristic of subjects and subjective health perception(N=969)

Variables	M(SD) or N(%)	
Age	49.46(5.65)	
Job activity state*	yes	611(63.1)
	no	358(36.9)
Subjective body shape perception	3.63(0.83)	
Sleep time per day(hour)	6.67(1.14)	
Time spent sitting per day(hour)	0.31(0.69)	
The degree of perceived stress in everyday	2.78(0.70)	
Subjective health perception	2.85(0.78)	

*N(%)

3.2 Correlation between Subjective Health Perception and Related Factors

The correlation between subjective health perception and related factors is shown in Table 2.

The older the subject, the lower the perception of health ($p < .05$), and the more time spent sitting during the day, the closer the subjective body shape perception was to obesity, and the higher the level of perceived stress, the worse the subjective health perception ($p < .001$).

The older the subject, the more likely they were to not engage in economic activities, the shorter the average daily sleep time and sitting time, and the lower the level of perceived stress. The less economic activities the subject had, the higher the subjective body shape perception, and the longer the average daily sleep time the lower the level of perceived stress. The more time spent sitting during the day, the higher the subjective body shape perception, but the lower the level of perceived stress. The better the subjective body shape perception, the lower the level of perceived stress.

Table 2. Correlations between subjective health perception and related factors of subjects(N=969)

Variables	SHP	AGE	EAS	STD	TSSD	SBP	DPS
Subjective health perception(SHP)	1						
Age(AGE)	.08 (.049)	1					
Economic activity status(EAS)	.06 (.017)	.10 (.009)	1				
Sleep time per day(STD)	-.02 (.615)	-.10 (.002)	.04 (.267)	1			
Time spent sitting per day(TSSD)	.17 ($< .001$)	-.08 (.009)	.01 (.749)	-.05 (.155)	1		
Subjective body shape perception(SBP)	.17 ($< .001$)	.02 (.535)	.07 (.035)	-.03 (.323)	.11 (.001)	1	
The degree of perceived stress(DPS)	-.28 ($< .001$)	.10 (.001)	.01 (.825)	.08 (.015)	-.35 ($< .001$)	-.07 (.021)	1

3.3 Factors Affecting Subjective Health Perception

The results of analyzing the factors affecting the subjects' subjective health perception are shown in Table 3.

To identify the factors affecting subjective health perception, hierarchical multiple regression analysis was performed, and the economic activity status was analyzed by processing it as a dummy variable. The Durbin-Watson value of the model was 1.911, which satisfied the independence of the residuals. The tolerance limit was .868~.986, which is 0.1 or higher, and the VIF was 1.014~1.153, which is 10 or lower, indicating that there was no problem with collinearity among the independent variables. The factors affecting subjective health perception were subjective body shape perception ($\beta=.141$), age ($\beta=.085$), and sitting time per day ($\beta=.069$), in that order, and the level of perceived stress ($\beta=-.250$) was analyzed to have a negative effect. These factors were found to explain 10.9% of subjective health perception ($F=29.517$, $p<.001$).

Table 3. Influence factors on subjective health perception of subjects (N=969)

Variables	B	S.E	β	t	p
(constant)	2.540	.250		10.18	<.001
Age	.012	.004	.085	2.78	.006
Time spent sitting per day	.078	.037	.069	2.11	.035
Subjective body shape perception	.133	.029	.141	4.62	<.001
The degree of perceived stress	-.278	.036	-.250	-7.67	<.001
$R^2=.109$ $F=29.517$ $p<.001$					

4. CONCLUSION

We studied to investigate the correlation between health-related variables (age, economic activity status, subjective body shape perception, average daily sleep time, time spent sitting during the day, and perceived stress level) of middle-aged women aged 40-59 years using the 1st year data of the 9th National Health and Nutrition Survey and the influence on subjective health perception.

The subjects' subjective health perception was mainly influenced by perceived stress level, subjective body shape perception, age, and sitting time during the day. This is in line with the results of previous studies that age, stress level, and body shape perception affect subjective health perception. This suggests that subjective health perception is not determined by one or two factors but is a complex reflection of the individual's overall health status and health concept about oneself, suggesting that multiple variables are influencing it.

According to the results of this study, to increase the level of subjective health perception, it is necessary to provide necessary health management programs by age and to establish management programs that can transform body shape perception into positive thinking.

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REFERENCES

- [1] H. S. Park and K. S. Kim, "The Influencing Factors of Subjective Health and Health-Related Quality of Life in Middle-Aged Women," *The Journal of the Convergence on Culture Technology*, Vol. 10, No. 3,

pp. 121-130, 2024. DOI:10.17703/JCCT.2024.10.3.121

- [2] M. S. Hyun and K. A. Nam, "A study of self-esteem and stress coping skills in early adolescents," *J Korean Academic Society Nursing Education*, Vol. 15, pp. 293-301, 2009.
- [3] S. Y. Bang and Y.S. Do, "Health-related Quality of Life of Physical and Mental Health in Middle-aged Women," *Journal of Korea Academia-Industrial Cooperation Society*, Vol. 21, No. 6, pp. 161-169, 2020.
- [4] J. D. Park, K. H. Kim, H. J. Jeong and L. S. Hyun, "Differences in Self-Esteem, Body Composition and Lower Extremity Muscle Strength based on The Type of Physical Labor in Middle-Aged Women in Their 50s," *International Journal of Internet, Broadcasting and Communication*, Vol. 15, No. 4, pp. 294-303, 2023. DOI:10.7236/IJIBC.2023.15.4.294
- [5] I. Eriksson, A. L. Unden and S. Elofsson, "Self-rated health. Comparisons between three different measures. Results from a population study," *International Journal of Epidemiology*, Vol. 30, No. 2, pp. 326-333, 2001.
- [6] M. R. Park, "Influence factors on subjective health status of a middle-aged women-Utilized the National Health and Nutrition Examination Survey(2013-2016)," *Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology*, Vol. 9, No. 6, pp. 451-458, 2019. DIO: 10.21742/AJMAHS.2019.06.43
- [7] M. A. Shin and H. S. Choi, "Subjective health influencing factors of postmenopausal women," *Humanities and Society*, Vol. 13, No. 4, pp. 2159-2172, 2022.
- [8] Y. G. Kim and K. M. Koo, "Effects of physical activity participation on subjective health status in older adults," *Korean Journal of Specialized Physical Education*, Vol. 29, No. 1, pp.169-177, 2021.
- [9] J. B. Dowd, and M. Todd, "Does self-reported health bias the measurement of health inequalities in US adults? Evidence using anchoring vignettes from the Health and Retirement Study," *the Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, Vol. 66, No. 4, pp. 478-489, 2011.
- [10] Y. Benyamini, "Why does self-rated health predict mortality? An update on current knowledge and a research agenda for psychologists," *Psychology & Health*, Vol. 26, No. 11, pp. 1407-1413, 2011.
- [11] K. H. Park, "The Influence of Interrelationship between Work and Family on the Managerial Competence, Job Satisfaction, Organizational Commitment, and Life Satisfaction of Married Managerial Women," *Daehan Association of Business Administration*, Vol. 25, No. 2, pp. 879-905, 2012.