

## Evaluation of Staffs' Quality of Working Life of Health Information Technology

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**Abstract:** The enhancements in employees' quality of working life of health information technology not only increase the quality of health services but also help to promote health information system. The aim of this study was to answer this question: what is the status of the quality of working life of these employees. This study was performed in affiliated hospitals of Semnan University of medical sciences in Semnan, Iran in 2015. In this study, a census method was used. The data collection tool was a researcher made questionnaire. The 36.6% were satisfied with safety of their work environment. The 82.2% feel safe of their working environment, 43.6% believed there was general supervision on staff. It is concluded that health information staffs' job was somewhat attractive and multi facet; it might help them to enhance their quality of working life.

**Key words:** Quality, working life, health information technology, employees, Iran

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### INTRODUCTION

Every organization is a social system and undoubtedly human resource is the most important factor for the effectiveness and efficiency of an organization (Starfield, 2012; Kahouei *et al.*, 2014a, b). Hospital as an organization has a more difficult condition because every hospital has several managers (Farzaneh *et al.*, 2011). As the management and organization are theoretically and practically under the powerful influence of human resources, proper handling and management of the manpower can help to take the most advantage of their potentials (Guest, 2011; Kahouei *et al.*, 2016). This is of great importance in treatment centers especially in hospitals because they play an important role in building a healthy community. Therefore, paying attention to human resources and providing qualified and competent people can help to improve health systems (Habibzadeh *et al.*, 2012; Kahouei *et al.*, 2013a-c). Given the fact that human resources are the most important and most essential element of any organization and since achievements and success of any organization depend on qualified human resources, hence, it is necessary to pay more attention to the physical needs of the staffs and the required facilities in addition, organizations must take further measures to meet the needs of their staffs (Mansour *et al.*, 2003; Kahouei *et al.*, 2014a, b).

Quality of working life includes a series of factors related to employees such as job satisfaction, growth opportunities, psychological issues, job privileges, human

relations of the staffs and the low wages in addition, it also includes a set of organizational tasks or functions such as participatory management, job enrichment and safe job conditions (Mehdi *et al.*, 2012). The quality of working life is one of the approaches to improve performance and is a key element of the organizational culture of excellence. It is an approach which makes a consistency between the staff and the organization. As a result, improvements in the quality of working life will be reflected in employees' job satisfaction and mental health and enhances employee satisfaction (Choobineh *et al.*, 2013; Mahboobe *et al.*, 2012).

According to a study by Choobineh *et al.* (2013) which was conducted on the quality of working life and its determinant factors among the staff working in Shiraz University of Medical Sciences, it was concluded that the quality of working life among women and employees with high income was higher than that among men and employees with low-income. On the other hand, the results showed that there was a relationship between the quality of working life and the factors of age, job experience, marital status, number of children, education level, type of employment and place of work. In view of that with increasing age the quality of working life increases as well; in addition, employees who earn more in comparison with the employees who have lower income, consider a better occupational position and outlook for themselves, hence they show more satisfaction with their work and are more interested toward their job. The mentioned group have a better

understanding and greater awareness of the outcomes of their efforts. Finally, they are more satisfied with their salaries and wages and thus achieve a higher quality of life. In another study in 2012, Jenaabadi and Nastiezaie (2011) conducted a research on the factors affecting quality of working life among the staffs working in Baharan educational, medical and psychiatric research center in Zahedan. The researcher concluded that lack of job security, lack of participation of employees in decision making, inappropriate work conditions, lack of opportunities for promotion, lack of competence and qualification of direct manager, inadequate salaries and wages, lack of cash and non-cash rewards and lack of in-service training courses all led to lower quality of working life. On the other hand, high quality of working life led to a reduction in occupational burnout. The good quality of working life not only affects the individual job satisfaction but also has an impact on job satisfaction of other colleagues as well. According to the results of the mentioned study, 40 and 43.6% of employees, respectively were not satisfied with their quality of working life and quality of life. According to the findings of the study, it seems necessary to provide and facilitate easy and satisfactory access to recreational, athletic, educational and health services in addition, reforms must be made in the systems of payments and rewards, training and development of human resources and management styles. Accordingly, to increase efficiency and effectiveness it is necessary to improve the work quality of employees in all organizations, particularly in hospitals which are the main source of health care and treatment services in addition such improvements increases the satisfaction of employees working in hospitals. Therefore, it is very important to pay more attention to the quality of working life of the personnel working the field of health information technology because in the current time, they are most the important source of information which can fulfill many needs of managers at different levels of the health system. The enhancements in the quality of working life of this group of people not only increase the quality of health services but also help to promote health information system. Based on our reviews, it seems that no study has been carried out yet to investigate the quality of working life among the employees working in the field of health information technology. Accordingly, the aim of this study was to answer this question: what is the status of the quality of working life of employees.

