

ORIGINAL ARTICLE

STUDY OF THE RELATIONSHIP BETWEEN PSYCHOLOGICAL EMPOWERMENT AND THE LIFESTYLE OF WOMEN WORKING IN NORTH OF IRAN HOSPITALS

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ABSTRACT

Lifestyle is a normal daily activity that people have accepted in their lives as pleasing. Empowerment, as the heart of health promotion, can be considered as a social action to increase behavioral dimensions of individual and society. The aim of this study was to determine the relationship between psychological empowerment and lifestyle of the women working in educational hospitals in North of Iran. This cross-sectional study was carried on 252 women with Spreitzer's staff psychological empowerment scale and Health-promoting lifestyle profile II. The response rate was 91.3%. U-Mann Whitney, Kruskal Wallis, Spearman correlation and Logistic regression were used to determine the relationship between the variables. Age, marital status, shift work, socioeconomic status and BMI were significantly associated with health promoting behaviors. The mean score of psychological empowerment was 42.90 ± 9.15 and the mean score of health promoting behaviors was 142.83 ± 21.25 . Work shift and age were also significantly related to employees' psychological empowerment. On the basis of regression analysis, the impact dimension was identified as the final determinant of health promoting behaviors. It is necessary to pay special attention to the psychological empowerment of employees, especially feeling efficacy at work and plan to enhance employees' health promoting behaviors.

Keywords: Psychological empowerment, Health promoting lifestyle, Hospital Nursing Staff, Women.

INTRODUCTION

Non-communicable diseases, formerly the problem of developed countries, are now common in most countries, and developing countries are increasingly involved in the problems caused by these diseases¹. The pattern of daily life and activity of individuals can be judged and evaluated as being healthy or unhealthy. Healthy lifestyle refers to those behaviors that protect one from physical or mental, psychological, spiritual, or other illnesses or injuries. Healthy lifestyle is a valuable resource for reducing the prevalence and impact of health problems, promoting health, adapting to stressors and improving the quality of life². More than one-third of all deaths in the world are due to a number of health-threatening behaviors that result from inaccurate personal and social lifestyles and cause about 50% of premature deaths^{3,4}. According to the World Health Organization in 2001, about 60% of the 56.5 million deaths worldwide were due to non-communicable diseases. The burden of these diseases is currently 46% and is projected to rise to 57% by 2020¹. Healthy lifestyles have viewed as the models of healthy behaviors based on people's choices and their life circumstances^{5,6}. These opportunities include class, age, gender, ethnicity, and other appropriate structural variables that shape lifestyle choices. These choices, for example, include decisions about

smoking, alcohol consumption, diet, exercise, and the like. Behaviors resulting from the interaction between choices and opportunities can have positive or negative health outcomes⁷. On the other hand, in health promotion; empowerment is a process whereby people can have more control over their health decisions and actions⁸. Empowerment also has considered as a process through which people achieve a level of personal development that enables them to choose based on their desires⁹. Empowerment on the other hand is a kind of freedom that is both a means and an ultimate goal; or, in other words, it is the freedom to achieve different ways of living and the ability to extend these freedoms to human beings in a way that can be valuable¹⁰. The Ottawa Charter (1986) outlined health promotion interventions, the process of empowering people and communities to increase their control over their own health and ultimately to improve their own health and the communities in which they live. What has been emphasized in this charter is that health is a common theme across countries and cultures, and all health care organizations in most countries must strive to achieve it. The purpose of community empowerment is to increase and improve their health¹¹.

Empowerment exists at three levels: individual or psychological, organizational and social or group. Individual empowerment refers to the ability of individuals to feel empowered in their life choices. Organizational empowerment is unique to organizations and is included in the definition of social empowerment. Group empowerment is also referred to as the capacity of a community to achieve the group's defined goals through partnership¹⁰. The findings of various studies have indicated the relationship between empowerment and health outcomes in individuals and groups¹².

