

Subjective health status and health-promoting behaviour of nursing students

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ABSTRACT

This descriptive study aimed to investigate the relation between subjective health status and health-promoting behaviour among nursing students. Participants were 177 students from the nursing department of two universities in South Korea. Data were collected from February to March 2018. Data were analysed using mean, standard deviation, analysis of variance, and Scheffe's test for post hoc using IBM SPSS Statistics 22.0. The distribution of the subjective health status was as follows: poor (39.0%), moderate (35.0%), and good (26.0%). The mean score of health-promoting behaviours was 3.03 (out of 5). In analysing the health-promoting behaviour scores according to subjective health status group, statistically significant differences were seen in exercise and sexual health. As for differences between the groups, the 'poor' and 'good' groups showed higher scores in 'exercise' compared with the 'moderate' group. Therefore, subjective health status can affect health-promoting behaviours.

Keywords: nursing students, self-related health, health-promoting behaviour

INTRODUCTION

Health behaviours in early adulthood persist throughout the individual's lifespan and may affect health in middle age and older adulthood [1]. After adolescence and middle age, physical activity is reduced, and body metabolism of is lowered, making individuals easily exposed to diseases. Therefore, it is crucial to have a healthy lifestyle before adverse health behaviours in early adulthood become fixed [2].

Health status is defined as the subjective assessment of health status in which people live and feel well-being [3]. Subjective health status is the personal assessment of health status based on a comprehensive consideration of physical, physiological, psychological, and social aspects. It indicates an overall health status and also shows a statistically correlated relation with objective health status. Subjective health status is also a useful indicator of adult mortality, health care usability, quality of food intake, aging process, and physical functioning [4, 5].

Nurses are practitioners of healthcare, directly serving as nursing providers, health educators, and promoters of health behaviours [6]. A higher level of health-promoting behaviour has been linked with a higher perceived health status [7]. Subjective health conditions can be affected by healthy lifestyles, physical activities, and health perception. Therefore, to maintain the physical health of nurses in the clinical setting, it is necessary to promote the practice of self-adjusting their self-awareness of their health condition [6].

In this study, focused on nursing students, we aimed to identify the relation between subjective health status and health-promoting behaviours. The results will contribute to explorations of how the perception of subjective health status of nursing students leads to health-promoting behaviours.

Study Purpose

This study aimed to investigate health-promoting behaviours according to subjective health status. The specific objectives are as follows.

- 1) To investigate the degree of subjective health status and health-promoting behaviours
- 2) To investigate the differences in health-promoting behaviours according to subjective health status in nursing students

METHODS

Study Design

This study used a cross-sectional descriptive design to investigate subjective health status and health-promoting behaviours in nursing students.

Participants and Data Collection Procedure

The participants were 177 students (89.3% women) from two universities in P and U cities in South Korea. Data collection was performed from February to March 2018 using a questionnaire survey. The mean age of the participants was 20.42 years. By year level at school, 25.4% of the participants were in the first year, 26.6% in the second year, 23.2% in the third year, and 24.9% in the fourth year (Table 1).

Ethical Considerations

This study was conducted in compliance with the regulations of the University Ethics Committee of the authors' university. For the ethical protection of the participants, the purpose and methods of the study were explained before the questionnaires were distributed to the participants. Only those who submitted their voluntary participation and written consent were included.

Measurement

- 1) Subjective health status was assessed in three levels: 'poor', 'moderate', and 'good'.
- 2) For health-promoting behaviours, eight items from the tool developed by Choi and Kang [8] were used: stress management, healthy diet, weight control, smoking cessation, moderate drinking, exercise, sleep management, and sexual health. Each item was scored on a five-point Likert scale, in which 1 = 'Do not do it at all' and 5 = 'Always do it'. The Cronbach's alpha for instrument reliability was .701.

Data Analysis

The collected data were analysed using IBM SPSS Statistics 22.0. The degree of subjective health status and of health-promoting behaviours of participants were analysed with descriptive statistics (frequency, percentage, mean, and standard deviation). Analysis of variance was used to compare the scores of health-promoting behaviours according to subjective health status level. Scheffe's test was used for post-hoc test analysis of groups. Statistical significance was declared at $p = 0.05$.

RESULTS

Subjective Health Status and Health-promoting Behaviours

Of the participants, 39%, 35%, and 26% reported a poor, moderate, and good subjective health status, respectively (Table 2). The mean score of health-promoting behaviours was 3.03 (out of 5). The health-promoting behaviour item with the highest score was non-smoking (4.38 out of 5), whereas the lowest scored item was a healthy diet (2.48 out of 5) (Table 3).