## MATERIALS AND METHODS

This study was performed in affiliated hospitals of Semnan University of Medical Sciences in Semnan, Iran in 2015. In this study, a census method was used. The

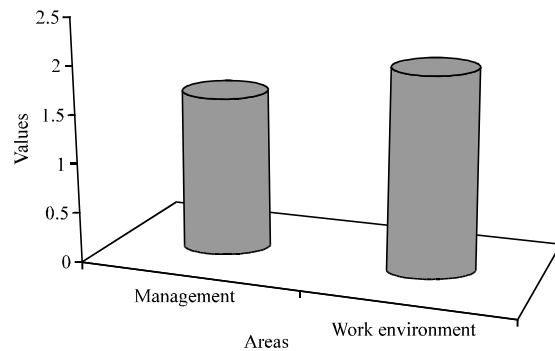


Fig. 1: Mean scores of the attitudes towards management and work environment areas

data collection tool was a researcher made questionnaire. The questionnaire consisted of 33 questions in 5 sections. The first part contained 5 questions related to demographic information including gender, marital status, age, work experience and education; the second part included 7 questions related to work environment; the third part contained 6 questions related to management; the fourth part included 6 questions related to mental health and the fifth section contained 9 questions related job nature. The attitudes were graded as totally disagree = 1, disagree = 2, neither disagree nor agree = 3, agree = 4 and totally agree = 5, respectively. Then, the primary questionnaire was reviewed for content validity through the content validity index. Next, the questionnaire was revised to be more focused as the experts suggested. Then, we piloted the questionnaire on 18 employees of health information technology department randomly selected from the two hospitals. Participants in the pilot study were excluded from the study. Internal consistencies were expressed as Cronbach's alpha 0.913 for data management. Next, further revisions were made and some statements were rephrased. Lastly, the researcher distributed the final version of the anonymous questionnaire among the employees who were working in departments of the hospitals and asked them to complete it. The questionnaire was delivered to the researcher at most 72 h later. Descriptive statistics, mean and standard deviation for each item was reported (Fig. 1).

## RESULTS AND DISCUSSION

**Demographic data:** In this study 111 questionnaires were returned. The 77.5% were women, 46.8% of the participants aged 40-30, 58.4% were temporary employment, 25.2% had 5 years work experiences, 87.3% of them were married and 50.5% had bachelor degree (Table 1).

**Attitudes towards components of the work life quality:**

The 55% were satisfied with their work environment means, 27.5% of the participants were not sufficient satisfied with facilities of their environment, 34% reported unfavorable physical conditions of their working environment, 36.6% were satisfied with safety of their work environment, 36.6% had stress at work, 36.6% believed that their work environment is not designed based on sanitizing, 82.2% feel safe of their working environment (Table 2).

**Attitudes towards managerial factors:** The results showed that 29.7% believed that benefits paid were not similar ones of other organizations, 31.8% believed that

further work will not lead to greater rewards, 33.3% reported that benefits received were not commensurate with the work done, 30.6% reported that the working environment is not given to the staffs' views, 43.6% believed there was general supervision on staff and 24.8% reported that the employees' needs were ignored in the workplace (Table 3).

This study was aimed to evaluate the quality of working life of staffs working in health information technology departments of hospitals affiliated to Semnan University of Medical Sciences during 2014-2015. The findings showed that less than half of the studied people were not satisfied with their salaries and rewards. The results of other studies are in line with the results of our study (Almaci *et al.*, 2011; Mehdi *et al.*, 2011; Kahouei *et al.*, 2013a-c). Probably this category of population, assumed that job was simply a means to meet the economic needs and because of such a view, they mostly had little loyalty to the organization. As a result, to compensate for the economic deficiencies, they had to have a second job and this in turn might led to a drop of salary, the loss of motivation, fatigue and thus a reduction in the quality of working life. According to different studies, there is a correlation between fair payments and the quality of working life because employees who earned less expected lower job positions in the future and thus they were not much interested to and satisfied with their jobs (Khoshknab *et al.*, 2007; Mozghan *et al.*, 2012). They also had much less awareness of the result of the efforts which they had made. Since, they earned low salaries and rewards, they were less satisfied and thus had a low quality of working life. Therefore, fair payments

Table 1: Demographic characteristics

Demographic profile	Groups	N	%
Sex	Female	86	77.5
	Man	25	22.5
Age (year)	<30	26	23.5
	40-30	52	46.8
	50-41	27	24.3
	<50	6	5.4
	Official	42	38.9
Employment status	Projective	3	2.8
	temporary	63	58.4
Job experience (year)	>5	27	25.2
	10-5	25	23.4
	15-10	14	13.1
	20-15	15	14.0
	<20	26	14.3
Marital status	Single	14	12.7
	Married	96	87.3
Education	Diploma	43	38.7
	Bachelor degree	56	50.5
	Master degree	11	9.9
	PhD	1	0.9

