



## Self-Evaluation of Health Promoting Behaviors among Employees and Nurses of Madani Heart Center: Beginning of Activities Related Health Promoting Hospital

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### ABSTRACT

Health promoting behaviors are considered as one of the criteria determining the health. Health promotion hospitals require these behaviors for improving the quality of services and promoting the health of community, and employees of such centers play crucial role in training and transferring of such behaviors and healthy lifestyle to various groups of community. The current research was conducted to evaluate these behaviors among employees working in Madani Heart Center in 2016. It was carried out at the beginning of activities related to implementing the health promoting hospital standards. The current research was a descriptive-analytical study, in which 319 administrative and therapeutic hospital employees were selected using proportional stratified sampling method. To collect the research data, Health Promotion Lifestyle Profile II (HPLP-II) was used. Data were analyzed by SPSS 18 software and by using non-parametric statistical method of Chi-square test and Gamma and Kendall correlation coefficient at the significance level of 0.05. Research findings revealed that 96 number of subjects (30.1%) were male and 223 of them (69.0%) were female and their mean age was found to be  $38.0 \pm 6.0$  years. Their mean work experience was found to be  $14.0 \pm 5.0$  years. The mean of total health promotion behaviors was found to be  $128.0 \pm 19.0$  and the highest score was found in the interpersonal relationship area ( $24.0 \pm 3.0$ ) and the lowest score was found in physical activity area ( $15.0 \pm 4.0$ ). The current research revealed that gender status had a significant relationship with health promotion behaviors of the employees, so that the score of health promotion behaviors in male employees was higher than that in female employees and this difference was significant ( $P < 0.001$ ). Multivariate linear regression analysis indicated that the gender status of employees is the most important factor affecting the health promotion behaviors. Given the status of health promotion behaviors among employees of the center and the low level of these behaviors among female gender, it is recommended that health education programs to be planned in order to enhance the healthy lifestyle of them.

**Key words:** Self-Evaluation, Health Promoting Behaviors, Employees, Nurses, Hospital Standard

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Increased health care costs and given the fact that therapeutic measures are not always effective have made health experts support the concept of health promotion (1). WHO defines health promotion as a process involves enabling the people to have more control on their health and its improvement(2).

### INTRODUCTION

Health is a human right and it requires promoting healthy lifestyle(3). The health promoting lifestyle is a multi-dimensional model of spontaneous behaviors, used for maintaining and improving the health, self-actualization, and individual perfection(4). It has six important elements, including interpersonal relationships, health responsibility, spiritual growth, stress management, nutrition, and physical activity(5). Based on the studies carried out by World Health Organization, almost 65% of people quality of life and health depends on their lifestyle and their individual behavior (3, 6). Based on the predictions of World Health Organization, 70-80% of mortalities in developed countries and 40-50% of mortalities in developing countries are resulting from diseases related to lifestyle (7). WHO stressed on the healthy lifestyle in 2000 and its main goal in 2000 was reported as maintaining and improving the healthy lifestyle behaviors(8). A person or group needs an ability to recognize and understand the wishes and satisfaction of needs, change and interaction with environment to achieve complete physical, mental, and social health (9). Studies have indicated that many chronic diseases are rooted in lifestyles and behaviors of humans(10, 11). Performing the health promotion behaviors is one of the best methods, through which people can maintain and control their health(7, 8). Health promotion behavior is regarded as an important concept in nursing, since most of the nursing roles include education and maintaining the health. When people choose the nursing field of study, they enter a profession requires serving and improving the health of community(12). Nursing knowledge has been guided toward helping people, families and communities to achieve the maximum health power. Health promotion involves facilities to use energy and potential of people, improved quality of life, productivity, and using one's capabilities with regard to health. Health promotion behavior suggests the human willingness to achieve excellence, resulting in desired well-being, personal development, and creative life (7, 8, 13, 14). The main goal of nurses, as largest professional group in health care system, is improving the patients' quality of life, but nurses' quality of life and promoting their health behaviors is an issue that less attention has been paid to(15). A health promoting hospital, as a single identity, which has included the health promotion goals in its programs, develops an organized culture and structure. It has introduced itself as a physical environment promoting the health in an interaction with its community actively(16).

Hence, the objective of the current research was to evaluate the health promoting behaviors among employees, especially a heart center nurses, who have begun their activities to implement health promotion hospitals standards.

