Factors Influencing Rural Elderly Women’ Health Promotion Behavior

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Abstract. This study aimed to survey rural elderly women’s activities of daily living, self-esteem, social support, and health promotion behavior levels; analyze correlations among the factors; and identify factors influencing their health promotion behavior. The subjects were 208 women aged over 65 living in rural area. Data were collected from March 2013 to April 2014 and analyzed using SPSS WIN 18.0 with descriptive statistics, Pearson’s correlations. Health promotion behavior showed statistically significant positive correlations with self-esteem (r = 0.305, p < 0.001), peer support (r = 0.619, p < 0.001), and other support (r = 0.522, p < 0.001) among the sub-factors of social support. Promoting positive self-image and encouraging use of social support systems would aid this population’s health promotion behavior; health promotion programs that consider these variables will also be helpful.

Keywords: Health behavior, activities of daily living, self-esteem, social support, aged, women

1 Introduction

According to statistics on the elderly population in rural areas of South Korea, the number of people younger than 75 is decreasing or unchanged, while the percentage of those aged 75 or older is increasing steadily. Furthermore, the female-to-male ratio is rising among the elderly population [1]. Compared to men, women have more health problems, such as chronic diseases, in their old age [2]. Particularly, they suffer from musculoskeletal disorders such as osteoporosis, arthritis, and chronic pain [2]. The prevalence of chronic disease is 93.7% in elderly women and about 81.8% among elderly men [1]. Health problems are even worse among elderly women living in rural areas, where the percentage of the aged population is higher than in urban areas[1].

As people grow old, their self-esteem may deteriorate because of poor bodily functions, retirement, death of a spouse, economic loss, and shrinkage of social networks [3]. It has been reported that elders with high self-esteem and who actively engage in social interaction show greater health promotion behavior [3]. On the other hand, social support helps elders live independently without being isolated [3]. In this way, maintaining high body functioning through good health habits such as regular exercise and decent diet enables adequate performance of social activities and brings emotional stability; therefore, health behavior is directly linked to quality of life [4].
Thus, this study examined rural elderly women’s activities of daily living (ADL), self-esteem, and social support levels and tested whether these variables have a significant effect on women’s health promotion behavior, with the objective of obtaining basic information for developing health promotion programs suitable for elderly women living in rural areas.

2 Methods

2.1. Design. This study had a cross-sectional and descriptive survey design.

2.2. Subjects and data collection. The subjects of this study were 208 women aged over 65 living in rural areas. Data were collected from March 2013 to April 2014. Ethical approval was obtained from the institutional review board (No. 2012-9-3). All participants were informed about the study’s purpose and method, and that their participation was voluntary and they could refuse to participate or withdraw from the study at any point without penalty.

2.3. Measurements

Health promotion behavior. Health promotion behavior was surveyed using the Health Promotion Lifestyle Profile developed by Walker et al. [5]. This tool consisted of 45 items in 6 subscales of health promotion behavior, including 13 items on self-realization, 9 on health responsibility, 6 on exercise, 6 on nutrition, 6 on interpersonal relation support, and 7 on stress management. Each question was answered on a 4-point scale ranging from “absolutely not” (1 point) to “always yes” (4); the total score ranged from 45 to 180, and higher scores indicated higher health behavior performance. The tool’s internal consistency was α = .94 on its development and α = .96 in this study.

Activities of daily living. ADL were measured using the Korean translation called the K-ADL[6]. The K-ADL consisted of 7 items on dressing, face washing, bathing, eating, moving, toileting, and continence, and each question is answered on a 3-point scale with options of “fully independent” (1 point), “partially dependent” (2), and “fully dependent” (3); the total score ranged from 7 to 21, with higher scores indicating greater dependency. The internal consistency of the tool was α = .95 in its translation by Won et al. [6] and α = .93 for this study.

Self-esteem. Self-esteem was measured using the tool developed by Rosenberg [7]. This questionnaire consisted of 10 items, including 5 positive items (No. 1, 2, 4, 6, and 7) and 5 negative (No. 3, 5, 8, 9, and 10). Each question was answered on a 4-point scale ranging from “absolutely not” (1) to “absolutely yes” (4); the scores of the negative items were reverse scored. Total scores ranged from 10 to 40, and a high score meant higher self-esteem. The internal consistency of the tool was α = .88 on its development and α = .74 in this study.

Social support. Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. [8]. This tool measures social support perceived in three dimensions—family, friends, and meaningful
others—and consisted of 12 items, 4 each in three subscales (social support from family, social support from friends, and social support from meaningful others) rated on a 7-point scale. Response options for each item ranged from “don’t agree at all” (1 point) to “agree completely” (7); the total score ranged from 12 to 84, and higher scores indicate higher social support. The internal consistency of the tool was $\alpha = .88$ in the study by Zimet et al. [8] and $\alpha = .94$ in this study.

2.4. Data analysis. Collected data were analyzed as follows using the SPSS WIN 18.0 (IBM Corporation, Armonk, NY, USA). The subjects’ general characteristics were analyzed through descriptive statistics. Differences in health promotion behavior according to the subjects’ general characteristics were analyzed through $t$-test and ANOVA, and post hoc mean comparisons after ANOVA were done with Tukey’s test. Correlations among the subjects’ ADL, self-esteem, social support, and health promotion behavior were analyzed with Pearson’s correlation coefficient.

3  Results

3.1. General characteristics

The mean age was 73.35, and the largest age group was 65–70 years (68, 32.7%). Of the subjects, 51.9% (108) were separated from their spouse by death. The majority was unschooled (48.6%, 101), and living alone (45.2%, 94). Furthermore, the majority answered “so-so” for subjective economic status (58.2%, 121), and “average” for subjective health status (46.6%, 97).

3.2. Health promotion behavior by general characteristics

The subjects’ health promotion behavior was significantly different by age ($F = 4.66$, $p = 0.001$), education level ($F = 25.29$, $p < 0.001$), and subjective economic status ($F = 3.85$, $p = 0.010$). According to the post hoc tests, health promotion behavior scores were higher in those aged 65–70 than in those aged 81–85, and in middle school graduates than in elementary school graduates and unschooled. In addition, it was higher in those who answered “quite enough” for their subjective economic status than in those who answered “very difficult,” “difficult,” or “so-so.”

3.3. Correlations among ADL, self-esteem, social support, and health promotion behavior

Health promotion behavior showed statistically significant positive correlations with self-esteem ($r = 0.305$, $p < 0.001$), peer support ($r = 0.619$, $p < 0.001$), and other support ($r = 0.522$, $p < 0.001$) among the sub-factors of social support.
4 Discussion

This study aimed to find strategies for increasing health promotion behavior by identifying factors that significantly affect it among elderly women from rural areas. According to the subjects’ general characteristics, the health promotion behavior level was higher at a young age, high education level, and good subjective economic condition; this result was consistent with previous reports [9].

Among the subscales of social support, subjects’ self-esteem ($r = 0.305, p < 0.001$), peer support ($r = 0.619, p < 0.001$), and meaningful other support ($r = 0.522, p < 0.001$) showed statistically significant positive correlations with health promotion behavior. Furthermore, our results are supported by previous studies with rural elderly women [10] in which elders with a large social relation network and high social support were found to perform health behaviors more actively.

References