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Research Article

**ASSOCIATION BETWEEN QUALITY OF WORK LIFE (QWL) AND
PERFORMANCE OF EMPLOYEES IN COMMUNITY HEALTH
CENTERS AND SELECTED HOSPITALS OF AHVAZ JUNDISHAPUR
UNIVERSITY OF MEDICAL SCIENCES, 2016****Ebrahim Naghibi¹, Amin Torabipour^{2,3*}, Farzad Faraji Khiavi^{2,3}, Bahman Cheragian⁴**¹ M.Sc. Student of Health Services Management, Department of Health Services Management, Faculty of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.² Department of Health Services Management, Faculty of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.³ Social Determinants of Health Research Center, Faculty of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.⁴ Department of Epidemiology and Biostatistics, Faculty of Health, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.**Abstract:**

Quality of work life is one of the key factors affecting employees' performance. The aim of this study was to determine the relationship between the quality of work life and performance of employees in community health centers and selected hospitals affiliated with Ahvaz Jundishapur University of Medical Sciences. In this cross-sectional study, 210 employees were randomly selected as the statistical samples of community health centers and hospitals of Ahvaz Jundishapur University of Medical Sciences in 2016. Data were collected by the validated questionnaires of employees' quality of work life (Walton's questionnaire) and the employees' work performance (Patterson's questionnaire). The results showed that the quality of work life of the administrative staff was significantly higher than hospital nurses and health care workers ($P=0.011$). There was a significant relationship between the components of quality of work life and work performance. Based on the regression analysis, the quality of work life significantly results in improving the employees' performance ($B=0.164$; [95% CI: 0.091-0.237]). In other words, for each unit of increase in the quality of work life for employees, the performance will increase significantly. There is a positive and direct relation between the quality of work life and performance. The social integrity leads to creation of a work environment in which the employees feel a sense of belonging. In case of having such integrity, it is possible to achieve the organizational goals. Since the higher quality of work life is associated with higher performance, managers can improve some important components of quality of work life for the employees by adopting appropriate solutions, thus providing the necessary conditions to improve performance.

Key words: *Quality of work life, Performance, Community health centers, Hospital.****Corresponding author:****Amin Torabipour,**

Assistant Professor,

Department of Health Services Management,

Faculty of Health, Ahvaz Jundishapur University of Medical Sciences,

Ahvaz, Iran

Tel: [+98-6133738269](tel:+98-6133738269).

QR code



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INTRODUCTION:

Health care providers are responsible for the critical area of prevention, treatment and provision of health services to the community. Therefore, it is necessary to focus on Quality of Work Life (QWL) programs and the performance of these people, their improvement and studying the factors associating with it [1]. Nowadays, human resources increasingly become more important as the core and prime mover of each organization [2]. Human resources are the most valuable assets of any organization [3]. In this regard, some organizations have managed to focus all their human resources' ability and attention on the organization and its problems and achieve their goals by emphasizing on meeting the material and spiritual needs of their human resources [1]. If human resources, and especially the operational employees, receive due attention regarding their potential abilities, they can play a vital role in achieving the organizational growth and development. Hence, using different techniques and methods with regard to quality of work life can bring about the achievement of this important goal [4]. One of the essential steps in improving any organizations is the recognition of causes and factors that affect the quality of work life in employees [5]. Optimal quality of work life is an added value for the organization [6]. Quality of work life is a good indicator which is necessary if the organization is to keep the employees attracted to the organization [7, 8]. The components of quality of work life include "fair and adequate payment", "safe and healthy work environment", "provision of growth opportunities", "social dependence of work life", "legalism in the organization", "overall atmosphere of life", "integration and social cohesion in the organization of work" and "the development of human capabilities" [9]. Improving the quality of work life in employees increases productivity and promotes cares received by patients and enhances patient's satisfaction from health care services [5]. Quality of work life is the employees' reaction to their jobs [10]. Quality of work life and quality of life are the most important and the most fundamental issues in improving the organizational performance [11]. One of the essential steps in improving the employees' work performance is enhancing the quality of work life. The individual's performance is the criterion with which their success is rated in their work, usually obtainable either from their output rate (e.g. the amount of sales and production) or the evaluation of the success rate of the individual's behavior in comparison with the organizational expectations [12]. As a result, performance can be defined as "the behavior, or actions, which is related to the objectives of the organization" [13]. Performance evaluation system is one of the most important and fundamental subsystems of human

