Original Article

The Healthy Lifestyle Behaviors of Nurses Working in Surgical Clinics in two Countries

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Abstract

Background: Lifestyle is the behaviors selected by individuals as appropriate for their health condition during daily living.

Objectives: The purpose of this study was to determine healthy lifestyle behaviors of nurses who worked in surgical clinics of Turkey and Iran.

Methodology: This descriptive study was conducted in Turkey and Iran between 2013 and 2014. The population of the study consisted of 304 nurses working in the surgical clinics of Atatürk University Research Hospital located in Turkey and the Azerbaijan Private Hospital located in Iran. The sample of the study consisted of 252 nurses who agreed to participate (response rate of 84%). The data were collected using Health Promoting Lifestyle Profile II (HPLP-II) and questionnaire involving descriptive characteristics of nurses. Percentage distribution, mean, analysis of variance, independent-samples t, and chi-square tests were used to analyze the data.

Results: The HPLP-II total mean score of the nurses working in Turkey and Iran were 120.96 ± 17.13 and 134.45 ± 21.28, respectively ($p < 0.001$). Nurses working in both countries obtained the highest mean score in the subscale "spiritual growth". However, the lowest mean score was obtained by the nurses in the subscale "physical activity" in Turkey and by in the subscale "stress management" in Iran.

Conclusions: Nurses in both countries had moderate healthy behaviors and high self-actualization. They did not do sufficient exercise and could not cope with stress adequately.

Keywords: Lifestyle, Different countries, Nurse

Introduction

Health level of the community is determined by measuring the rate of healthy individuals in the society. Well-being and health are among the basic rights of every individual, and should be the main goals of medical staff (Karadeniz et al., 2008). Healthy lifestyle behaviors are all behaviors displayed by individuals to stay healthy and be protected against diseases (Meier et al.,2008). Nutrition, stress management, physical activity, spiritual growth, interpersonal relationships, and health responsibility are deemed to be among healthy lifestyle behaviors. It is estimated that 70-80% of deaths in developed countries and 40-50% of deaths in underdeveloped countries are caused by unhealthy lifestyle (Erci,2009; Arena et al.,2016; Whatnall et al.,2016).

Nurses are the basic manpower for implementation of health protection and

health promotion activities (Cürcani et al.,2010). Nurses should firstly display healthy lifestyle behaviors in order to inform individuals about healthy behaviors and direct them.(Wills et al.,2017). However, it has reported that health of nurses, is not protected properly in their work environment.(Kosgeroglu et al.,2009). Nurses working in surgical clinics are particularly important because they work with excessive workload and patient circulation (Karabulut et al.,2011).

Every healthcare professional and especially, nurses should comprehend the importance of health promotion and display behaviors increasing motivation for development of positive health behaviors by individuals in the society (Hidalgo et al.,2016; Brill,2011). From this perspective, it is important to evaluate and determine healthy lifestyle behaviors of nurses working in surgical clinics in order to design national health programs (Nejat et al.,2015).Although there are studies that have analyzed the healthy lifestyle of nurses in both Iran (Motlagh et al.,2011; Jalili et al.,2008).and Turkey (Cürcani et al.,2010;Çoşkun Güner et al.,2006;Özkan et al.,2008;Alpar et al.,2008) none of them has compared these two countries. The study is crucial in terms of making contribution to the literature of transcultural nursing in the case of both countries that seem similar but do not have similar lifestyles.

Objectives: This study was designed to determine healthy lifestyle behaviors of nurses working in surgical clinics in Turkey and Iran.

Methods

Study Design and Participants

This descriptive study was conducted in the surgical clinic of Ataturk University Research Hospital in Turkey and in the surgical unit of Orumiyeh Azerbaijan Hospital in Iran between March 2013 and July 2014. The population of the study consisted of 304 nurses who were working in these surgical units. Since 32 of the nurses did not agree to participate in the study and 20 were on annual leave, the study was conducted with a total of 252 nurses including 133 nurses from Turkey and 119 nurses from Iran.

Data Collection

A questionnaire, which was prepared in accordance with the literature and involved descriptive characteristics of the nurses, and the Health Promoting Lifestyle Profile II (HPLP-II) were used to collect the data. The validity and reliability of HPLP-II in Turkey was assessed by Bahar et al. in 2008. Its Turkish version has 52 items and six factors (Bahar et al.,2008). The validity and reliability study of the scale in Iran was conducted by Meymenat et al. in 2012. Its Persian form has 52 items and six factors namely spiritual growth (9 items), nutrition (9 items), physical activity (8 items), health responsibility (9 items), interpersonal relations (9 items), and stress management (8 items) (Mohamadi Zaidi et al.,2013).The Turkish and Persian Cronbach's alphas of the scale were 0.92 (Bahar et al.,2008) and 0.95 (Mohamadi Zaidi et al.,2013).respectively. In this study, the Cronbach's alpha value was found as 0.90 for the Turkish version and 0.92 for the Persian version.

