

Effects of Perceived Health Status, Self-efficacy, Lifestyle Habits, and Wisdom on Health Conservation among Middle-Aged Women

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Abstract

Objectives: The purposes of this research are to examine the relationship among perceived health status, self-efficacy, lifestyle habits, wisdom and health conservation, and to analyze the effects of perceived health status, self-efficacy, lifestyle habits, and wisdom on health conservation. **Methods/Statistical Analysis:** Subjects of this research are 135 middle-aged women of 40~64 years old residing in C city and M city. They were given copies of the questionnaire. Collected data were analyzed using descriptive statistics, t-test, ANOVA, Pearson's correlation coefficients, and stepwise multiple regression. **Findings:** There were statistically significant relationship between health conservation and the following independent variables: perceived health status ($r=.327$, $p<.001$), self-efficacy ($r=.475$, $p<.001$), lifestyle habits ($r=.411$, $p<.001$), and wisdom ($r=.647$, $p<.001$). The relative explanatory powers of independent variables in descending order are as follows: wisdom 39.6%, lifestyle habits 6.0%, living level 3.8%, education 2.3%, self-efficacy 1.8%, and exercise 1.6%. In total, those variables explained 53.6% of health conservation. **Applications/Improvements:** Considering elements found to be influential in improving health conservation of middle-aged women- wisdom, lifestyle habits 6.0, living level, education, and self-efficacy-nursing mediation should be developed. It is also necessary to search for other elements which can help predict health conservation. In particular, as wisdom was found to be a crucial element in improving health conservation, this research suggests that programs be developed and repetitive researches be done to enhance the wisdom.

Keywords: Health Conservation, Lifestyle Habit, Middle-Aged Women, Perceived Health Status, Self-Efficacy, Wisdom

1. Introduction

Middle age is the turning point where one comes out of the former part of one's life, and goes into the latter part of one's life. It is also called mature age or menopause. Middle age is from 40 to 64 years old. In Korea, those in midlife take up 33% of the whole population, and it is expected that their proportion of the population will continue to increase¹. Midlife is the time when, experiencing the limits of human existence, one has leisure and wisdom to look into one's inner self. But, it is also the time when one, experiencing decline of physical strength, experiences decline of pride, anxiety and gloom. Watching those near him or her get sick, old and die, one has agony over life and death².

As the average life expectancy gets longer, most women have come to live 1/3 of their lives after menopause. While they experience physical and mental problems such as menopause syndrome caused by estrogen deficiency³, they feel stressful with home-making and family relations. And, as they put priority to health of family members like husband and children over their own health, they lead sacrificial lives⁴. In particular, in the age where people can live up to 100 years old, middle-aged women experience their aging unexpectedly. They feel getting old suddenly, and feel physically and mentally tired. But, they think everything depends on how one accepts it. They think that middle age is the harvest season when one can reap much⁵. Thus, nurses have duty to help middle-aged women prepare successful old age

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and live happily. Therefore, using an important concept called health conservation nurses need to provide nursing to them.

That is, to measure healthy life, it is necessary to consider a human as a holistic organism as physical, mental, social and spiritual being, and examine his or her conditions. Such conditions can start with identifying health conservation. Health conservation is to maintain good conditions and equilibrium as physical, psychological, and social being. Therefore, in the perspective of nursing, the concept of health conservation is more holistic and comprehensive term, and can be used to measure humans and health.

If middle-aged women keep their health well, they can maintain physical health such as fatigue prevention, disease prevention, energy preservation, and recovery and maintenance of functions through physical integration. Health conservation is also effective in psychological health such as recovery and maintenance of self-recognition and pride. Socially, it can help them form harmonious human relations. Overall, it helps them to maintain equilibrium by achieving integrity, unity⁶.