resources. It is clear that the employee's performance evaluation is very crucial, it one of the most sensitive issues confronted by the authorities of the organization. They are not satisfied despite the constant effort in designing systems assess employees. The main reasons for this dissatisfaction include different factors such as the complexity of the assessment process and the existence of deficiencies in a comprehensive evaluation system but the organizations, as social beings, need a base on which they can assess the competency of their employees. Retesting and measuring the performance of each system are necessary steps to ensure its performance and effectiveness, and to eliminate the obstacles and unseen problems after a suitable period of time [14]. One study showed that there is a significant relationship between quality of work life and performance [15]. Kanten et al. demonstrated that there was a significant relationship between the aspects of quality of work life and performance [7]. Roman in a study in Kenia declared that there were similar results between the quality of work life and performance [16]. The aim of this study was to determine the relationship between the quality of work life and performance in employees of community health centers selected by Ahvaz Jundishapur University of Medical Sciences.

MATERIALS AND METHODS:

This research is a cross-sectional study which was conducted from April 2016 to January 2017. The research population consisted of employees of community health centers (30 centers) and educational hospitals (3 hospitals) which were covered by Ahvaz Jundishapur University of Medical Sciences. A total of 210 employees in the fields of health, care (nurses) and administrative (including administrative and financial staff) were randomly selected as the sample. In this study, the data were collected both by validated questionnaires of Quality of Work Life in employees (Walton's questionnaire)[1, 12 and 17] and employees' Work Performance (Patterson questionnaire)[18, 19]. The measuring scale in the questionnaire was a five-point Likert-type scale. The quality of work life questionnaire has eight dimensions including "fair and adequate payment" (3 questions), "safe and healthy work environment" (3 questions), "provision of growth opportunities and continuous security" (3 questions), "legalism in the organization" (4 questions), "social dependence of work life" (3 questions), "overall atmosphere of life" (3 questions), "integration and social cohesion in the organization of work" (4 questions) and "development of human capabilities" (4 questions). The reliability of this questionnaire was determined to be 0.88 [20] in Walton study and 0.70 in the pilot study. The

reliability of Patterson's questionnaire was 0.86 in Aslanpoor's study [19]. Also, Patterson's work performance questionnaire has four dimensions including "discipline at work" (4 questions), "sense of responsibility at work" (4 questions), "cooperation" (3 questions) and "improvement in work" (4 questions). Data analysis was carried out by SPSS .20 software. The significance level was considered 0.05. The data were analyzed using independent t-test, chi square test and Pearson's correlation coefficient, the one-way analysis of variance (ANOVA), and Tukey's test. In order to control possible confounding factors, multiple linear regression was used based on the following formula:

$$y = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n + N(0, \sigma^2)$$

RESULTS:

Table 1 shows that from a total of 210 employees, 48 employee (22.9%) were male and 162 employee (77.1%) were female. The mean age of the employees was 33.7 ± 7.4 years and the mean work experience of the employees was 10.4 ± 6.7 years. According to Table 2 and Chart 1, the quality of work life and work performance had the highest scores in the category of administrative staff. There was a significant difference in the scores of quality of work life among the surveyed job categories ($P=0.011$); however, the difference of mean work performance score was not statistically significant in the jobs ($P=0.057$). Of the quality of work life dimensions, the score of "fair and adequate payment", "safe and healthy work environment", "overall atmosphere of life" had a significant difference among the jobs. Among the various dimensions of performance, there was a significant difference between the score of "cooperation" and "improvement in work". Based on the results, among the various dimensions of quality of work life, "development of human capabilities" in nurses (2.5 ± 11.08) and administrative staff (2.08 ± 11.22), and "integration in organization" in health workers (3.5 ± 11.35) had the highest score. From among the dimensions of work performance, "sense of responsibility at work" in nurses (2.1 ± 18.60) and health workers (2.21 ± 18.57) and "improvement in work" in administrative staff (1.8 ± 18.7) had the highest score. According to Table

3, there was a significant relationship between the quality of work life and the performance of employees. Among the components of the quality of work life, "safe and healthy work environment" and "integrity in the organization" had a significant correlation with all the components of the performance. "Safer work environment" and an increase in "integration in the organization" significantly lead to an increase in the quality of work life. Based on the regression analysis, in general, the quality of work life significantly results in improving the employees' performance ($B=0.164$; [95% CI: 0.091-0.237]). In other words, for each unit of increase in the quality of work life for employees, the performance will increase significantly. There are multiple relationships between the quality of work life (components of "fair and adequate payment", "safe and healthy work environment", "provision of growth opportunities and continuous security", "legalism in the organization", "social dependence of work life", "overall atmosphere of life", "integration and social cohesion in the organization of work" and "development of human capabilities") and the performance of health workers, nurses and administrative staff. The multiple regression method was used to investigate this hypothesis. According to the results of the regression analysis in Table 4, multiple correlation coefficient for the linear combination of components of quality of work life ("fair and adequate payment", "safe and healthy work environment", "provision of growth opportunities and continuous security", "legalism in the organization", "social dependence of work life", "overall atmosphere of life", "integration in the organization", "development of human capabilities") with the performance of health workers, nurses and administrative staff is equal to $MR=0.394$ and $RS=0.155$; which is significant at the level of $P<0.001$. Thus, the hypothesis of this study is confirmed. In the regression equation R^2 (coefficient of determination), the components of quality of work life (safe work environment and integrity in the organization) are by 15 percent predictive of the performance of health workers, nurses and administrative staff.

