Pathology of Isfahan University of Medical Sciences based on Weisbord six box model and its relation with mental health

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ABSTRACT

Background: The aim of this research was to study the pathology of Isfahan University of Medical Sciences based on Weisbord six box model and to find its relation with mental health. Materials and Methods: The research method followed was a descriptive survey. The statistical society consisted of all staffs of the Isfahan University of Medical Sciences consisting of professors in the year 2012 (personnel of deputy of treatment, deputy of training, cultural-student deputy, supporting deputy, deputy of food and drugs, health deputy, and deputy of research). The number of subjects in the mentioned society was 1647, sample size was 332 Based on Cochrane’s formula. They were selected by random sampling method in proportion with the statistical society. The measurement instruments included organizational pathology questionnaire (ODQ) with 35 questions and the questionnaire of mental health standard [General Health Questionnaire (GHQ)] with 28 questions. The validity of the questionnaires obtained from reviews by faculties and experts, and the reliability of the questionnaire assessed through Cronbach’s coefficient were 0.86, 0.85, and 0.76, respectively. To analyze data, the statistical methods such as single-variance t-test, regression analysis, correlation coefficient, Kolmogorov–Smirnov test, and Multivariate Analysis of Variance (MANOVA) were used. Findings: The findings of research demonstrated that the organizational damage based on six box model was seen only in the reward component at the Isfahan University of Medical Sciences. Mental health of persons in the sample group of Isfahan University of Medical Sciences was in the suitable status. There was a meaningful and positive interrelation between mental health and attitude toward the organizational damages in the dimensions of communications, useful merchandises, and attitude to change. However, no meaningful interrelation was seen between aims, structure, leadership, and reward and mental health. There was no meaningful difference between the averages of staffs’ attitude about their mental health per the demographic properties. Conclusions: The results show that there was a meaningful and positive interrelation between mental health and attitude toward the organizational damages in the dimensions of communications, useful merchandises, and attitude to change. Therefore, managers should focus on all parts of the organization and the pathology strengths and weaknesses in these areas.

Key words: Isfahan University of Medical Sciences, mental health, organizational pathology, six box model, staffs

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INTRODUCTION

Today’s world is full of changes. In such condition, organizations as the development factor in the society should be able to not only manage these changes but also be a factor for changes, review their goals and achieve their main and developing goals. However, it changes every time, while the available evidence shows that there are several problems in companies. Without any doubt, if there are problems, they cause decreased efficiency and finally affect organizational benefits. It is a fact that a company or an organization has different dimensions such as goal, structure, human force, technology and environment, and recognizing the organizational problems and commitments to them.[3]

On the other hand, to achieve the organizational goals without employees who accept the organizational goals and principles is not possible. In order to identify the organizations’ goals and also the level of achievement of goals, organizations must design an evaluation system, implement it, and also modify their goals to recognize the restrictions, obstacles, and limitations to obtaining goals.[2] For this purpose, organizational pathology systems are used. Pathology means diagnosis of diseases and identifying the factors of injuries on special systems. Organizational pathology requires defining and implementing a model for understanding the organizational problems, collecting and analyzing data, and reaching conclusions based on findings, in order to bring about changes and possible reforms. Pathology is considered as a process of using conceptual models and methods of behavioral sciences to evaluate the organization's situation and also finding methods to solve special problems and increase the efficiency of the organization.[3] Using the models facilitates organizational pathology. An organizational model represents an organization that helps us to understand more clearly and faster than what we see in the organization.[4]

In this research was used Weisbord six box among the current models as the conceptual model; goal, structure, relationship, rewards, leadership, and effective mechanisms and attitude against change are the six box pattern dimensions. The most important factors of goal dimension are the level of acceptance and clearness and resolution. Structural dimension must provide an appropriate image and picture of legal powers and is considered as a formal method to facilitate doing work and obtaining goals. Relationship dimension surveys and explores the relationship between objects or units that do various duties and tasks.