Currently, most of researches on health conservation deal with the elderly people⁷⁻⁹. In analysis⁷ on variables related with health conservation among the elderly found that variables like perceived health status, wisdom, and pain are highly related. Specially, wisdom and perceived health status are major variables. They⁸ found that health conservation of the elderly is related with meaning of life and self-efficacy. She⁹ argued that, for health conservation of old people with chronic diseases, wisdom and pain are major predictive elements. And, she^{10,11} reported that, among the elderly and middle-aged people, wisdom has mediating effect on the relationship among perceived health status, health conservation, health promotion activities in daily life and health conservation. They said that, among the elderly and middle aged people, wisdom is relatively stable after middle age, and that the higher level of wisdom is, the higher life satisfaction, well-being, sense of energy, and sense of self-integrity are¹². As wisdom is an important element in improving health conservation among the elderly and middle-aged people, it is necessary to improve health conservation using it. And, in her analysis of elements regarding health-related life quality among working women including middle-aged women, she¹³ found that health promotion activities and perceived health status are important elements, and that self-efficacy, judgment on individual capabilities in organizing and

implementing specific behavioral processes¹⁴, is necessary in designing strategies to enhance health conservation among middle-aged women.

To achieve sustainable development goals related with health conservation promotion, it is necessary to manage health from middle age. As there are differences in demographic and cultural characteristics between men and women, it is necessary to do researches considering gender¹⁵. Thus, first of all, it is necessary to do researches on middle-aged women, a vulnerable group of people. Thus, this research aims to prepare basic data to develop nursing mediation program designed to improve life quality of middle-aged women and to prepare for their older years by examining perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of them, and examining relationship among those variables and predictive elements.

1.1 Purpose

The purpose of this research is to examine the effects of perceived health status, self-efficacy, lifestyle habits, and wisdom on health conservation. More specifically, this research tries to examine the followings:

- Identify the level of perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of middle aged women,
- Identify the difference in health conservation among middle aged women depending on general characteristics of them,
- Identify the correlation among perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of middle aged women, and
- Analyze elements which can be used to predict health conservation of middle aged women.

2. Methods

2.1 Research Design

This study is a descriptive survey research to examine elements which can predict health conservation of middle-aged women.

2.2 Subjects

The subjects of this research are those who understood the research contents and agreed to answer the survey among women who are 40 to 64 years old, living in C city and M

city. Survey was performed using the questionnaire. The sample size was calculated using G*Power 3.1 Program. The sample size needed to maintain 7 predictive factors needed for multivariate regression analysis, the medium effect size .15, significance level .05, and power .90 is 130. Considering drop rate, the survey was conducted to 143 women. Excluding copies where respondents did not answer sufficiently, 135 copies were finally used for analysis. The number satisfied the requirement of sample size.

2.3 Instruments

2.3.1 Perceived Health Status

We used the tool for 3 questions developed¹⁶ to measure the perceived health status, and the questions included perception of the current health, perception of the health compared to that of 1 year ago, and perception of health compared to people at the same age. Respondents were required to mark any number from 1 point “very bad” to 5 point “very good”, and high point means that people perceive their health as good. In the Speake et al. research, Cronbach's $\alpha=.85$, and in this research, Cronbach's $\alpha=.83$.

2.3.2 Self-Efficacy

The scale for self-efficacy used in this research was what they¹⁷ developed and he¹⁸ translated. It consisted of 8 questions, and respondents were required to choose their choices in the 5-point Likert scale. The scores range from 8 points, the lowest, to 40, the highest. The higher the score is, the higher self-efficacy is. In the research of Noh^{18,7}, reliability Cronbach's $\alpha=.83$, and, in this study, Cronbach's $\alpha=.88$.

2.3.3 Lifestyle Habits

The health promotion assessment scale of them¹⁹ which was translated²⁰ into a lifestyle habits measurement tool was used in this research. The number of questions regarding lifestyle habits was 25 in total: 4 questions on dietary habits, 1 question on weight control, 1 question on smoking habits, 2 questions on addiction to caffeine or substances, 2 questions on alcohol drinking, 2 questions on sports and leisure activities, 2 questions on safety awareness, 1 question on sleep, 1 question on stress, 2 questions on personality type, 2 questions on depression or instability, 2 questions on job satisfaction and 3 questions on closeness with friends and family. Using 5-point Likert scale, respondents were required to choose anyone from five choices. Higher score was designed to

mean healthier lifestyle habit. In the study of Wilson and Ciliska¹⁹, the reliability coefficient Cronbach's $\alpha=0.88$, and in the study of Ro²⁰ it was 0.85. In this study, Cronbach's $\alpha=0.67$.