As half of the world's population, women play a key role in deciding to improve their lifestyle and that of other family members. The presence of healthy women in every community is a very good indicator of the health status of that community and ensures the health of the next generation¹³. Organizational empowerment is a democratic management where members of the organization share information, control decisions and are involved in designing and executing efforts toward predetermined group goals¹⁴. Since human resources are the most important and essential elements of any organization and the success of any organization in achieving its goals depends on the desirable human resources, it is necessary to pay attention to the extent to which employees are empowered as well as their lifestyles. More and more steps must be taken to provide and pay attention to their empowerment and healthy lifestyle. Empowerment should be seen as an individual process that enables the individual to make independent decisions, perform activities, and be able to control and monitor their actions, in which organizations have a duty to provide working conditions¹⁵. That is why one of the most effective strategies for comprehensive and sustainable development at the moment is to use participation and empowerment in all its dimensions¹⁶.

Despite the relationship between empowerment and a healthy lifestyle, no study has directly examined the impact of these two variables. Therefore, the present study aimed to determine the relationship between psychological (individual) empowerment and lifestyle of women working in hospitals in Rasht, North of Iran.

METHODS

The present study was a cross-sectional study that investigated the relationship between psychological empowerment and lifestyle of 252 clinical and administrative staffs of Rasht hospitals using stratified random sampling. Sample size included 203 individuals based on data from pilot study on 30 randomly selected individuals with correlation coefficient of 0.194, 95% confidence and 80% test power. In order to predict the correction of sample loss, 25% of sample size was added to the number of participants and final sample size for this study

included 254 persons. Then, considering the proportion of sample size to the study population, the percentage of staff in each hospital was evaluated. Samples were selected from different departments of each hospitals using random number table from the list of registered staff. The proportion of each job category was also applied to the unit in question. Participants in the initial pilot study were not included in the sample size calculation. Inclusion criteria were: employment in Government Hospitals, having a minimum diploma degree and willingness to participate in the research project. Exclusion criteria also included chronic illness and incorrect completion of the questionnaire. Data were collected using a demographic questionnaire including age, sex, marital status, education, occupation, type of clinical or office work, shift work, work experience, employment status, and socioeconomic status. Respondents were asked to rate their socioeconomic status based on the five categories of society in the form of upper, middle, upper, middle, lower and lower Likert responses. Spreitzer's Staff Psychological Empowerment Scale (1995), consisted of 12 questions assessing and evaluating four aspects of Spreitzer's perspective on psychological empowerment. These include: competence, meaning, self-determination, and impact (3 questions per dimension). These questions are based on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). It has the lowest point of 12 and the highest point of 60 points. The reliability of this tool was higher than 0.8 in English versions¹⁷. In Iran, Khadivi et al. (2013) and Barzabad et al. (2015) calculated the reliability and validity of the questionnaire and achieved Cronbach's alpha greater than 0.8^{18,19}. The reliability of this questionnaire in the pilot study of the pilot project was calculated by 30 randomly entered units with a value of 0.948.

The standard questionnaire of Health-promoting lifestyle profile II (HPLPII) was used to measure the participants' lifestyle. The questionnaire measured six dimensions of lifestyle, including health responsibility, nutrition, interpersonal relations, spiritual growth, physical activity, and stress management in the form of 52 questions, each with a four-point Likert scale (1), sometimes (2), often (3) and always (4). The questionnaire scores four dimensions of health responsibility, nutrition, interpersonal relations, and spiritual growth (9 items each with a total score of 36) and two dimensions of physical activity and stress management (8 items each with a total score of 32). The total score is between 52 and 208 and higher scores indicate a healthier lifestyle. In this study, a cut-off point of 2.5 was considered as a healthy lifestyle segmentation, with a score of 2.5 or higher indicating a favorable lifestyle and values below 2.5, indicating an undesirable lifestyle²⁰. This scale has been previously translated into Persian by translators and has been used in numerous studies such as the study