Table 1: The demographic characteristics of employees (N=210)

Individual variables	Frequency	Percent	
Age (Years)	20-30	61	29
	31-40	105	50
	41-50	32	15.2
	> 50	12	5.8
		210	100
Gender	Male	48	22.9
	Female	162	77.1
		210	100
Marital Status	Single	62	29.5
	Married	148	70.5
		210	100
Level of Education	Diploma	24	11.5
	Associate's degree	30	14.4
	Bachelor's degree	106	51
	Master's degree and higher	50	23.1
		210	100
Job	Nurses	70	33.3
	Administrative staff	70	33.3
	Health workers	70	33.3
		210	100
Employment Status	Conventional	78	37.1
	Contractual	62	29.5
	Official	70	33.3
		210	100
Work Experience	1-5 years	42	20
	6-10 years	73	34.8
	11-15 years	36	17.1
	16-20 years	28	13.3
	Over 20 years	31	14.8
		210	100
Being native of workers	Native	176	83.8
	Non-native	34	16.2
		210	100

Table 2: Mean and standard deviation of quality of work life and performance dimensions according to job category

	Dimensions	Job category			F	P-value
		Nurses	Administrative staff	Health workers		
Quality of work life	Fair and adequate payment	6.31±1.81	1.3±8.51	2.04±6.42	34.20	0.001
	safe and healthy work environment	6.87±2.2	1.8±8.3	2.7±6.72	10.05	0.001
	provision of growth opportunities and continuous security	7.88±2.64	2.3±8.42	7.7±8.94	0.816	0.444
	legalism in the organization	10.87±2.88	3.08±11.06	3.6±10.90	0.72	0.487
	social dependence of work life	8.42±1.69	1.7±8.67	2.1±8.82	0.98	0.374
	overall atmosphere of life	6.87±2.20	2.1±7.40	2.1±6.87	13.66	0.001
	integration and social cohesion in the organization	10.7±3.1	3.1±11.08	3.5±11.35	0.71	0.488
	Development of human capabilities	2.5±11.08	2.08±11.22	2.5±11.08	0.083	0.921
	Quality of work life	13.17±69.05	10.75±76.30	18.70±71.14	4.56	0.011
	Work performance	Discipline at work	3.1±17.50	2.2±18.42	3.1±17.81	1.89
Sense of responsibility at work		2.1±18.60	1.9±18.6	2.21±18.57	0.024	0.97
Co-operation		2.15±13.22	1.6±13.94	2.2±13.14	3.24	0.041
Improvement		2.7±17.4	1.8±18.7	2.7±17.4	6.40	0.002
Work performance		8.77±66.76	6.90±69.77	8/5±67.05	2.89	0.057

Table 3: The relation between components of quality of work life and performance of studied employees

Quality of work life		Work performance			
		Discipline at work	Sense of responsibility at work	Co-operation	Improvement in work
Fair and adequate payment	Coefficient	0.052	*0.143	*0.149	**0.200
	P-value	0.455	0.038	0.031	0.004
Safe and healthy work environment	Coefficient	**0.228	**0.232	*0.289	**0.366
	P-value	0.001	0.001	0.001	0.001
Growth opportunities and continuous security	Coefficient	0.029-	0.133	*0.162	**0.304
	P-value	0.680	0.055	0.019	0.001
legalism in the organization	Coefficient	0.111	0.106	0.122	*0.146
	P-value	0.108	0.125	0.078	0.035
social dependence of work life	Coefficient	0.103	**0.194	*0.140	0.129
	P-value	0.135	0.005	0.043	0.062
overall atmosphere of life	Coefficient	*0.185	0.110	0.101	*0.175
	P-value	0.007	0.111	0.146	0.011
integration and in the organization	Coefficient	**0.320	**0.217	**0.260	**0.260
	P-value	0.001	0.002	0.001	0.001
the development of human capabilities	Coefficient	0.063	**0.261	*0.171	*0.136
	P-value	0.366	0.001	0.013	0.049

