Evaluation of a Psychoeducation Program Given to International Nursing Students for Healthy Lifestyle and Life Satisfaction

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ABSTRACT

Objective: This research was conducted to evaluate the effectiveness of a psychoeducation program given to international nursing students receiving education in the nursing department of a public university to improve their healthy lifestyle behaviors and life satisfaction.

Methods: The research was designed based on the single-group pretest-posttest model. The research sample consisted of 68 international students enrolled in the university's nursing department in the 2016-2017 academic year. Data were collected using the introduction form, Healthy Lifestyle Behaviors Scale, and Life Satisfaction Scale. Pre-education and post-education scores were compared using the dependent t-test.

Results: The total Healthy Lifestyle Behaviors Scale score and subscale scores significantly increased after the program (p≤0.001). The score obtained from the Life Satisfaction Scale was 20.1±4.6 before the program and 25.9±3.9 after the program, and this increase was statistically significant (p≤0.001).

Conclusion: The psychoeducation program given to international students effectively ensures that students gain healthy lifestyle behaviors, positively affecting life satisfaction.

Keywords: International student, psychoeducation, healthy lifestyle, life satisfaction, nursing

1. INTRODUCTION

Migration from abroad to Turkey for educational purposes has increased with the Examination for International Students (1). In Turkey, international students have been taken as a political sphere since the early 1990s. According to international students, studying in higher education in Turkey provides them gain prestige and finding a job easily in their own country. Students come to Turkey's universities from Azerbaijan, Cyprus, Turkmenistan, Bulgaria, etc., depending on the intensity of the geographical and cultural relations (2). An increasing number of students come to Turkey every year and make efforts to remain in the higher education system and be successful (3). During this process, students enjoy the idea of getting into university but encounter many problems in the social, cultural, and economic areas (1,4). In addition to the regular problems of university students, nursing students also encounter some problems arising from nursing education and the hospital environment. The mental health of nursing students is affected negatively due to the intense theoretical content of nursing education and communication with patients who suffer (4). With the problems faced in the social, cultural, and economic areas, it becomes even more difficult for international students to adapt to society. Studies show that international students experience loneliness, inadaptability, shyness, cultural shock, and psychological problems (1,5,6). Moreover, they may face risky health behaviors such as inability to make changes in their lifestyle, lack of good stress management (future concerns, limit-pushing behaviors, violence), inability to take responsibility for their health (smoking, alcohol and drug use, unprotected intercourse) or malnutrition (fast-food, poor nutrition) (1,7).

Health promotion involves using the capacity and energy effectively, living a satisfactory life, being productive, and using all the health-related skills (8). Primarily, it is necessary to determine the lifestyle behaviors of international students and organize training programs for their needs to ensure the acquirement of healthy lifestyle behaviors (9). Psychoeducation, one of the educational programs, provides group environments where individuals have the opportunity to share their problems and mutually help and support each other by sharing their problem-coping methods. When individuals in the group see that they have similar problems, a strong bond develops between them; they receive acceptance, understanding, and support from each other and can easily realize the events in their lives with

the feedback they receive from the group members (10). Therefore, including international students in such a group environment can transform their healthy lifestyle behaviors into a lifestyle and improve their health status.

A psychoeducation program carried out in the group structure provides benefits such as interaction, social learning, and social support (11,12,13). This is considered important in ensuring international nursing students gain necessary healthy life behaviors and life satisfaction. The fact that there is no study for foreign students in the literature is essential in terms of the originality of our study.

Aim of the Study: This study was carried out to evaluate the effectiveness of a psychoeducation program given to international nursing students receiving education in the nursing department of a public university to improve their healthy lifestyle behaviors and life satisfaction.

Research Hypotheses

H1: The psychoeducation program given to international students during ensures gain healthy lifestyle behaviors.

H2: The psychoeducation program is given to international students during increases life satisfaction levels.

2. METHODS

2.1. Research Type

The quasi-experimental study was conducted in the 2016-2017 academic year based on the single-group pretest-posttest model.

2.2. Sample

The research population consisted of 70 international students who were receiving education in the nursing department of a public university health school in the 2016-2017 academic year. The sample size was calculated a priori using G*Power. Considering the pretest-posttest means and standard deviations in the article taken as the reference for the sample size (14), it was determined that 66 students were required in the sample for Type I Error (Alpha) of 0.01 and power of 99%. The sample of the study consisted of 68 international students. Students over 18 who could easily read and understand our language and who were willing to participate in the study were included in the sample. During the study, there were no students who withdrew from the study or took a break from education.