2.3.4 Wisdom

As the measurement tool for wisdom, we used “wisdom scale of elderly people in Korea” developed²¹. The tool consists of 27 questions in three sub-domains: 11 questions on sympathetic sense; 9 questions on self-reflection; 7 questions on experiences of overcoming difficulties. Each question used 4-point scale and 1 question, which was stated as reverse question, was reverse-converted and the possible score range was 27~108. High point means high degree of wisdom. In the research of them²¹, the reliability coefficient of the whole questions was Cronbach's $\alpha=.80$, 3, and reliability coefficients in three sub-domains were Cronbach's $\alpha=.82$, .85, .74. In this research, it was Cronbach's $\alpha=.90$.

2.3.5 Health Conservation

As the tool to measure health conservation, we used the scale developed²². The tool is composed of 37 questions. Each question used 4-point scale and 5 questions were reverse-converted. Respondents were required to choose from 1 point “Not true at all” to 4 point “Very true”. High score means high degree of health conservation. In her research²², the reliability coefficient was Cronbach's $\alpha=.94$, and reliability coefficients for 4 sub-domains were Cronbach's α , that is Conservation of personal integrity = .88, Conservation of energy = .82, Conservation of structural integrity = .81, and Conservation of social integrity = .79. In this research, it was Cronbach's $\alpha=.82$.

2.4 Data Analysis

Collected data was statistically treated using SPSS Win 23.0 program. General characteristics were analyzed by real number, percentage, average, and standard deviation through descriptive statistics. Perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of respondents were analyzed by average and standard deviation through descriptive statistics. Whether there are differences in health conservation depending on general characteristics were analyzed through t-test and ANONA. The relationships between health conservation of respondents and their perceived health status, self-efficacy, lifestyle habits, and wisdom were analyzed using Pearson's

correlation coefficient. The explanatory powers of factors that affect health conservation of respondents were analyzed using stepwise multiple regression analysis.

2.5 Data Collection

Copies of the questionnaire were collected from May 30 to June 13, 2016. To middle-aged women in C city and M city in Chungbuk province who were members of social clubs, self-help associations, religious groups and NGOs, we explained the purpose of the research, and got the written agreement to answer the questions. Then, copies of the structured questionnaire were distributed to them, and they were asked to write the answers to the questions. The researcher employed a nurse as research assistant. Before conducting the survey, researcher gave full training to the research assistant on the research purpose and aim, and questions in the questionnaire and the way to answer the questions. To maintain consistency of research, the researcher made the assistant know the survey sufficiently. Through conducting a preliminary survey, the researcher and research assistant were made to collect copies of the questionnaire consistently.

2.6 Ethical Consideration

The study received approval from the Bioethics Committee of K University (IRB No. KNU_IRB_2016-15) and abided by the guidelines for research ethics during the research. We explained the goal and purpose of the study to respondents of the survey before conducting the survey, making them understand that they can stop answering the questions of the survey anytime if they prefer to do. Also, we distributed the questionnaire after respondents signed the written agreement showing that collected data will be used only for research purpose, and that the anonymity and autonomy of respondents are guaranteed.

3. Results

3.1 General Characteristics of Middle-Aged Women

The average age of respondents was 50.52 years old. Those in their 50s (50~59 years old) took up 51.1%, the largest group, and those in their 40s did 40.7%. 88.1% of respondents had spouses, while 11.9% did not. In education level, 52.6% of them were high school graduates, while 32.6% were college graduates or graduate school

graduates. While 80.7% of them had jobs, 19.3% did not. The kinds of jobs they had been as follows: 17.0% were self-employed; 15.6% were in service jobs; 14.8% were in professional ones. 61.5% of respondents said they had religions. The majority of them (67.2%) said they did not have any disease. 32.8% of them had one or more diseases. On the question whether they exercise or not, 53.0% of respondents said that they occasionally did exercise, while 23.1% did not exercise at all. 51.9% of them said that current family income is not sufficient to live in Table 1.

Table 1. General characteristics of middle-aged women (N=135).

