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The Correlation Study on Health-promoting Behavior and Life Satisfaction of the Elderly in Urban Area

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CONTENTS

Ⅰ. Introduction

As the proportion of people over age 65 continues to increase, a timely and important area for community health practice and research is that of health promotion of the elderly.

Health-promoting behaviors are defined as activities directed toward developing the resources of people that maintain or enhance well-being.

Health-promoting behaviors have been found to contribute to improve health status among the older population. Health promotion is defined as 'activities directed toward developing the resources of clients that maintain or enhance well-being'(Pender, 1982). Health promotion has been found to contribute to improved health status among the older population(Wing, 1988). This improved health status has been reflected in increased overall life expectancy, decreased mortality of older adults, decreased incidence of heart disease, cancer, cerebrovascular disease, and accidents(Wallack & Winkleby, 1987).

We have seen that life expectancy is now beyond 70 years of age for both men and women, with the fast-growing age group

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being those over 85. This is indeed a wonderful phenomenon. However, aging causes physiological change in many bodily functions. Although some of these changes are begun, the older adult has a higher frequency of illness than the younger population. With these physiological and pathological changes, health promotion services are integral to helping older adults to lead high-quality lives throughout their expanded lifespan(Keating, 1995).

Older adults are a particularly important group to target for health promotion programs.

A health promotion focus has become official government policy as embodied in the nation's health promotion and disease prevention goals entitled Healthy People 2000 (U. S Public Health Services, 1991).

The document proclaims three broad national goals; increase the span of healthy life for Americans, reduce health disparities among Americans, and achieve access to preventive services for all Americans. A total of 16 priority areas are listed with almost 300 specific, guantifiable goals that are applicable to older persons (American Association of Retired Persons, 1991).

Approaches to health promotion are based in part on the premise that education about changes necessary to improve health will facilitate enactment of these changes.

Variables of this study were selected based on Pender's(1982) health promotion model. Pender believed that health-promoting behaviors are directed toward sustaining the level of well-being, self-actualization, and fulfillment of the individual. In the current investigation, life satisfaction was used as an index of well-being because it has been widely studied among the elderly(Johson et al., 1984).

Life satisfaction is defined as the perceived differences between one's feelings of success, ranging from one's perception of fulfillment to that of deprivation(Campbell et al., 1976).

Numerous studies(Brooker, 1997; Bonder, 1994) have supported a positive relationship between health promotion and health status in the general population. However, there is a lack of research on the relationship between health promotion behavior and life satisfaction in the general population as well as a dearth of research examining these variables in elderly of the urban area. The purpose of this study was to explore the health-promoting behaviors and discover the correlation between the health-promoting behaviors and life satisfaction in elderly of the urban area.

Ⅱ. Methods

1. Design & Sample

A descriptive research approach was utilized in this study to explore the health promotion and discover the relationship among the health promotion and life satisfaction. The subjects consisted of two hundred and two community-dwelling elderly residing in Daegu city. Those elderly were measured by interview using a structured interview schedule from April 10th to September 30th, 2002 that contained three questionnaires.

2. Instrument

The health degrees of the elderly subjects were measured by interviews using a structured interview schedule that contained both close and open-ended questions.

Likert scale was selected as a system of rating statements to indicate measurable degrees of the variables.

Health-promoting behavior. The health promoting lifestyle profile(HPLP) consists of 53 item questionnaire, which was developed by Walker et al. (1986).

The HPLP measures health responsibility, self-actualization, nutrition, interpersonal relationship, stress management, and exercise.

The HPLP was surveyed on a five-point scale, which ranged from one (never) to five (routinely).

The reliability of this instrument was 0.822 in Cronbach's alpha value.

Life satisfaction. The 20 item modified version of the life satisfaction index A (LSIA; Adams, 1969) was used to measure life satisfaction.

The areas are; physical health, emotional health, health care, economic condition, housing, community safety, friendships, work or use of time, leisure and life in general.

The life satisfaction was surveyed on a five-point scale, which ranged from one (very dissatisfied) to five (very satisfied).

The reliability of this instrument was 0.813 in Cronbach's alpha value.

Perceived health status. The perceived health status consists of 10 item questionnaire, which was modified by the investigator from a questionnaire developed by the Health Status Questionnaire (HSQ: InterStudy Outcome Management System, 1991). Information about the subjects' perceived health status was elicited as to how they feel about their current health status, appetite, digestion, urinary function, bowel function, hearing, vision, sleep, breathing and dental status during the month prior to interview.

The perceived health status was surveyed

on a four-point scale, which ranged from one (very poor) to four (very good).