Procedure and Application

The student participating in the study filled the personal data form and scales in a quiet classroom environment around a round table. A single-group, 8-session psychoeducation program was carried out based on the pre-test and post-test model. Each focus group session was planned to be 60

minutes. Each student was given a number. The scope of the 8-session psychoeducation program includes meeting and determination of group rules, taking responsibility for health, nutrition, and exercise, using interpersonal communication and support, self-realization, stress management, and life satisfaction. The psychoeducation program was held in 8 sessions, 60 minutes each once a week. Each session was carried out on the days and hours determined previously with international students, according to the session's topic and in line with the specified objectives. In the sessions, the previous session was summarized in the first 10 minutes, the plan was applied in line with the session topic for 40 minutes, the session was evaluated, and the session was ended after summarizing the next session in the last 10 minutes. The content of the psychoeducation program was based on the sub-dimensions of the Healthy Lifestyle Scale and the Life Satisfaction Scale used in the study (15).

Sessions:

1. Meeting with the group members, introducing the group process, explaining the session topics,
2. Taking Responsibility for Health,
3. Gaining Positive Health Behaviors: Nutrition and Exercise,
4. Gaining Positive Health Behaviors: Using Interpersonal Communication and Support,
5. Gaining Positive Health Behaviors: Self-realization,
6. Gaining Positive Health Behaviors: Stress Management,
7. Life Satisfaction,
8. Evaluation of Psychoeducation Given to Improve Healthy Lifestyle and Life Satisfaction/Termination of the Group Session.

Sessions 4, 6, 7 lasted 90 minutes due to the long topic contents and time-consuming activities.

2.3. Instruments

In this study, a questionnaire consisting of 19 questions describing international students, the Healthy Life Style Behaviors Scale (HLBS), and the Life Satisfaction Scale (LSS).

Healthy Lifestyle Behaviors Scale (HLBS)

The scale was developed by Walker, Sechrist, and Pender in 1987 to measure one's health-promoting behaviors regarding a healthy lifestyle. It was adapted to Turkish by Esin, its validity and reliability study was performed, and the Cronbach's alpha internal consistency coefficient was found as 0.91. The scale is a four-point Likert-type scale consisting of 48 items and six subscales. The score of each subscale can be used alone, or the total score of all subscales can be used and gives a healthy lifestyle behaviors score. The highest score for the total scale is 192, and the lowest score is 48. A high scale score indicates better healthy lifestyle behaviors. All items of the scale have a positive expression, and no items are scored reversely. The subscales of the scale are as

follows. Self-realization: The subscale consists of 13 items, including questions 3, 8, 11, 12, 16, 17, 21, 23, 29, 34, 37, 44 and 48. It determines one's life goals, self-development ability, how well they know and can satisfy themself. Health responsibility: The subscale consists of 10 items (items 2, 7, 15, 20, 28, 32, 33, 42, 43 and 46). It determines one's level of responsibility for their health and how much they participate in their health. Exercise: The subscale shows one's level of exercise, a constant element of a healthy life, and consists of 5 items (4, 13, 22, 30, and 38). Nutrition: The subscale consists of 6 items, including questions 1, 5, 14, 19, 26, and 35. It determines one's values in choosing and organizing meals and food selection. Interpersonal support: The subscale determines one's communication with their close environment and level of continuity and consists of 7 items (10, 18, 24, 25, 31, 39, and 47). Stress management: The subscale consists of 7 items (6, 9, 27, 36, 40, 41, and 45) that determine one's level of stress source recognition and stress control mechanisms (15).

Satisfaction with Life Scale (SWLS):

University students' general life satisfaction was measured using the scale developed by Diener, Emmons, Larsen, and Griffin (1985) and adapted into Turkish by Köker (1991). The scale, which reflects how the individual evaluates his own life, measures the perceived general life satisfaction. The items of the scale, which has five positive items, are in seven-point Likert type. The increase in the scores obtained from the scale shows that the perceived general life satisfaction also increases (16).

2.4. Data Evaluation

Descriptive data were given with mean ± standard deviation, number, and perceentage (%). The distribution of the data was tested using the Shapiro-Wilk test. The dependent sample t-test was used to compare the pre-program and post-program scores. In all analyses, the statistical significance was accepted as p≤0.05.

2.5. Ethical Aspect of the Research

Ethics committee approval (Number: 2016/2, Date: October 26, 2016) was received from the ethics committee of Kastamonu University. Students were informed about the study, and their verbal and written consent was received.

