A study on the Health-Promoting Behaviors of the Young-Elderly Population in Urban and Rural Communities

Eun Ju Lim RN PhD¹, Jun Hee Noh RN PhD², Eun Young Kim RN PhD³

¹Assistant Professor, Red Cross College of Nursing, Chung-Ang University, Seoul, Korea, ²Assistant Professor, Department of Nursing, Woosuk University, Wanju-Gun, Jeollabuk-Do, Korea, ³Assistant Professor, Department of Nursing, Gwangju University, Gwangju, Korea

Abstract. The purpose of this study was to identify the factors affecting the health-promoting behaviors for young-elderly people in urban and rural communities. The subjects were 202 men and women in the age of 65–74. Health-promoting behaviors were significantly positively correlated with subjective health status (r = 0.216, P = 0.022), previous health-related behaviors (r = 0.735, P < 0.001), perceived benefit (r = 0.602, P < 0.001), and self-efficacy (r = 0.348, P < 0.001) in the urban population and previous health-related behaviors (r = 0.501, P < 0.001), perceived benefit (r = 0.810, P < 0.001), and self-efficacy (r = 0.226, P = 0.032) in the rural population.

Keywords: Aged, Health promotion, Rural population, Urban population

1 Introduction

Health-promoting behaviors refer to general activities that improve self-realization and a sense of well-being, including acts that assist individuals in maintaining and promoting healthy lifestyles [1]. Health-promoting activities for elderly adults are significant, in that they could minimize the limitations imposed by the aging process, promote independence, and maximize remaining ability. While almost half of the aged population in South Korea (48.7%) considered their subjective health status to be poor [2], they tended to neglect positive health management that requires time and energy, including physical activities [3]. Industrialization has led to family nuclearization and population gravitation toward cities; consequently, rural communities have faced aging and feminization of the farming population, with an increasing number of aged individuals living alone, and urban communities have seen disease types change due to Westernized dietary habits, diversified family composition, and increasing sociopsychological health problems in elderly adults [3]. Therefore, there is an urgent need for the analysis of health-promoting behaviors.
which could improve health status and prevent diseases in elderly adults, and relevant factors affecting such behaviors in urban and rural communities, in addition to the development and implementation of health programs that could revise or reinforce such behaviors.

Elderly adults were divided into urban and rural populations to determine health-promoting behaviors status and identify the factors affecting such behaviors, with the objectives of contributing to the improvement of health equality within South Korean communities and presenting basic data to develop a plan for health-promoting behavioral training programs and nursing interventions, taking geographical characteristics into account.

2 Methods

2.1 Data collection and subjects.

Data collection was performed between January 1 and December 31, 2014, and three trained research assistants recruited subjects with the help of women’s cultural centers, community service centers, and religious groups in each of the communities involved. The questionnaires were distributed to the individuals who agreed to participate in the study, and the research assistants provided explanations to those who experienced difficulty in understanding the questions. The sample size found to be sufficient on the basis of the results of regression analysis performed using the G*power3 Program [4] was 85 for urban communities and 77 for rural communities, with a significance level of .05, a medium-level effective size of .15, and testability of .80.

2.2 Measurements

Perceived health status. The subjects described their levels of general health and compared them with those of others in the same age group using a 3-point scale ranging from 1 (poor) to 3 (good). Cronbach’s α for the scale was .91 in this study.

Previous health-related behaviors. The four-point scale developed by Yun and Kim [5] was used to measure previous health-related behaviors and consists of seven items. These seven items include two items regarding health information inquiry and one item regarding each of the following: exercise, diet, counseling, psychological well-being, and spiritual activity. Total possible scores ranged from 7 to 28, with a higher score indicating more active performance of health-related behaviors during the preceding six months. Cronbach’s α for the scale was = .74 when it was developed and .81 in this study.

Perceived benefit. I developed a four-point scale consisting of eleven items for use in this study, by adapting Moon’s [6] Perceived Benefit Scale. Total possible scores ranged from 11 to 44, with a higher score indicating a higher likelihood that a subject would perceive health-promoting behavior performance as beneficial. Cronbach’s α for the scale was .71 when it was developed and .92 in this study.

Self-efficacy. A five-point scale developed by Sherer and Maddux [7] was used to
measure self-efficacy in general situations and included seventeen items. Total possible scores ranged from 17 to 85, with a higher score indicating a deeper belief in one’s ability to succeed in performing one’s duties. Cronbach's α for the scale was .71 when it was developed and .78 in this study.

**Health-promoting behaviors.** Suh’s [9] Korean translation of the Health Promotion Lifestyle Profile (HPLP) developed by Walker et al. [8] was used to measure health-promoting behaviors. This is a four-point scale consisting of 47 items concerning six aspects of health-promoting behaviors, as follows: eleven items regarding spiritual growth, ten items regarding health responsibility, five items regarding exercise, seven items regarding diet, seven items regarding interpersonal relationship support, and seven items regarding stress management. Total possible scores ranged from 47 to 188, with a higher score indicating a higher level of health-promoting behavior. Cronbach's α for the scale was .90 in Suh’s [9] study and .95 in this study.

2.3 Data analysis.

Data were analyzed using SPSS for Windows version 18.0 (SPSS, Chicago, IL, USA). A chi-square test was used to verify the homogeneity of the subjects’ general characteristics. To determine whether subjective health status, previous health-related behaviors, perceived benefit, and self-efficacy differed with respect to health-promoting behaviors, independent-sample t tests were performed. Correlations between the variables were calculated using Pearson's correlation coefficient.

3 Results

3.1 Subjects’ general characteristics

The subjects’ mean age was 68.8 years (SD = 3.02), with 59.9% (121 subjects) aged between 65 and 69 years. Of 202 subjects, 57.9% (117) were women and 84.7% (171) had received a standard education. Homogeneity was confirmed between the two groups, as there were no statistically significant intergroup differences in age, sex, or experience of a standard education.

3.2 Differences in mean scores for health-promoting behaviors between subjects from urban and rural communities

There were statistically significant mean differences in variables such as subjective health status ($t = 4.057, P < 0.001$), perceived benefit ($t = 3.787, P < 0.001$), and self-efficacy ($t = 5.116, P < 0.001$) between the subjects from urban and rural communities, with higher levels found in subjects from urban areas relative to those from rural areas. In contrast, subjects from rural areas showed higher levels of previous health-related behaviors ($t = -1.664, P < 0.098$) relative to those from urban areas.
areas. The rural population showed statistically significantly higher levels of health-promoting behaviors \( t = -3.865, P < 0.001 \) relative to the urban population.

### 3.3 Correlations between study variables and health-promoting behaviors

Correlations between health-promoting behaviors and the study variables in subjects from urban and rural communities are presented. Health-promoting behaviors were significantly positively correlated with subjective health status \( (r = 0.216, P = 0.022) \), previous health-related behaviors \( (r = 0.735, P < 0.001) \), perceived benefit \( (r = 0.602, P < 0.001) \), and self-efficacy \( (r = 0.348, P < 0.001) \) in the urban population and previous health-related behaviors \( (r = 0.501, P < 0.001) \), perceived benefit \( (r = 0.810, P < 0.001) \), and self-efficacy \( (r = 0.226, P = 0.032) \) in the rural population.

### References