of Morowati et al. (2005), the study of Mohammad Khan Kermanshahi et al.²¹⁻²³. Also, the validity and reliability of the Persian version of this questionnaire were measured by a study by Mohammadi Zeidi et al. (2011) and showed the elementary validity and reliability²⁴. In order to comply with research ethics, sampling was done after obtaining permission under the code of ethics IR.GUMS.REC.1395.228 from Vice chancellor for research, Guilan University of Medical Sciences and providing it to hospital authorities. After introducing the researcher to the study units and expressing the research objectives and obtaining written informed consent, the data were collected. It took about 20 minutes for each participant to complete the questionnaires. Data were entered into SPSS, version 19, software and data were analyzed for non-normality based on Kolmogorov-Smirnov test using nonparametric Mann-Whitney, Kruskal-Wallis, Spearman correlation and logistic regression tests. $P < 0.05$ was considered as the level of significance.

RESULTS

The mean and standard deviation of age were 31.86 ± 9.08 . More than half were married and 53.5% had one to two children. 77.4% had undergraduate education and 50.6% had less than 5 years' work experience. Also, 78.1% were nurses and about 90% of them reported moderate and higher socioeconomic status. Descriptive findings regarding the individual and social components are presented in Table 1.

Regarding the psychological empowerment of the staff, the results showed that the average score of the total empowerment of the staff was 42.90 ± 9.15 , out of a maximum score of 60, indicating an average level of empowerment. Among the four domains of psychological empowerment, the highest score belonged to the domain of competence at work (11.42 ± 2.35) and the lowest score belonged to the domain of Impact at work (10.10 ± 2.59). The mean lifestyle score of the subjects was 142.83 ± 21.25 out of the 208 maximum points that indicated a higher than average level for healthy lifestyle behaviors. Among the six domains of health promoting behaviors, the highest and the lowest scores belonged to Spiritual Growth (27.50 ± 5.17) and physical activity (18.28 ± 5.35), respectively. (Table 2).

Among the participants' sociodemographic characteristics in the Mann-Whitney test, there was a statistically significant relationship between the dimensions of health responsibility, nutrition, spiritual growth, interpersonal relations, stress management and total score of health promoting behaviors with fixed shift of Staff. Kruskal-Wallis test was utilized to examine the relationship between the dimensions of health promoting behaviors and the social demographic characteristics of employees. The relationship

between the dimensions of health responsibility, spiritual growth, interpersonal relations, and total score of health promoting behaviors with older employees indicated a significant difference ($P < 0.05$). There was a significant relationship between all dimensions and total score of health promoting behaviors with married employees and also with the dimension of health responsibility with increasing work experience. There was also a significant relationship between stress management dimension and administrative staff. Also, the study of the relationship between socioeconomic status and health promoting behaviors showed a significant statistical relationship between stress management dimension and behavior and total score of health promoting behaviors with better socioeconomic status of employees. Spearman correlation coefficient between the total score of employees' psychological well-being and the total score of their lifestyle-promoting behaviors was 0.334 ($P < 0.001$).

All domains of healthy lifestyle had a direct and significant correlation with psychological empowerment. This test showed the highest correlation between the total score of psychological empowerment and spiritual growth dimension ($P < 0.001$, $r = 0/412$) and the lowest correlation with physical activity ($P < 0.005$, $r = 0/182$). Logistic regression was used to predict healthy lifestyle behaviors. The results showed that from the set of entered variables (with P -value $< 0/15$ in regression model) only the dimension of competence at work, age and BMI had a significant effect on healthy lifestyle behaviors, so that for every one score increase in the competence, age increase and BMI decrease, the healthy lifestyle behaviors would be improved 1.35, 1.05 and 0.95 times. Table 3.