3. RESULTS

Of the students, 55.9% were in the 18-20 age interval, 67.6% were first-grade students, and 67.6% were female. 95.6% had no metabolic disease, 51.5% had social security, 14.7% were smokers, 10.3% were alcohol users, and 58.8% had sufficient income (Table 1).

Table 1. Distribution of socio-demographic characteristics of student

SOCIO-DEMOGRAPHIC CHARACTERISTICS			n	%
Age		18-20 years old	38	55.9
		21 years old and older	30	44.1
			68	100
Class		1st	46	67.6
		2nd	16	23.5
		3rd	4	5.9
		4th	2	2.9
			68	100
Gender		Female	46	67.6
		Male	22	32.4
			68	100
Presence of metabolic disease		Yes	3	4.4
		No	65	95.6
			68	100
Social assurance		There is	35	51.5
		no	33	48.5
			68	100
Smoking status		Yes	10	14.7
		No	58	85.3
			68	100
Alcohol Use		Yes	7	10.3
		No	61	89.7
			68	100
Income status		Sufficient	40	58.8
		insufficient	28	41.2
			68	100

Of the students, 70.6% were living in Turkey for 1 to 5 years, 54.4% had family or relatives in Turkey, 42.6% were staying at home, most of them defined their Turkish speaking (85.3%) and writing (86.8%) skills as sufficient (Table 2).

As seen in Table 3, the *Healthy Lifestyle Behaviors Scale* and *Life Satisfaction Scale* scores displayed normal distribution; therefore, parametr ic techniques were used in all statistical procedures (Table 3).

When the pre-program and post-program total score and subscale scores of the students from the Healthy Lifestyle Behaviors Scale were compared, total and all subscale scores were found to increase after the program compared to the pre-program scores, and this increase was statistically significant (p≤0.001) (Table 4).

The mean scores of the students from the Life Satisfaction Scale before and after the program are presented in Table 5. The score was 20.1±4.6 before the program and 25.9±3.9 after the program, and the difference was statistically significant (p≤0.001) (Table 5).

Table 2. Distribution of descriptive characteristics of students

DESCRIPTIVE CHARACTERISTICS OF STUDENTS		n	%
How long has he/she been in the country	1-5 year	48	70.6
	6-10 year	11	16.2
	11-15 year	9	13.2
		68	100
*Do you have family and relatives in the country	Yes	37	54.4
	No	28	41.2
		65	100
Where does he/she stay during his/her education?	Government dorm	27	39.7
	Private dormitory	7	10.3
	Home	29	42.6
	With family	5	7.4
		68	100
The competence of speaking the language of the country	Sufficient	58	85.3
	insufficient	10	14.7
		68	100
The competence of writing the language of the country	Sufficient	59	86.8
	insufficient	9	13.2
		68	100
Health perception	Excellent	10	14.7
	Very good	45	66.2
	Middle	12	17.6
	Bad	1	1.5
		68	100

*3 students did not answer.

Table 3. Healthy lifestyle behaviors scale and life satisfaction scale normality test results

Variable	Shapiro-Wilk	
	Value	P
Healthy Lifestyle Behaviors Scale – pre-program scores	.978	.274
Healthy Lifestyle Behaviors Scale – post-program scores	.975	.200
Life Satisfaction Scale_ pre-program scores	.988	.778
Life Satisfaction Scale_ post – program scores	.970	.097

Table 4. Comparison of the pre-and post-program scores of the total and sub-dimensions of the healthy lifestyle behaviors scale

Healthy Lifestyle Behaviors Scale	Pre-Program Scores	Post-Program Scores	t*
	X±SS	X±SS	p
Total Score	110.5±11.6	143.7±15.3	21.446 <0.001
Self-Realization	32.5±4.2	41.4±4.2	16.731 <0.001
Health Responsibility	21.1±3.5	27.6±4.4	14.340 0.000
Exercise	9.7±2.5	13.6±2.9	11.631 <0.001
Nutrition	13.7±2.3	17.7±2.9	13.005 <0.001
Interpersonal Support	17.1±2.6	21.9±3.1	14.366 <0.001
Stress Management	16.2±2.2	21.2±2.8	15.501 <0.001

*Paired Samples T-Test

Table 5. Comparison of life satisfaction scale before and after program scores.