Reward dimension evaluates the level of employees' satisfaction and the organizations' rewards to them. Effective mechanism dimension refers to all the processes that cause an organization obtains its goals. Relationship is used in supporting the details and elements of a model. It also shows the attitudes against changes and the system's reaction to these changes, whether a system agrees with any change (for achieving goal) or disagrees to it.

Another factor that we would like to point out is mental health. This factor can be assessed and studied in related to dimensions and factors of organizational pathology. The World Health Organization (WHO) defined health as physical and mental social welfare without any disease. Mental health is defined as welfare and the best situation that each person can realize his/her potential abilities, deal with the daily stress of life, and constructively engage in work, playing effective roles in his/her social life and community.[5] Since the organizations influence on staff through their special nature, managers of organizations can work to secure a healthy psychological work environment so all employees do not meet any disturbance of mental pathology (trauma) for non-human troubles such as insufficient management, poor organizational environment, etc., Through the environmental and psychological space. The appropriate organizational environment and climate can be effective on employees’ motivation, improves employees’ morality, and increases their participation in decision making and also their creativity and innovation; also, it is considered as the most important resource of mental supply and vice versa.[6] The researchers showed that approximately one-third of the employees suffer from mental disorders, stress, and mental pressure caused by the poor working condition leading to burnout in the employees. The exhausted persons lose their work and become aggressive, cynical, negative, and bored.[7] Employees’ mental health issues imposed increased expenditure to the organization in ways such as waste working hours, leave job and shifts, relocating and changing jobs.

This indicates the importance of the issue, wherein the organizational problems become a hazard and damage the employees’ health in the short and long term, and it is necessary to identify and control the adverse effects of injuries on personal and organizational health.[8]

Mirzai Ahranjani conducted a survey on “organizational pathology in waste areas.” The results showed that the organizational structure led to create some behaviors with final results into vulnerability in system, so the maximum injury can be seen in leadership and employees with different years of services represented the same attitudes.[9] Zali studied the organizational pathology in the governmental company using Weisbord model. This study aimed to find the vulnerable areas in an organization. According to the results, participating in the organizational areas of goals, leadership, reward, and useful mechanisms have problems and insufficiency.[10]

Hemmat pur studied the Physical Education Department’s pathology in Kohgiluyeh, and Boyer-Ahmad and he concluded that these departments have problems and traumas in the areas of structure, goal, relationship, reward, and useful mechanisms and attitude to the changes.[11]

Najafi focused on sport and youth organizational pathology in Isfahan. According to the results, this department does not have any organizational trauma in the areas of leadership,
relationship, and useful mechanisms and attitude to the changes, but it has problems and insufficiency just in the area of employees’ rewards.[12]

Mohammadi studied the relationship between the role of management, job satisfaction, and mental pressure factors in Tehran’s governmental and private hospital nurses. The findings and results of this research showed that the directors’ and managers’ supervision plays the most important role in nurses’ mental health.[13]

Ramezani Nejhad showed that among the organizational stresses, some play a lesser role such as organizational structure and reward systems and lack of participation in decision making.[14]

Dortaj (2007) studied the role of organizational and personal internal factors on managers’ and employees’ mental health of Martyrs and Veterans Affairs and he concluded thus:

“The employees spend more than half of their lives in workspace, so stress and mental conditions of workspace have the most important effects on employees’ mental health and well-being (such as the relationship with managers, colleagues, etc.) and this effect has direct relationship to their performance and efficiency.”[15]

Savad Kohi stated in his study that neurotic organizations suffered badly in their performance because of organizational mental traumas and their disabilities in handling mental weakness in employees. The organizations can improve the employees’ mental health by measurement, prevention, and treatment of this trauma. Also, the findings showed that there is meaningful relationship between neurotic dimensions and employees’ mental health.[16] Arizi and Darmi paid attention to the importance of effects on employees’ health from justice in offering rewards to employees based on their activity levels. Attention to these findings to improve the health of industrial workers in Iran can be effective on both mental and physical health. According to the findings, when a person spends a long time in a state of imbalance, it will cause pressure reaction and then leads to physical and mental diseases such as weakness in general health and increased risks of heart attacks, migraine headaches, mental stress, etc.[17]