All items are scored on a 4-point Likert-type scale with the following options; never "1", sometimes "2", often "3", and regularly "4". There is no reverse item in the scale. The total score of the scale is calculated by adding the scores of the subscales. While the lowest possible total score of the scale is 52, the highest possible total score is 208.

The data of the study were collected by the researcher conducting face-to-face interviews with the nurses at 08:00-16:00, 16:00-24:00 or 16:00-08:00 when applicable.

Ethical Consideration

In order to conduct the study, we obtained ethics committee approval from Atatürk

University Faculty of Health Sciences. In addition to the ethics committee approval, an official permission was also obtained from the chief physician of the hospitals by submitting an information form involving the objective and content of the study (ethical approval code: 45361945-03/6592-10.05.2013). The nurses were verbally informed about the aim of the study. They were informed that their personal information and the identity of the respondent would be kept confidential and if they do not want, they would withdraw from the study. Thus, ethical principles of "Informed consent", "Autonomy", "Confidentiality and Protection of Confidentiality" were fulfilled and verbal consent of the nurses was obtained.

Data Analysis

Data were analyzed by using the Statistical Package for the Social Sciences (SPSS 16.0; IBM, Armonk, NY). Percentage distribution and mean tests were used to assess the data. We used an independent samples t test to compare the groups in terms of sociodemographic and professional characteristics. The significance level was accepted as $p<0.05$.

Results

When distribution of the socio-demographic characteristics of the nurses in terms of countries was examined, there was no statistically significant difference between them (Table 1).

When professional characteristics of the nurses were compared according to the countries (Table 2), it was determined that while there was a statistically significant difference between the nurses in terms of weekly hours of work and professional activities ($p<0.05$), there was no statistically significant difference between the nurses in terms of the clinic, working duration, working type, and duration of working in the surgical clinic ($p> 0.05$).

While examining the HPLP-II total mean scores of the nurses; it was found that the total mean score of the nurses working in Turkey was 120.96 ± 17.13, the total mean score of the nurses working in Iran was 134.45 ± 21.28, and there was a statistically significant difference between them ($p=0.000$).

Table 1. Distribution of Socio-Demographic Characteristics of Nurses Based on Countries Values are expressed as No. (%)

Characteristics	Turkey	Iran	p Value
Sex			
Female	115 (86.5)	94 (79.0)	0.133
Male	18 (13.5)	25 (21.0)	
Age group			
18-25 years	76 (57.1)	54 (45.4)	
26-40 years	50 (37.6)	55 (46.2)	0.155
41 and ↑	7 (5.3)	10 (8.4)	
Education			0.162

Vocational school of health	23 (17.3)	13 (10.9)	
Associate degree	29 (21.8)	27 (22.7)	
Bachelor's degree	69 (51.9)	74 (62.2)	
Postgraduate	12 (9.0)	5 (4.2)	
Perception of income status			
Income more than expense	61 (45.9)	67 (56.3)	0.220
Income equals to expense	57 (42.9)	39 (32.8)	
Income less than expense	15 (11.2)	13 (10.9)	
Marital status			
Married	59 (44.4)	50 (42.0)	0.709
Single	74 (55.6)	69 (58.0)	
State of having a child			
Yes	47 (35.3)	56 (47.1)	0.590
No	86 (64.7)	63 (52.9)	
The longest place of residence			
Province	117 (88.0)	108 (90.8)	0.614
District	13 (9.8)	10 (8.4)	
Village	3 (2.3)	1 (0.8)	
With whom they live			
Nobody	24 (18.0)	14 (11.8)	0.259
Husband and children	63 (47.4)	67 (56.3)	
Family and relatives	46 (34.6)	38 (31.9)	
State of the Smoking			
Smoking	41 (30.8)	24 (20.2)	0.543
Not smoking	92 (69.2)	95 (79.8)	
Mental disease			
Available	16 (12.0)	12 (10.1)	0.621
NA	117 (88.0)	107 (89.9)	
Chronic disease			0.762
Available	18 (13.5)	8 (6.7)	
NA	115 (86.5)	111 (93.3)	

Table 2. Distribution of Professional Characteristics of Nurses Based on Countries[a]