Characteristics	Classification	N(%)	M±SD
Age	40-49	55(40.7)	50.52±6.76
	50-59	69(51.1)	
	60-64	11(8.2)	
Spouse	Yes	119(88.1)	
	No	16(11.9)	
Education	Middle school graduates or lower	20(14.8)	
	High school graduates	71(52.6)	
	College graduates or above	44(32.6)	
Job	No	25(19.3)	
	Yes	110(81.5)	
Job type	Profession	20(14.8)	
	Service job	21(15.6)	
	Office worker	15(11.1)	
	Self-employed	23(17.0)	
	Others	31(23.0)	
Religion	No	52(38.5)	
	Yes	83(61.5)	
No. of disease one has	No	86(67.2)	
	1	30(23.4)	
	2 or more	19(9.5-4)	
Exercise	Exercise regularly	32(23.9)	
	Exercise not regularly, but occasionally	71(53.0)	
	Do not exercise	32(23.1)	
Living level	Not sufficiently good	70(51.9)	
	Sufficiently good	65(48.5)	

3.2 Perceived Health Status, Self-Efficacy, Lifestyle Habits, Wisdom, and Health Conservation of Middle Aged Women

The average score of perceived health status of respondents was 3.27 (1~5), above the mean value; the average score of self-efficacy was 3.58 (1~5); that of lifestyle habits was 3.34 (1~5), near the mean value; that of wisdom was 3.04 (1~4), higher than the mean value; that of health conservation was 2.82 (1~4), higher than the mean value in Table 2.

3.3 Difference in Health Conservation Depending on General Characteristics of Middle-Aged Women

There are differences in health conservation depending on general characteristics of respondents. Education ($F=3.679$, $p=.028$), exercise ($t=4.584$, $p<.001$), and living level ($t=-3.328$, $p=.001$) made statistically significant differences. College graduates were higher in their health conservation degrees than high school graduates or those whose education levels are lower than that were. Those who exercised regularly were higher in health conservation level than those who did occasionally or did not. Middle-aged women who responded that their living levels were sufficiently good were higher in health conservation level than those who responded that those levels were not sufficiently good. But, there were no significant differences depending on age, job, religiousness, and the number of diseases Table 3.

Table 2. Perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of middle aged women (N=135).

Variables	M±SD	Range
Perceived health status	3.27±.69	1~5
Self-efficacy	3.58±.53	1~5
Lifestyle habits	3.34±.31	1~5
Wisdom	3.04±.31	1~4
Health conservation	2.82±.24	1~4

3.4 Correlation among Perceived Health Status, Self-Efficacy, Lifestyle Habits, Wisdom, and Health Conservation of Middle Aged Women

The analysis among perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of middle aged women showed that health conservation has significant relationship with other variables as follows: perceived health status ($r=.327$, $p<.001$), self-efficacy ($r=.475$, $p<.001$), lifestyle habits ($r=.411$, $p<.001$), and wisdom ($r=.647$, $p<.001$). It means that the higher perceived health status, self-efficacy, lifestyle habits, and wisdom are, the higher health conservation is Table 4.

Table 3. Differences in health conservation depending on general characteristics among middle-aged women (N=135).

Variable	Classification	M±SD	t or F	p
Age	40-49	2.81(.21)	2.036	.135
	50-59	2.85(.24)		
	60-64	2.69(.32)		
Spouse	Yes	2.82(.24)	.088	.930
	No	2.82(.19)		
Education	Elementary school graduates or less	2.66(.06)	3.679	.028
	Middle school or high school graduates	2.79(.23)		
	College graduates or above	2.89(.24)		
Job	Yes	2.84(.27)	.549	.584
	No	2.82(.23)		
Religion	Yes	2.82(.23)	.115	.909
	No	2.82(.24)		
No. of diseases	0	2.82(.23)	-.299	.766
	1 or more	2.84(.27)		
Exercise	Exercise regularly	2.98(.27)	4.584	<.001
	Exercise occasionally or do not exercise	2.77(.20)		
Living level	Not sufficiently good	2.76(.21)	-3.328	.001
	Sufficiently good	2.89(.24)		

Table 4. Correlation among perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of middle aged women.

	Perceived health status r(p)	Self-efficacy r(p)	Lifestyle habits r(p)	Wisdom r(p)	Health conservation r(p)
Perceived health status	1				
Self-efficacy	.447 <.001	1			
Lifestyle habits	.223 .010	.303 <.001	1		
Wisdom	.240 .005	.452 <.001	.273 .001	1	
Health conservation	.327 <.001	.475 <.001	.411 <.001	.647 <.001	1

3.5 Elements Predicting Health Conservation of Middle-Aged Women

To examine predictive elements affecting health conservation of middle-aged women, this research did multivariate regression analysis by making the following variables into dummy variables: major variables of this research like perceived health status, self-efficacy, lifestyle habits, and wisdom, and some variables belonging to general characteristics which made significant differences in health conservation like education, exercise, and living level. Multivariate regression analysis showed that Durbin-Watson value was 1.987, satisfying independence of residual. Test of multicollinearity among independent variables showed that tolerance was 0.754~0.987, lower than 1.0. Variance Inflation Factor (VIF) was 1.013~1.326, lower than 10. Thus, there was no multicollinearity among independent variables.