## MATERIALS AND METHODS

The current research was a descriptive-analytical type of study. The research population included employees of Tabriz Madani Heart Center. The sample size was determined to be 350, based on 0/05 the Cochran table. They were selected using proportional stratified sampling method. To collect the data, standard HPLP-II questionnaire was used. It is used to evaluate the health promotion lifestyle .It has been used widely in many studies and its reliability and validity have been reported in various populations. This profile has been developed based on Pender Health Promotion Model. It assesses one's involvement in health promotion behaviors. HPLP-II is revised version of HPLP, presented by Walker et al. It assesses the health promotion lifestyle with a focus on innovative works and one's perception, acting in line with self-actualization and personal satisfaction. The questionnaire includes 52 questions. They have been developed in 6 sub-categories, including nutrition, physical activity, health responsibility, stress management, interpersonal relationships, and spiritual growth. This questionnaire evaluates one's behaviors based on the Likert scale (never, sometimes, often, and usually). Its validity and reliability were investigated by Mohammadi et al. (2011) (17) and Cronbach's alpha was reported to be higher than 0.8. The inclusion criteria of research included cooperating in the project and completing the questionnaire and the exclusion criteria of research included lack of willingness for participating in the project for any reason. Ethical considerations of the research included presenting written introduction letter and obtaining the permission from the hospital officials to conduct the research and introducing the researcher to subjects and explaining the research objectives, ensuring the subjects that their information will remain confidential, and lack of bias in reviewing the texts and analyzing the data. After completing the questionnaires, the collected data were analyzed by SPSS 18 software and by using non-parametric statistical test of Chi-square and Gamma and Kendall correlation coefficient at the significance level of 0.05.

**Table 1. mean and SD of health promotion behaviors scores in general and its areas in employees of Tabriz Shahid Madani Heart Center**

Variable	Acquired range of scores	Observed range	SD ±Mean
Health Promotion Behaviors	52-208	58-193	19.0 ±128.0
Interpersonal relationships	9-36	12-35	3.0 ±24.0
Health responsibility	9-36	9-33	4.1 ±22.0
Nutrition	9-36	12-35	4.0 ± 24.1
Spiritual growth	9-36	9-36	5.0 ± 24.0
Stress management	8-32	8-30	3.0 ± 17.0
Physical activity	8-32	8-30	4.0 ± 15.0

**Table 2. The status of health promotion behaviors in employees based on their demographic characteristics**

Demographic variables	Mean total score± SD	statistical test	F or t statistic	P. Value	Scheffe posthoc
Gender	male	independent t test	T=4.6	P<0/001	-
	female				
Marital status	single	One-way ANOVA	F=0.41	P=0.66	-
	married				
	Divorced or widowed				
Education status	High school	One-way ANOVA	F=0.21	P=0.89	-
	associate				
	bachelor				
	Master or PhD				
Income status	Between 15 and 25 million Rials	One-way ANOVA	F=1.48	P=0.23	-
	Between 25 and 35 million Rials				
	Between 35 and 45 million Rials				
Job	therapeutic	One-way ANOVA	F=1.31	P=0.27	-
	administrative				
	Para-clinic				
Work shift	morning	One-way ANOVA	F=0.01	P=0.87	-
	Evening or night				
	Circular shift				
Employment type	formal	One-way ANOVA	F=0.23	P=0.87	-
	project				
	conventional				
	contractual				
Smoking status	yes	Independent t test	T=0.23	P=0.82	-
	no				
Age	-	Pearson correlation test	r=0/01	p< 0/001 *	
Number of children	-	Pearson correlation test	r= -001	p< 0/001 *	
Work experience (year)	-	Pearson correlation test	r= -0/03	p< 0/001	

\* Significance at the level of 0.01

## RESULTS

In this research, 319 questionnaires were completed and returned by subjects. Findings revealed that 96 subjects (30.1%) were male and 223 of them (69.0%) were female, with mean age of  $38.0 \pm 6.0$  years. In addition, 15% of them were single and 82% of them were married. They had work experience of 1 to 30 years, with mean work experience of  $14.0 \pm 5.0$  years. Moreover, 25.1% of them had fixed shift in the morning, 4% had evening or night shift, and rest of them had circular shift.

Table 1 illustrates the mean and SD of the score of health promotion behaviors in general and its areas in employees of Educational, Medical, and Research Center of Tabriz Shahid Madani University. The mean of health promotion behaviors was  $128.0 \pm 19.0$ . The highest score was

obtained in the interpersonal relationships area with  $24.0 \pm 3.0$  and the lowest score was obtained in the stress management  $3.0 \pm 17.0$  and physical activity area with  $15.0 \pm 4.0$

Comparing the health promotion behaviors in terms of demographic characteristics revealed that only gender status was significantly correlated with health promotion behaviors among the variables investigated in this study, so that male employees' health promoting behaviors score was higher than that of female employees, and this difference was significant. For example, findings obtained by investigating other variables indicated that in comparing the health promotion behaviors of employees in terms of marital status, single employees obtained higher score than married, divorced, and widowed employees, but this difference was not significant.