DISCUSSION

According to the results of this study, there was a positive and significant correlation between psychological empowerment of staff and health promoting lifestyle. Among the four dimensions of psychological empowerment, all four dimensions, competence, meaning, self-determination of choice in initiating and regulating action and impact and total psychological empowerment correlated with health-promoting lifestyle. They were positive and meaningful. Then the competence had the power to explain health-promoting lifestyle behaviors. Therefore, individual empowerment associated with the competence at work was one of the essential factors for promoting healthy lifestyle behaviors.

In other words, employees who feel that they are doing good quality work on a task are more likely to adopt health-promoting lifestyles. Different studies have considered different areas of empowerment, sometimes more or less similar

Table 1: Demographic characteristics of the study population (n=252)

	Variable	Frequency	Percent
Age groups (Years)	20-34	169	67.6
	35-49	68	27.2
	50-69	13	5.2
Marital status	Single	105	41.7
	Married	145	57.5
	Widowed	1	0.4
	Divorced	1	0.4
Number of children	0	50	34.4
	1	56	37.2
	2	29	20.2
	>2	12	8.2
Education	Diploma	6	2.4
	Under Graduate	15	6.1
	Graduate	192	77.4
	Post Graduate	35	14.1
Shift of work	Fixed	74	29.5
	In circulation	177	70.5
work experience (Years)	<5	120	50.6
	5-10	54	22.8
	10-15	27	11.4
	15-20	8	2.4
	20-25	14	5.9
	>25	14	5.9
Occupation	physician	8	3.2
	Nurse	196	78.1
	Clinical staff	24	9.6
	Office staff	23	9.2
Socioeconomic status	Poorest	2	0.8
	Poor	12	4.8
	Middle	146	58.4
	Rich	83	33.2
	Richest	7	2.8
BMI	Underweight	10	4.1
	Normal	134	55.4
	Overweight	82	33.9
	Obese	13	5.4
	Morbid Obesity	3	1.2

Table 2. Average distribution of Empowerment and Healthy lifestyle domains among participants (n=252)

Variable	Dimensions	Mean ± SD	Minimum	Maximum
psychological Empowerment	Competence	11.42 ± 2.35	3	15
	Meaning	11.10 ± 2.75	3	15
	Self-determination	10.24 ± 2.60	3	15
	Impact	10.10 ± 2.59	3	15
	Total Score	42.90 ± 9.15	12	60
health-promoting lifestyle	Health responsibility	24.28 ± 5.07	10	36
	Nutrition	25.30 ± 4.64	11	36
	Interpersonal relations	27.18 ± 4.56	13	36
	Spiritual growth	27.50 ± 5.17	11	37
	Physical activity	18.28 ± 5.35	8	32
	Stress management	20.29 ± 4.61	9	32
	Total Score	142.83 ± 21.25	78	201

Table 3. Multivariate analysis between independent variables and Health Promoting Behaviors (n=252)

Characteristics	Odds ratio	95% confidence interval	P-value
Competence	1.35	1.190 - 1.533	<0.001
Age	1.05	1.009 - 1.102	0.910
BMI	0.95	0.899 - 1.000	0.049

The results of the study of the relationship between these dimensions and lifestyle showed that health promotion was completely influenced by social empowerment²⁵⁻²⁷. Reports from the World Health Organization and a review of relevant evidence have found that interventions to empower individuals can improve their health behaviors. Studies have shown that improving individual empowerment by increasing self-efficacy and self-esteem leads to promoting healthy behaviors in their lives. Heidari et al. in a study, found that implementing empowerment model improves diabetes control and self-care in adolescents with diabetes²⁸. Brandstetter et al. found in a systematic review that empowerment interventions would lead to increased healthy eating behaviors thus a healthier lifestyle²⁹. In a study by Lin (2018), it was shown that empowerment intervention using participants' mobile phones significantly increased smoking cessation and well-being³⁰.