Characteristics	Turkey	Iran	p Value
The clinic			
General surgery	22 (16.5)	18 (15.1)	
Emergency department	17 (12.8)	15 (12.6)	
Intensive care unit	26 (19.5)	15 (12.6)	
Orthopedics	6 (4.5)	6 (5.0)	
ENT-Eye	13 (9.8)	15 (12.6)	0.890
Operating room	28 (21.1)	25 (21.0)	
Brain surgery	7 (5.3)	7 (5.9)	
Urology	7 (5.3)	10 (8.4)	
Cardiovascular surgery	7 (5.3)	8 (6.7)	
Working duration			
1-5 years	71 (53.4)	67 (56.3)	
6-10 years	30 (22.6)	14 (11.8)	0.126
11-15 years	17 (12.8)	21 (17.6)	
16 years and above	15 (11.3)	17 (14.3)	
Duration of working in the Surgical Clinic			
1-5 years	91 (68.4)	79 (66.4)	
6-10 years	17 (12.8)	10 (8.4)	0.359
11-15 years	14 (10.5)	13 (10.9)	
16 years and above	11 (8.3)	17 (14.3)	
Working type in the Surgical Clinic			
Fixed-day-shift	46 (34.6)	54 (45.4)	
Rotating –shift	87 (65.4)	65 (54.6)	0.072
Weekly hours of work			
40 hours and ↓	86 (64.7)	26 (21.8)	
41 hours and ↑	47 (35.3)	93 (78.2)	**0.000**

Status of participation into Professional activities			
Participating	93 (69.9)	59 (49.6)	**0.001**
Not participating	40 (30.1)	60 (50.4)	

[a]Values are expressed as No. (%)

Table 3. Highest and Lowest Scores of HPLP-II and Distribution of Mean Scores of Nurses[a]

HPLP-II subscales	HPLP-II			p Value
	Lowest and highest scores of the scale	HPLP-II mean score of the nurses working in Turkey	HPLP-II mean score of the nurses working in Iran	
Spiritual Growth	9-36	25.56 ±4.32	26.45 ± 5.54	0.155
Nutrition	9-36	19.48 ± 3.52	23.60 ± 3.50	**0.000**
Physical activity	8-32	15.41 ± 4.55	17.20 ± 5.52	**0.000**
Health responsibility	9-36	20.16 ± 3.50	25.23 ± 4.70	**0.000**
Interpersonal relations	9-36	24.21 ± 4.17	25.38 ± 4.92	**0.041**
Stress management	8-32	16.12 ± 3.05	16.57 ± 3.69	0.290
Total score	52-208	120.96 ± 17.13	134.45 ± 21.28	**0.000**

[a] All data are presented as mean ± SD

Discussion

In this study, the HPLP II total mean score of the nurses working in Turkey was moderate. The result of the present study was similar to the results of the studies by (Cürcani et al.,2010;Çoşkun Güner et al.,2006;Ozkan et al.,2008;Alpar et al.,2008)

The HPLP II total mean score of the nurses working in Iran was found to be 134.45. The result of the present study was compatible with the studies by (Motlagh et al., 2011 and by Jalili et al.,2008).

It was found that the nurses working in Turkey and Iran had a moderate level of

healthy lifestyle behaviors, the nurses working in the surgical clinics in Iran had higher HPLP II scores compared to the nurses working in the surgical clinics in Turkey, and the difference between them was statistically significant. This result suggested that the nurses working in Turkey gave less importance to health responsibility behaviors than the nurses working in Iran.

When the subscales of HPLP-II were examined, the nurses working in Iran had the highest mean score in the subscales of spiritual growth and interpersonal relations which was followed by the subscales of Health Responsibility, Nutrition, and Physical Activity. The lowest mean score was obtained in the subscale of Stress Management. Likewise, in the study conducted by Nejat et al. with nurses in Iran, they reported that while the highest mean score was obtained in spirituality, the lowest mean score was obtained in coping with stress (Nejat et al.,2015;Motlagh et al.,2011).It was thought that the reason why the highest mean score was obtained in the subscale of spiritual growth was cultural structure and belief system; whereas, the lowest mean score was observed in the subscale of physical activity due to factors such as the nurses' spending most of their time in the hospital during the day, insufficient number of sports areas around the hospital, and high prices of gyms.

When the subscales of HPLP-II were examined for nurses working in Turkey; the highest mean score was obtained in the subscales of Spiritual Growth, Interpersonal Relations and Health Responsibility, which was followed by the subscales of Nutrition, Stress Management, and Physical activity. In the studies by Ozkan et al., and Coşkun et al., it was reported that while the highest mean score was obtained in the subscale of spiritual growth, the lowest mean score was observed in the subscale of Physical Activity (Coşkun Güner et al.,2006; Ozkan et al.,2008).When physical activity in Turkey

has been examined, it has been determined that people do not do exercise(male:67.7%, female:76.8%) throughout Turkey (71.9%).