Variables affecting health conservation are as follows: wisdom 39.6% ($\beta=.469$, $p<.001$), lifestyle habits 6.0% ($\beta=.135$, $p=.049$), living level 3.8% ($\beta=.181$, $p=.004$), education 2.3% ($\beta=.145$, $p=.017$), self-efficacy 1.8% ($\beta=.161$, $p=.020$), and exercise 1.6% ($\beta=.137$, $p=.037$). The total explanatory power of those variables was 53.6% Table 5.

4. Discussion

This research was done to provide basic data for healthy older life for middle-aged women by examining perceived health status, self-efficacy, lifestyle habits, wisdom, and health conservation of them, and analyzing the effects

Table 5. Variables affecting health conservation of middle-aged women.

Variables	B	SE	β	t	p
Constant	1.036	.197		5.266	<.001
Wisdom	.363	.053	.469	6.843	<.001
Lifestyle habits	.101	.051	.135	1.990	.049
Living level (sufficiently good)	.085	.029	.181	2.955	.004
Education (college graduates or above)	.073	.030	.145	2.426	.017
Self-efficacy	.072	.031	.161	2.354	.020
Exercise (exercise regularly)	.077	.037	.137	2.105	.037

$R^2=.557$, Adj $R^2=.536$, $F=26.212$, $p<.001$

Notes: Criteria are as follows: Living level "Not sufficiently good"; education "lower than elementary school graduates"; exercise "exercise occasionally, or does not exercise"

of those variables on health conservation of them. This research analyzed the degree of health conservation and degree of related variables, and whether general characteristics of them make differences in health conservation of them.

The average score of middle-aged women per each variable was as follows: perceived health status 3.27 (1~5); self-efficacy 3.58 (1~5); lifestyle habits 3.34 (1~5); wisdom 3.04 (1~4); health conservation 2.82 (1~4). All the scores were higher than mid-point.

In a health conservation study²³ using 132 middle-aged men and women, the average score of perceived health status was 3.2; that of wisdom was 2.95, that of health conservation was 2.85. The scores were similar to those of this study. But, as that study includes men as subjects, the future study needs to be done only using women. And, in a health conservation research using the elderly as subjects, self-efficacy was 2.82⁷. It was lower than that of researches using middle-aged men or women, which is understandable considering that middle-aged men or women are higher in physical and mental health than the elderly. It seems to be efficient to prepare health conservation for the elderly life. It is necessary to do research on self-efficacy for middle-aged women. In a research using 326 women in their 40s~50s as subjects in Gwangju area and comparing exercise, daily life and eating habits in different age groups showed that the average scores of lifestyle habits were 3.30-3.45 in different age groups, similar to the score of this research. Middle-aged women need to have correct lifestyle habits by changing wrong eating habits, and increase physical activities by doing exercise regularly²⁴.

There were differences in health conservation depending on general characteristics of middle-aged women, specifically education, exercise, and living level. College graduates were higher in health conservation than high school graduates or those with lower education level. Those who exercise regularly and who said their living levels are sufficiently good were higher in their health conservation than other respondents. Such results are similar to the research of ²⁵ who did research on life quality using 230 middle-aged adults of 40~64 years old as subjects. Most of researches on health conservation use the elderly as subjects, and they tend to show the differences in health conservation depending on the following variables of general characteristics: education level, gender, age, religion, spouse or not, subjective health status ^{7-9,26}, which are different from the findings of this research.

It seems that the findings of this research are the results of analyzing middle-aged women who are different in situations and conditions. It seems necessary to repeat the research dealing with middle-aged women in the future.

Health conservation of middle-aged women showed significant positive relationship with perceived health status, self-efficacy, lifestyle habits, and wisdom. The higher the values of those variables are, the higher health conservation value becomes. The relative explanatory powers of those variables in descending order are as follows: wisdom 39.6%, lifestyle habits 6.0%, living level 3.8%, education 2.3%, self-efficacy 1.8%, and exercise 1.6%. In total, those variables explained 53.6% of health conservation.