Due to the dependence of lifestyle-promoting behaviors on people's decision-making^{31,32}, various WHO statements also have the potential to influence health promotion and healthier lifestyles through people's participation in health and decision-making programs. Health-centric approaches are emphasized³³⁻³⁶. In this regard, there is an evidence that empowerment has an impact on mental health, self-efficacy, and self-esteem^{31,37-40}. Also it was reported in a study a positive relationship between individual empowerment and healthy lifestyle behaviors of NGO members²⁵.

Among the social demographic characteristics of the participants, there was a significant relationship between gender, type of shift, age, marital status, length of work experience, job position and socioeconomic status of staff members of the hospitals with health promoting lifestyle. These results can be explained by increasing the length of work experience, empowering individuals and adhering to health promoting behaviors. As Laverack (2006) stated in his study that the personal and social empowerment of individuals with the influence of factors such as participation, management, etc.

can improve health related outcomes³¹. The socioeconomic status can also be a factor in empowering individuals and thereby their better adherence to health-promoting behaviors by developing the freedom of choice and function^{38,41}.

In examining different aspects of health promoting lifestyle, the highest score was related to spiritual growth and interpersonal relations, which was consistent with the results of other studies^{42,43}. The lowest score was for physical activity and stress management. The lower mean score of physical activity and stress management was also consistent with various studies, such as the Malakouti study (2015), the Sousa study (2015) and the Cao study (2012)⁴⁴⁻⁴⁶. However, in the study of Enjezab et al. (2012) on middle-aged women in Yazd, stress management had a high average score⁴². This discrepancy is justified by the differences in the occupational and social characteristics of the target communities. In the field of empowerment, the highest scores were related to the dimensions of competence and meaning in the workplace. This finding was in line with the results of Hall (2008) study⁴⁷. The mean total score of calculated individual empowerment indicated that participants achieved 71.45% of the total score of empowerment scale, which was a relatively high figure indicating good individual empowerment. This rate has been reported differently in various studies. Bakhshi (2017) stated that the psychological empowerment of women members of NGOs in Guilan province was 80.2%²⁵. Saadi (2014) reported the empowerment of rural women at 63.3%⁴⁸. In the Kiani study (2016), women's empowerment in decision-making for fertility was reported to be 54.3%⁴⁹. Soares (2015) estimated the total average of individual empowerment to be 77.83%¹⁰. This diversity may be due to differences in the target communities of the studies in question. The higher level of empowerment in the present study can be attributed to the nature of their work in medical education centers and the care provided by these individuals to their clients.

The mean score of overall health promoting lifestyle obtained by the participants in this study was 68.3% higher than the mean of the total score of the questionnaire. These results were consistent with the findings of other studies^{25-42,43-50}. The reason for such similar results can be attributed to the gender of the units studied in all three studies, the majority being women, but in most other studies, the sample was selected from other groups such as teachers, employees and students, etc⁵¹⁻⁵³

Recommendations

The study population consisted of women who could be considered as a limitation of the study. Future studies with a more gender-balanced composition are recommended in order to examine the comparisons between sex-promoting lifestyle behaviors. The findings of this study showed that by increasing the empowerment of the studied units, health promoting lifestyle was also improved in them. The practical significance of these findings is that evidence has emerged regarding the impact of empowerment on healthy lifestyle among health care workers. In order to enhance individual empowerment of the design staff, interventions to increase these dimensions are necessary; doing so may provide a healthier lifestyle. Conducting additional research on the relationship between personal empowerment and

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job satisfaction and quality of life with staff in health centers can be a good way to plan and manage policies in this field.

Conclusion

The results showed that there was a significant and positive correlation between psychological empowerment and health promoting lifestyle. Among the four dimensions of employees' psychological empowerment, dimension of competence showed the explanatory power of health promoting lifestyle behaviors. So one of the essential factors in promoting healthy lifestyle behaviors is the feeling of being effective in the workplace. Given this finding, it is necessary to pay special attention to plan for enhancing employees' health-promoting behaviors to their psychological abilities, especially feelings of efficacy at work.

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