Table 4: Results of regression analysis of factors affecting Employees' performance

predictor variables		R	R ²	B	T	P-value
Employees' performance	Constant	0.394	0.155	54.233	14.98**	0.001
	"fair and adequate payment"			0.360	1.08	0.281
	"safe and healthy work environment"			0.744	2.572**	0.011
	"provision of growth opportunities and continuous security"			0.037-	0.248-	0.777
	"legalism in the organization"			0.419-	1.722-	0.087
	"social dependence of work life"			0.173	0.471	0.638
	"overall atmosphere of life"			0.182-	0.541-	0.589
	"integration in the organization"			0.692	3.042**	0.003
	"development of human capabilities"			0.228	0.894	0.372

**significance level of 0.01 *significance level of 0.05

DISCUSSION:

The aim of this study was to determine the relationship between quality of work life and performance in employees of community health centers and selected hospitals affiliated with Ahvaz Jundishapur University of Medical Sciences. The regression analysis showed that the quality of work life improved the studied employees' performance significantly. There is a direct relationship between the quality of work life and performance. As the quality of work life of the employee's increases, their performance enhances. Several studies have confirmed the positive impact of the quality of life on performance, productivity and organizational effectiveness [21, 22]. In a study, Kasraei showed that the quality of work life has a positive relationship with job satisfaction and stress reduction [3]. A study showed that the quality of work life affects job satisfaction and performance in the employees. Increasing the components of quality of work life leads to increasing job satisfaction of employees, and following an increased job satisfaction, the employees' performance will be increased [8]. The study by Gonzalez et al. showed that there is a significant relation between the quality of work life and mental health. As the quality of work life of employees in the organization increases, they will have better mental health and therefore a better performance [23]. Another study showed that there is a significant relationship between exercise (physical activity) and the quality of work life and performance. In the organizations whose employees participated in sports and physical activity programs, the staff had a higher quality of life and better performance, having more commitment to the

organization as well as more confidence. Based on these findings, the organizations which are interested in improving the quality of life of their employees and productivity in the workplace should be aware of this fact and operationalize it in their organizations [24]. The studies showed that any increase in job satisfaction and job security leads to an increase in the quality of work life of the employees and, as a result, to an increase in the organizational commitment [7, 8]. The results of the present study showed that there was a significant and positive relationship between most of the components of quality of work life and the components of performance ($P < 0.05$). Among the components of quality of work life, "safe and healthy work environment" and "integration in the organization" had a significant correlation with all components of performance. "Safer work environment" and "increase of integration in the organization" significantly lead to an increase in the quality of work life [25]. The results of regression analysis showed that among the components of quality of work life, only two variables ("safe and healthy work environment" and "integration in the organization") are predictors of performance of health workers, nurses and administrative staff. Safe work environment and safety culture at work lead to an increase in job satisfaction and performance in employees [26, 27]. The results of the study showed that there was a significant relationship between "safe and healthy work environment" and all the components of performance ("discipline at work", "sense of responsibility at work", "co-operation" and "improvement in work"). Azizi Nejad et al. obtained similar results in this field [1]. According to the

results of the present study, there was a significant relationship between “integration in the organization” and all the components of performance including “discipline at work”, “sense of responsibility at work”, “co-operation” and “improvement in work”. In a study, Korner et al. showed that there was a significant relationship among job satisfaction, organizational culture and teamwork [28]. In a study which was conducted by Aziz Nejad et al, it was found that remuneration and financial incentives have always been considered as factors contributing to an increase of performance [1]. Financial incentives have a greater impact on the improvement of team and individual’s performance [29].

CONCLUSION:

According to the results, it can be said that “integration in the organization” and “safe and healthy work environment” provide the basis for job promotion of individuals in the organization and the affairs will be done based on administrative hierarchy. The employees feel a sense of belonging in such an environment; they feel that the organization needs them and their work, and they can use their full potential to achieve organizational goals and better performance. Therefore, integration in the organization leads to an increase in job commitment, job satisfaction and organizational belonging. This will, in turn, affect the activities of people within the organization. In general, there was a significant and positive relationship between the quality of work life and performance so that the quality of work life was highly effective on the performance. Managers can improve the important components of quality of work life by adopting appropriate solutions and providing the necessary conditions to improve performance and efficiency.

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Conflict of Interest

There is no conflict of interest to be declared.

Authors' contributions

All authors contributed to this project and article equally. All authors read and approved the final manuscript.

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