Wisdom was revealed as the most important element affecting health conservation of middle-aged women. Wisdom is response to life process and problems, and comprehension of emotional, positive, and cognitive aspects of human capacity²⁷. It increases with accumulation of experiences. Thus, wisdom gets higher with age. Since mid-life, wisdom is expressed comparatively stably, and it shows somewhat higher among women than among men. Furthermore, wisdom is expressed bit by bit with the development of emotional and self control gets higher. It is a comprehensive and multidimensional concept leading to integration of better personality. In addition, wisdom is related with life satisfaction, sense of well-being, self-integration, transcendence, and acceptance of death. Thus, it is the element which is deeply related with conserving health through positive attitude toward life and temperance and balance¹². Consequently, such researches supported the findings of this research demonstrating that wisdom is the most important variable affecting health conservation of middle-aged women. Lifestyle habits and exercise are also important variables for health conservation.

The research showing that those women who are active in health promotion live healthy life²³ supports the findings of this research. The research pointed out that it is necessary to develop a special program for middle-aged women in low-income class who had less information on health and received less social support and had vulnerable family functions. It is consistent with the findings of this research that living level affects health conservation. It testifies that income is an element nurses should consider.

If middle-aged women exercise regularly, it can help them to overcome menopause. Thus, it is important to exercise 30-60 minutes 3-5 days a week with 45-70% levels of their capacities²⁸.

Self-efficacy was also an element affecting health conservation among middle-aged women. Self-efficacy is the judgment on personal ability to organize and implement specific behavioral process. As it is related with judgment on one's ability to do something with certain techniques one possesses, it is necessary to motivate individuals to participate in activities they can do well with their capacities and techniques. Consequently, middle-aged women should be encouraged to participate in activities for health conservation. In a research on middle-aged women who are vulnerable to cardiovascular diseases, those women were under a 7-round program designed to improve lifestyle habits. It found out that those who had higher education had higher scores in self-efficacy related with prevention of such diseases than those who are lower in education level²⁹. It supports the findings of this research showing that lifestyle habits and self-efficacy are related, and middle-aged women can improve their health through it. Thus, to conserve health of middle-aged women, their lifestyle habits, and self-efficacy should be considered. They should be encouraged to cultivate good lifestyle habits, which can enhance their life quality.

In addition, a research on life quality of adults found out that educational level and exercise affect life quality²⁵ which supports the findings of this research. But, as that research included men as subjects, it is necessary to repeat the research targeting only women.

In conclusion, it is important for middle-aged women to be aware of the possibility that they can get diseases with physical and physiological changes, maintain mental stability, widen their thinking, live wise life, and make mature life^{30,31}. That is, various activities for health promotion should be integrated into daily life, become desirable habits. Middle-aged women, using internal and external sources^{32,33}, should develop their potentials, contribute to the society, discover their values, and fulfill the meaning of life.

As this research used middle-aged women in specific regions, some caution should be applied to try to expand the findings of this research generally. It is desirable to repeat this kind of researches in the future by expanding the regions where respondents are chosen.

5. Conclusion

The relative explanatory powers of those variables in descending order are as follows: wisdom 39.6%, lifestyle

habits 6.0%, living level 3.8%, education 2.3%, self-efficacy 1.8%, and exercise 1.6%. In total, those variables explained 53.6% of health conservation. Based on the findings of this research, this research wants to suggest the followings. It is necessary to make efforts to enhance wisdom, lifestyle habits, and self-efficacy which were found to be influential in improving health conservation of middle-aged women, and to encourage them to exercise regularly. In addition, the findings that living level and education level are effective in improving health conservation lead us to suggest that economic conditions should be considered in conserving health. Thus, it is necessary to create jobs for them to work. The finding that those with higher education are higher in health conservation leads us to assume that those with higher education are more likely to enjoy occupational and economic stability. Therefore, this research suggests that it is necessary to develop nursing mediation, actively considering the above findings. It is also necessary to search for other variables which can enhance explanatory power of health conservation. In particular, as wisdom was found to be important element predicting health conservation, it is necessary to search for ways to live wisely.

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