Score Differences in Health-promoting Behaviours According to Subjective Health Status

Table 4 shows the differences in health-promoting behaviour scores according to subjective health status. The difference between the mean scores was $F = 2.928$, $p = 0.055$; no statistically significant differences were seen between the groups.

However, the sub-item analysis of the scores showed a statistically significant difference between exercise ($F = 5.647$, $p = 0.004$) and sexual health ($F = 3.047$, $p = 0.048$).

For the analysis of differences between the groups, the Scheffe's test showed differences between the groups in the item 'exercise' (poor > moderate, $p = 0.012$, good > moderate, $p = 0.019$).

DISCUSSION

This study attempted to investigate whether the perception of subjective health status of nursing students influences their health-promoting behaviours.

Among the nursing students in this study, 39.0% reported that their subjective health status was 'poor', which is lower than the 68% in the case of middle-aged women in Lee [9], in which subjective health status was influenced by income, post-menopausal status, and age. Notably, the present participants were in their 20s, far lower than the age of middle-aged women, indicating the effect of age on subjective health status.

The current participants' health-promoting behaviour scores had a mean of 3.03 (out of 5). This score is lower than the 3.36 points reported in Choi and Kang [8], which used the same tool. However, the findings are difficult to compare because of the difference in the number of participants in the two studies. Nonetheless, in Choi and Kang [8], the highest scored item is 'non-smoking' and the lowest score item is 'healthy diet', corresponding to the trends in the present study.

We also found that health-promoting behaviours according to subjective health status were higher in the 'poor' and 'good' groups compared with the 'moderate' group in terms of exercise. Participants with a subjective health status of 'good' and 'poor' showed a tendency to exercise more compared with those of a 'moderate' health status. In previous studies [7, 10], exercise and physical activity have been shown to have positive effects on subjective health status. Although studies have been conducted on variables that affect subjective perception of health, exhaustive research has not been conducted on whether subjective health status influences health behaviours. There is a need to analyse the bi-directional impact of subjective health status perception and health behaviours.

LIMITATIONS OF THE STUDY

The participants of this study were recruited through convenience sampling, and as such, caution should be taken in the generalization of the results of the study.

CONCLUSION

This study investigated the subjective health status and health-promoting behaviours of nursing students. Subjective health status was found to affect health-promoting behaviours. It is necessary to analyse the factors that influence the subjective health status of nursing students and to help them form a healthy lifestyle in early adulthood.

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Table 1. General characteristics of participants (N = 177)

Variables	n	%
Gender		
Male	19	10.7
Female	158	89.3
Year level		
First	45	25.4
Second	47	26.6
Third	41	23.2
Fourth	44	24.9

Table 2. Distribution of self-rated health level of participants (N = 177)

Self-rated health level	n	%
Poor	69	39.0
Moderate	62	35.0
Good	46	26.0

Table 3. Score of health-promoting behaviours

Variables		Mean (SD) (range: 1-5)
Health-promoting behaviours Total mean		3.03 (0.57)
Sub-items	Stress management	2.74 (0.95)
	Healthy diet	2.48 (0.93)
	Weight control	2.58 (1.01)
	Non-smoking	4.38 (1.36)
	Moderate drinking	3.38 (1.19)
	Exercise	2.55 (0.97)
	Sleep management	2.79 (1.00)
	Sexual health	3.37 (1.24)

Table 4. Score difference of health-promoting behaviours according to self-rated health level

Variables		Self-rated health level			F (p)
		^a Poor	^b Moderate	^c Good	
		Mean (SD)			
Health-promoting behaviours Total mean		3.03 (0.57)	2.95 (0.47)	3.11 (0.65)	2.928 (0.055)
Sub- items	Stress management	2.75 (0.88)	2.66 (0.91)	2.81 (1.04)	1.079 (0.341)
	Healthy diet	2.46 (0.93)	2.38 (0.83)	2.59 (1.00)	2.154 (0.117)
	Weight control	2.66 (1.09)	2.46 (0.93)	2.50 (1.01)	1.624 (0.198)
	Non smoking	4.37 (1.40)	4.40 (1.32)	4.37 (1.35)	0.023 (0.977)
	Moderate drinking	3.36 (1.17)	3.39 (1.16)	3.37 (1.23)	0.028 (0.972)
	Exercise	2.66 (0.97)	2.33 (0.95)	2.64 (0.95)	5.647 (0.004)* a>b, 0.012 c>b, 0.019
	Sleep management	2.72 (1.01)	2.78 (0.97)	2.87 (1.02)	0.929 (0.396)
	Sexual health	3.31 (1.15)	3.23 (1.18)	3.56 (1.35)	3.047 (0.048)*

SD, Standard deviation, *p<0.05