Life Satisfaction Scale	Pre-Program Scores	Post-Program Scores	t*
	X±SS	X±SS	p
Total Scores	20.1±4.6	25.9±3.9	12.429 <0.001

*Paired Samples T-Test

4. DISCUSSION

One of the biggest challenges of the 21st century is the fight against the continuous growth in the global burden of non-communicable diseases. One of the main objectives of the World Health Organisation's (WHO) Global Action Plan for the Prevention and Control of Non-Communicable Diseases 2013-2020 is to ensure individuals and the population make healthier choices and adopt a health-promoting lifestyle since health and lifestyle are closely related (17). Beliefs about health, diseases, and lifestyle are largely affected by culture and local values (18,19). Biological health can be focused on as the only measure of well-being if the role of cultural values in health is ignored. The potential of culture to become a key component in health care and development can be ignored (20).

This study aimed to evaluate the effectiveness of a psychoeducation program given to international nursing students to improve their healthy lifestyle behaviors and life satisfaction. There was a significant difference in the scores of the students who had cultural differences from the total Healthy Lifestyle Behaviors Scale, its subscales, and the Life Satisfaction Scale after the program (p≤0.001).

In this study, the total healthy lifestyle score of the students was 110.5±11.6 before the program. Vural and Bakır (2015) conducted a study with students in a school of health service (21). They reported the total scale score as 127.05±20.35, and Şemin and Tengiz (2016) reported as 136.79±17.80 in their study (22). Şimşek et al. (2012) found that the total score of medical students from the Healthy Lifestyle Behaviors Scale was 134.4±9.7(23). Aksoy and Uçar conducted a study with 281 nursing students and found the total scale score as 136.12±19.16 (9). The results of these studies, which were conducted with Turkish students, were higher than the mean scores of the students in our study. The students included in our study sample were the citizens of Afghanistan, Kyrgyzstan, Iran, Syria, and Saudi Arabia. This difference may have occurred because healthy life behaviors are largely affected by culture and local values (18). A study conducted in Qatar reported that socio-cultural factors influence women's decisions on participating in healthier lifestyles related to physical activity, healthy nutrition, and smoking (24).

In this study, the total Healthy Lifestyle Behaviors Scale score and subscale scores increased significantly after the program (p≤0.001). The difference between the pre-program and post-program scores obtained from the subscales of self-realization, health responsibility, exercise, nutrition,

interpersonal support, and stress management was strongly significant (p≤0.001). Şemin and Tengiz (2016) conducted a study to determine whether the health and life course affected the development of healthy lifestyle behaviors in students and to determine the most preferred education method and found the difference between the pre-and post-training has increased significantly (22). Some studies investigated the causal effect of education on health-related behaviors such as smoking, drinking alcohol, exercising, eating healthy food, and Body Mass Index (BMI). Some reported no causal correlation between education and health behaviors (25,26). Some reported a correlation (27-30). Kim et al. (2016) conducted a study with primary school students in South Korea and found that educational interventions aimed at changing health behaviors can be effective for primary school children (27). Brunello et al. (2013) emphasized that education had a protective effect on the BMI of women living in nine European countries and reduced the probability of being obese or overweight (28). In a study conducted in Indonesia to evaluate the effectiveness of training given to 7th – and 8th-grade students to prevent smoking, it was reported that students' knowledge about smoking and its harmful effects increased and that students showed more serious anti-smoking attitudes (29). Yazdani et al. (2010) reported that training given to nursing students on stress management reduced their depression, anxiety, and stress levels (30). These studies report that education is effective in developing healthy life behaviors and show similarities with the results of our study. This finding suggests that education programs should be benefitted to ensure students gain appropriate behaviors.

The difference in the mean scores of the students from the Life Satisfaction Scale before and after the program was significant (p≤0.001). Studies in the literature report a significant positive correlation between health behavior indicators and life satisfaction levels (31,32). Teker and Lüleci (2018) reported that there was a positive correlation between healthy lifestyle behaviors and quality of life and suggested that the improvement of the quality of life of individuals in the community can ensure they develop healthy lifestyle behaviors or improving healthy lifestyle behaviors can improve the quality of life (32). Gürsel et al. (2016) found that stress management, a subscale of the healthy lifestyle behaviors scale, was highly associated with the quality of life of instructors (33). In this study, students' mean healthy lifestyle scores and the quality of life scores differed significantly after the program.

Limitations of the Research: This study is limited to international students enrolled in the nursing department of a public university in the 2016-2017 academic year.

5. CONCLUSION

It was concluded that education given to international students is effective in ensuring them gain healthy lifestyle behaviors and that this situation affects life satisfaction positively. In light of these findings, considering that nursing students will become role models for society in the future, it is necessary to ensure nursing students adopt or develop healthy lifestyle behaviors with such psychoeducation programs. It is thought that it is necessary to ensure the continuity of psychoeducation programs to develop healthy lifestyle behaviors and life satisfaction of international nursing students.

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