Table 2: Distribution of the study subjects' attitude toward workplace safety

Factors	Attitudes	Totally disagree (N (%))	Disagree (N (%))	No idea (N (%))	Agree (N (%))	Totally agree (N (%))	Mean±SD
<b>Work environment</b>							
Physical condition, amenities and facilities	Meeting needs	4 (3.6)	19 (17.1)	10 (9.0)	61 (55.0)	17 (15.3)	1.05±2.61
	Facilities	24 (22.0)	30 (27.5)	24 (22.0)	22 (20.2)	9 (8.3)	1.25±1.65
	Good physical condition	14 (10.8)	38 (34.2)	19 (17.1)	28 (25.2)	14 (12.6)	1.24±1.94
Health and safety at work	Safe working environment and away from any danger	7 (6.3)	38 (34.2)	14 (12.6)	40 (36.0)	12 (10.8)	1.17±2.10
	Lack of stress in the workplace	13 (11.7)	40 (36.0)	18 (16.2)	27 (24.3)	13 (11.7)	1.24±1.88
	Work environment is designed according to hygienic principles	15 (14.6)	40 (36.4)	19 (17.3)	30 (27.3)	6 (5.5)	1.16±1.75
	Feel safe in the workplace	8 (7.4)	21 (19.1)	28 (25.5)	42 (38.2)	11 (10.0)	1.10±2.24

Table 3: Distribution of the participants' attitude toward management area

Factors	Attitudes	Totally disagree (N (%))	Disagree (N (%))	No idea (N (%))	Agree (N (%))	Totally agree (N (%))	Mean±SD
<b>Manage</b>							
Salary and benefits	The payment of benefits similar to other organizations	33 (29.7)	32 (28.8)	7 (24.3)	13 (11.7)	6 (5.4)	1.17±1.34
	Get more rewards for more work	35 (31.8)	34 (30.9)	20 (18.2)	12 (10.9)	9 (8.2)	1.32±1.25
	Pay as much work done	29 (26.1)	37 (23.3)	20 (18)	20 (18)	5 (4.5)	1.18±1.41
Monitoring activities	According to the staffs' views	14 (12.6)	34 (30.6)	24 (21.6)	32 (28.8)	7 (6.3)	1.15±1.85
	General supervision on staff	7 (6.4)	20 (18.2)	20 (18.2)	48 (43.6)	15 (13.6)	1.12±2.40
	According to their needs and suppliers	25 (22.9)	27 (24.8)	24 (22)	23 (21.1)	10 (9.2)	1.28±1.68

and salaries for the employees and paying attention to their basic needs can help the employees to handle the cost of living and meet their family needs and consequently increase the quality of working life.

The results showed that nearly half of the studied people were working in an environment away from the dangers. This may be due to the use of new devices and modern technology. That finding of other studies are consistent with our results (Safavi *et al.*, 2012; Kahouei *et al.*, 2015a, b). On the other hand, the results of a study by Van Laar *et al.* (2007) indicated that a safe working environment enhances the quality of working life. Because a work environment with less dangers and risks has a favorable impact on physical and mental condition of employees and increases their quality of working life (Ramesh *et al.*, 2013; Kahouei *et al.*, 2015a, b). As a result, the formation of committees and special groups for training the staffs, continuous inspection of the workplace, ensuring the safety of workplace and adjusting the work conditions with physical and mental abilities of employees can reduce sever security problems and risks.

The findings showed that half of the studied people were suffering from stress. The results of other studies are consistent with the results of our study (Aziz, 2004; Karimi *et al.*, 2014; Kahouei *et al.*, 2013a-c). The stress might be due to high volume of workload, few hours of rest, long working shifts and not utilizing the main skills of staffs. The increases rate of problems in the work environment reduces the individual performance in the workplace (Chen *et al.*, 2014; Kahouei *et al.*, 2011). As a result, nowadays more attention is paid to work environment and work conditions of staff and workers to raise the quality of work and protect the safety and health of employees; such measures are taken to achieve a better and more efficiency during the working years. As a result, one way to reduce job stress is to invite consultants and experts to provide employees with advices and comments on ways to improve their working conditions. This approach is the most direct way to reduce stress at work and it includes the identification of good aspects of work and design of a strategy is to reduce or eliminate the factors leading to stress. The advantage of this approach is that it directly deals with the root causes of stress at work. However, managers sometimes do not agree with this approach because it causes changes in work routines or production schedules or alters the organizational structure.

The results of this study indicated that less than half of the studied people reported that the managers asked about their views in the field of education and invited

them to participate in this field. When the managers of organizations are flexible toward the work conditions and environment, employees can participate in the work and thus it improves the quality of work of employees. On the other hand, when the participation system is institutionalized in an organization and is practically emphasized on all employees can actively participate in the decision-making processes in the organization; it leads to a joint responsibility which can reduce the occupational tensions related to individual responsibility of managers in the organization. Consequently, it increases their mental health and enhances their quality of working life (Argote and Miron-Spektor, 2011).

## CONCLUSION

The results showed that employees working in health information technology departments were not much satisfied with their payments and this led to a reduced level of quality of working life. However, they reported that their job was attractive and multi facet; it might help them to enhance their quality of working life.

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