The reliability of this instrument was 0.780 in Cronbach's alpha value.

3. Data Collection

The investigator obtained the permission to survey elderly individuals from senior centers. The chief of center were asked to announce this study and introduce the researcher to those elderly people. At the beginning of the interview, the consent form was given, and subjects signed it prior to implementing the survey. During the interviews, the investigator spoke slowly and clearly so that the elderly subjects could comprehend the interview questions. The subjects were informed that they could decline to answer any point they chose. Each subject was interviewed for about 1 hour.

4. Data Analysis

Quantitative data were computerized by using the Statistical Packages for Social Science(SPSS). The measurement of frequencies, percentages, mean, and standard deviation was used to summarize responses to each item. The Cronbach's alpha was calculated as a measure of internal consistency for all instruments used in this study. One-way analyses of variance and t-test were used to determine the difference of individual variables upon demographic characteristics. The Pearson's correlation coefficient was employed to analyze a correlation among all variables.

Ⅲ. Results

1. Demographic Characteristics

The total number of participants was two hundred and two elderly, One hundred and seven respondents(53.0%) were female. The mean age of the total sample was 76.8 years (SD=6.62) with 28.5% aged 65 to 74 and 66.8% aged 75 to 84. 62.3% participants lived alone, and 37.7% participants lived together with spouse or their family members.

In terms of education, 50.2% participants had no formal or an elementary school education, 39.2% participants had a middle or high school education and 10.6% respondents had a college education<Table 2>.

2. Health-promoting Behavior & Life Satisfaction

The health-promoting behavior was given the information on personal health behaviors. The mean scores within categories were used to determine the rank order of each category by these subjects. Nutrition practices were most highly ranked, followed by interpersonal relationship, self-actualization, stress management, health responsibility, and

exercise.

The mean of life satisfaction was 3.49(SD=0.48) <Table 1>.

3. Difference of Sample Variables on Demographic Data

One-way analyses of variance and t-test were conducted to determine if mean scores of health-promoting behavior and life satisfaction for each of the selected person factors differed according to gender, age, living situation and level of education<Table 2>.

The scores of health-promoting behaviors were significant differences in age and educational level. The 65 to 74 years age group (M=3.68) had better health-promoting

<Table 1> Personal Health-promoting Behavior & Life Satisfaction(N=202)

Behavior	Mean	SD
health-promoting behavior		
Health responsibility	3.49	0.43
Self-actualization	3.58	0.74
Nutrition	3.82	0.72
Interpersonal relationship	3.74	0.68
Stress management	3.51	0.74
Exercise	3.03	0.82
life satisfaction	3.49	0.48

<Table 2> Difference of Sample Variables on Demographic Data (N=202)

Variables	N(%)	Health-promoting behavior			Life satisfaction		
		M±SD	F or t	p	M±S	F or t	p
Gender							
Male	95(47.0)	3.66±0.69	0.69	.784	3.68±0.62	0.24	.752
Female	107(53.0)	3.53±0.59			3.53±0.51		
Age							
65 - 74 yrs	58(28.5)	3.68±0.72		.031	3.71±0.69		
75 - 84 yrs	135(66.8)	3.59±0.71	3.99		3.43±0.54	1.43	.322
85 and over	9(4.7)	3.22±0.43			3.23±0.35		
		(Mean = 77.97, SD = 6.02)					
Living Situation							
Living together	76(37.7)	3.59±0.59	3.43	.081	3.74±0.68	3.38	.043
Living alone	123(62.3)	3.52±0.67			3.51±0.61		
Level of Education							
No formal/Ele.sch.	101(50.2)	3.35±0.59			3.48±0.65		
Middle/High sch.	79(39.2)	3.65±0.76	9.31	.000	3.88±0.43	1.42	.354
College	22(10.6)	3.73±0.51			3.85±0.62		

behavior than aged 75 and over group (75 to 84 years: M=3.59, aged 85 and over: M=3.22) (P<.05). Higher educational level (College: M=3.73) had better health-promoting behavior than lower educational level (Middle/High school: M=3.65, No formal/Ele..school: M=3.35) (P<.001).

Life satisfaction was significantly related to only their living situation. The subjects who lived together with spouse or their family members (M=3.74) had higher life satisfaction than alone (M=3.51) (P<.05).

4. Correlation Analysis

Health-promoting behavior, life satisfaction, and perceived health status were compared using Pearson's product-moment correlation to ascertain the relationship between them <Table 3>. Health-promoting behavior of the subjects was found to be statistically significant and positively correlated with life satisfaction (r=.682, p<.01) and with perceived health status (r=.655, p<.01) respectively. And life satisfaction was also found to be statistically significant and positively correlated with perceived health status (r=.724, p<.01).