**Table 3. findings of the final model of multiple regression analysis for variables predicting the health promotion behaviors**

factors affecting the health promotion behaviors	Reference	Coefficient $\beta$	Standard error (SE)	t	P value
Constant value	-	153.49	11.10	1.82	$p < 0/001$
Gender	male				
	female	10.7-	2.53	4.25-	$p < 0/001$
Income status	Between 15 and 25 million Rials				
	Between 25 and 35 million Rials	3.72	3.49	1.06	$P=0.29$
	Between 35 and 45 million Rials	1.32-	7.62	0.17-	$P=0.86$
Job	therapeutic				
	Administrative	0.71	4.17	0.17	$P=0.87$
	Para-clinical	2.71-	5.86	0.46-	$P=0.64$
shift	Morning				
	Night and evening	2.69	6.22	0.43	$P=0.67$
	Circular shift	3.38-	3.57	0.95-	$P=0.34$
Age	-	0.083-	0.3	0.28-	$P=0.78$
Number of children	-	2.10-	1.82	1.15-	$P=0.25$
Work experience (year)	-	0.16	0.32	0.5	$P=0.62$

After performing univariate analysis, based on Table 2, the variables that had a significant relationship with the dependent variable in this analysis or had P-value less than 0.35 were re-examined using multiple linear regression model, and the relationship of each of them with dependent variable was examined by controlling the impact of other variables. As variables need to be included into multiple linear regression model quantitatively, all qualitative variables (multivariate) in this research were included into model as dummy variable. Its findings have been

shown in Table 3. Based in the linear regression multivariate test, only the variable of gender status of employees was found as the most important factor affecting the health promotion behaviors.

## DISCUSSION AND CONCLUSION

In general, the quality of life refers to level and degree of one's enjoyment of the important facilities of his or her life. These facilities are resulting from opportunities and limitations of each person in life. The final goal of quality of life of

nurses and its using in life is enabling them to experience high quality, meaningful, and enjoyable life. Quality of life, feeling happiness, and life satisfaction are regarded general health and mental health indices. We face with industrialization, increased longevity, and change in people lifestyle throughout of world in the twenty-first century. As lifestyle of people is at desired level, they will feel higher satisfaction physically, psychologically, and socially. Thus, people can enhance the quality of their life and work by improving their lifestyle. General health score of total health promotion behaviors was  $128.0 \pm 19.0$ , which suggests that it is at the acceptable level. Findings of our research are in line with findings of the research carried out by Hongh et al. (18), Moghaddam et al (19), Moradi et al(3) and in contrast with Nilsaz et al (20). The highest score obtained in this research belonged to interpersonal relationships area with  $24.0 \pm 3.0$  and the lowest score belonged to physical activity area with  $15.0 \pm 4.0$  and stress management  $3.0 \pm 17.0$  which was in line with Baghersad et al(21), Abdolkarimy et al(22). Positive correlation was found between gender and health promotion behaviors, so that male subjects had higher scores, which it was contrast to the research conducted by Haeri et al(23), while it was in line with research carried out by Yazdanpanah et al(24). The reason for this difference might be related to the fact that gender is a determinant factor in the adoption of health behaviors disease(25). Different capabilities of males and females in controlling the social and economic factors affecting health, different social base of the two genders, and their vulnerability level to diseases are considered among the gender differences(25, 26). No positive relationship was found between income, work shift, and the number of children and health promotion behaviors which was comply with Johnson(27), while several studies such as those carried out by Haeri et al, Hongh et al, found findings in contrast to findings of our research.

The findings indicate that health promotion has not fully integrated into the daily activities of the hospital. So in order to the Ottawa charter in 1986, health in all policies is considered as one of the health promotion strategies. Considering that Hospital units cause stress for patients, their relatives, employees, and nurses. Due to stressful nature of their job, nurses are at high risk of job burnout, affecting their quality of life. Evaluating the health promotion behaviors in medical sciences, especially nurses, is crucial and can be used in the process of decision making by health

care team. Health promotion hospitals have a special commitment to perform health promotion activities and integrate them with daily activities, the health system will have desired efficiency, if employees' requirements are taken into consideration in its planning and management.

#### **Ethical approval**

This article is derived from Ph.D. dissertation health promotion and education at Iran University of Medical Sciences. The number is 9522178, which has been confirmed by IR.IUMS.REC 1395.9223489202 code, April 2015, in Ethics Committee of Research Deputy of Iran University of Medical Sciences. The authors received approval from the research deputy of IUMS. All participants gave oral consents for participation also voluntarily participated in this study and were free to leave at any part that they want. All data was kept confidential.

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