The studies have revealed that 20.32% of the population in Turkey never do exercise; therefore, they have a sedentary life in this sense; and also 15.99% do physical activity at insufficient level (2013-2017 Healthy Nutrition and Active Life Program of Turkey, 2013). Given that the majority (71.9%) of the Turkish population do not do exercise, it is an expected result that the lowest mean score was obtained in the subscale of physical activity among the subscales of HPLP-II. The results of the present study suggest that hospital staff members do not have an exercise habit as in Turkish society.

While comparing the mean scores of the nurses for the subscales of HPLP-II, it was determined that the nurses working in Iran and Turkey obtained the highest mean score in the subscale of Spiritual Growth. However, the difference between them was not statistically significant. This pointed out that the nurses had very similar belief systems. It is a fact that cultural structure and belief system had a significant effect on spiritual growth's being on the first rank.

The highest mean score of the nurses for the subscales of HPLP-II was obtained in the subscale of Spiritual Growth, which was followed by Interpersonal Relations. The mean score of the subscale "interpersonal relations" was 24.21 in Turkey and 25.38 in Iran, and there was a statistically significant difference between them. In today's complex technological society and in a period when expertise has reached advanced levels, health protection and effective healthcare service require the approaches of both individual and team work. Nurses always take care of healthy or sick individuals directly or indirectly. Therefore, it was an expected result that the nurses had a high mean score in the subscale of interpersonal relations.

The highest mean score of the nurses working in Turkey for subscales of HPLP-II was obtained in the subscale of interpersonal relations, which was followed by the subscale of health responsibility. The mean score of health responsibility was 20.16 in nurses working in Turkey and 25.23 in nurses working in Iran, and there was a statistically significant difference between them. The low mean score obtained by nurses in the subscale of health responsibility could be associated with the fact that they did not recognize their potentials regarding promotion and maintenance of their own health.

The mean score of the HPLP-II nutrition subscale was 19.48 in Turkey and 23.60 in Iran, and there was a statistically significant difference between them. The low nutrition scores of the nurses working in both countries could be associated with the fact that a great majority of the nurses could not eat their meals on time because of their irregular working hours and shift change. Appearance, type and taste of hospital meals, intensive working hours, routine works in the service, and the physical environment of the service have negative effects on nutrition of nurses (Coşkun Güner et al.,2006).On the other hand, high mean scores of nurses working in Iran could be associated with the fact that traditional foods are preferred instead of ready foods based on the traditional lifestyle in Iran.

When considering intensive working hours of the nurses working in Turkey since the working hours of the nurses were higher than those of the nurses working in Iran, it was expected that their nutrition was negatively affected and thus their nutrition subscale scores were low.

The lowest mean score of the nurses working in Turkey was determined in the subscale of physical activity, which was followed by stress management. On the other hand, the lowest mean score of the nurses working in Iran was determined in the subscale of stress management. There was no statistically significant difference between them.

As a result of the effect of numerous negative factors caused by the work environment, nursing is qualified as a stressful job with an intense workload (Ozkan et al.,2008). It is reported in the literature that as working years of nurses increase, they experience more mental and physical health problems (Curcani et al.,2010).

The lowest mean score of the nurses working in Turkey was determined in the subscale of physical activity. Additionally, the mean score of physical activity was also the lowest for the nurses working in Iran and there was a statistically significant difference between them. The scores of the subscale "physical activity" were also low in the results of other studies, (Wills et al.,2017;Nejat et al.,2015;Motlagh et al.,2011;Coşkun Güner et al.,2006). which is compatible with the results of the present study. It can be concluded that while spiritual growth was in the first place due to the cultural structure and belief system; physical activity was in the last place due to the nurses' intensive workload, insufficient sports areas around the hospital, and high prices of gyms.

This study was conducted only in one hospital setting and therefore on a relatively small sample. Further multicenter studies with larger samples are suggested.

Conclusion

As a consequence of the study, it was determined that the nurses working in the surgical clinics in Turkey and Iran had a moderate level of healthy behaviors and the nurses working in Iran had higher total mean scores of HPLP II compared to those working in Turkey.

While the highest mean score of the nurses in both countries was determined in the subscale of spiritual growth, the lowest mean score was observed in the subscale of

physical activity in Turkey and in the subscale of stress management in Iran.

Health is one of the most important issues in a country. Therefore, in line with the results; it may be recommended to

- Perform training programs on health protection and promotion
- Support health-promoting behaviors in the organizations,
- Conduct studies on assessment of health-promoting behaviors in Iran and Turkey and make attempts for solutions in accordance with the results.

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