Ⅳ. Discussion

With the adoption of health promotion act in 1995 and establishment of health promotion funds, various health promotion programs are underway centering around public health centers, making health promotion programs a major part of public health clinic tasks. The average 65-year-old person today can expect to live another 15 years, remaining functionally independent for 10 of those years. Because most elderly people are active and independently functioning, they stand to gain from health-promoting behaviors and programs (Kotthoff-Burrell, 1992).

Several studies have identified determinants of health promotion among the general elderly population. Health-promoting behaviors were shown to be factors in older persons' life satisfaction(Kuffy, 1993; Kvale

<Table 3> Association between Health-Promoting Behavior, Life Satisfaction, and Perceived Health Status(N=202)

Variables	Health-promoting behavior	Life satisfaction	Perceived health status
Health-promoting behavior	-		
Life satisfaction	.682**	-	
Perceived health status	.655**	.724**	-

** P<.01

et al., 1989).

This study is the first investigation of a relationship between health promotion and life satisfaction in the elderly of the urban area. In this sample, subjects who were young old and higher educational level reported better health-promoting behaviors than those who were oldest old and lower educational level.

This finding was consistent with Muhlenkamp et al.(1985) who reported a marked difference in the educational level. He found that subjects with higher educational level reported significantly more health promoting behaviors than subjects with lower educational level.

This finding indicates that subjects who live together with their families felt their life satisfaction higher than subjects living alone. Compared to studies of Johnson et al. (1984) and Mancini(1980-1981), subjects living alone reported lower their life satisfaction.

The findings in some instances, such as the existence of a strong association between health-promoting behavior and life satisfaction, are congruent with previous studies(Green, et al.,1986; Whetstone & Reid, 1991). If one accepts that life satisfaction is a form of personal fulfillment and well-being, the findings of this study are congruent with those of Pender(1982).

Health-promoting behavior denotes comprehensive care that provides not only health practices but also life satisfaction such as myriad forms of social and spiritual supports for individuals and their families, groups, aggregates, and populations in communities.

Policies must address key issues concerning access to appropriate and acceptable healthy environment to promote health, and support of healthy lifestyles that ultimately promote quality of life for all elderly individuals.

Ⅴ. Conclusion

This study attempts to identify health-promoting behavior and discover the relationship between the health-promoting behavior and life satisfaction of the elderly people in the urban area.

The subjects surveyed in this study consisted of two hundred-two community-dwelling elderly living in Daegu city.

The health degrees of the elderly subjects were measured by interviews using a structured interview schedule that contained both close and open-ended questions.

The results of the study are as follows;

1) The health-promoting behavior was given the informations that nutrition practices were most highly ranked, followed by interpersonal

relationships, self-actualization, stress management, health responsibility, and exercise.

2) The mean scores of health-promoting behaviors were significant differences in age and educational level.
3) Life satisfaction was significantly related to only living situation.
4) Health-promoting behavior of the subjects was found to be statistically significant and positively correlated with life satisfaction.
5) Life satisfaction was also found to be statistically significant and positively correlated with perceived health status.

This research will be contributed the health care professionals' knowledge of health promotion and well-being of elders. Further investigation is warranted if health-promoting behaviors of the elderly are to be instructive models to use in patterning their life-styles and health status.

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ABSTRACT

Purpose: This study was to identify the correlation between the health-promoting behavior and life satisfaction in elderly of the urban area.

Method: The subjects of this study were 202 people aged over 65 who had been living in urban area. Data was collected through questionnaires from April 10th to September 30th, 2002. The collected data was analyzed using descriptive statistics, t-test, ANOVA, Pearson correlation coefficient with SPSS statistical program.

Result: The health-promoting behavior was given the informations that nutrition practices were most highly ranked, followed by interpersonal relationships, self-actualization, stress management, health responsibility, and exercise. The mean scores of health-promoting behaviors were significant differences in age and educational level. Life satisfaction was significantly related to only living situation. Health-promoting behavior of the subjects was found to be statistically significant and positively correlated with life satisfaction.

Conclusion: These results suggested that elderly people in urban areas with high degree of quality of life is likely to be in practice with high degree of health-promoting behaviors. Therefore, it is necessary to develop health promotion programs in order to enhance the quality of life of elderly people in urban areas.

Key Words: Health-promoting Behavior, Life Satisfaction, Elderly of the Urban Area