Rahimi stated in his research thus: “Organizational pathology of medical science university based on Weisbord six box model and its relationship with organizational health shows that Isfahan Medical Science University has many points of trauma. These traumas include: Motivation, reward, leadership, relationship, structure, goal, useful mechanism areas in the goal components which are lower than the average.[13]

Bani Hashemiyan stated that there was a relationship between general managers’ health and leadership methods of employees. Empathy, high self-motivation, and self-confidence are the conditions that caused a positive relationship between general health and leadership methods.[18] Mardani and Shahraki studied on the mental health of nurses from one of hospitals in Iran and the results showed that the mental signs in women were higher than in men and it was because of the limitations of women in social activities and their environmental tensions and family problems such as upbringing children and other duties. The other finding was psychiatric symptoms with higher frequency in those staff with more years of service. The results showed that 81.1% of nurses had good mental health and 18.9% of them suffered from mental disorders, 5.8% from paranoid ideation, and 5% suffered from worries.[19] Fuque and Kurpius, in their study on organizational pathology factors, showed that deterrent forces such as limitation recources or employees’ poor morale caused organization’s trauma. First, those factors being responsible for inner problems and trauma in the organization should be identified, then goals and guidelines must be framed for changing this state to the correct state and preventing organization’s trauma.[20] Bissel stated that when an organizational system is disrupted, the stress level will be increased among employees. If the stress continues, people build coalitions that can intervene in achieving organizational goals.[21] Stoetzer et al. showed that personal internal relationship is the most important factor in workspace for employees’ health, and low social support, serious conflicts, and deprivation imposed by superiors and colleagues at work have significant effects on depression in the workspace. The results of this research on 4040 men and women showed that personal internal relationship problems can be an effective factor on depression.[12] Vicic studied the organizational pathology of social welfare health care institutes by Burke and Litwin’s model, and stated that including the external environment and the changes in leadership and nursing management is essential for health care.[25,26] Enache studied the organizational pathology among trained employees in Prashakny in Romani. The results showed that the organizations work like a human body and they can be compared with each other. Organization is the same as human body; it may be healthy or sick. Healthy organization has characteristics such as high profit and satisfactory and safe condition.[23]

This research evaluates and measures the relationship between two mentioned factors (organizational pathology and mental health) in one of the known and effective organizations in the society such as a university, as it is a dynamic and targeted system and faces new challenges. The University employees are the committed human resource with their physical and mental health as importance in the success of and meeting goals of the University. If the university authorities are not able to alter and maintain qualified and motivated human resources, the university will face difficulties in order to do serious responsibilities and duties. Paying attention to the employees’ physical and mental health and providing material and spiritual needs and proportion of workspace is an important step in upgrading the performance of an organization.[18] So, this research focused on university pathology based on Weisbord six box and its relationship with employees’ mental health, with an aim to find answers for these questions: Is there organizational pathology in...
Isfahan Medical Sciences University? What is the university employees’ mental health? Is there a relationship between organizational pathology and employees’ mental health? Is there significant difference in the organizational pathology of Isfahan Medical Sciences University based on demographic characteristics (age, gender, educational degree, employment status, years of service, and marital status)? Is there significant difference between employees’ attitudes about mental health based on demographic characteristics (age, gender, educational degree, employment status, services experiments, and marital status)?

**MATERIALS AND METHODS**

**Methods of research**
In this study, the researchers tried to survey the relationship between variables. So, the research is a descriptive one and its method is survey. As the managers can use its results for improving the organization’s health, this research is a practical one.

**Population**
The population consisted of all employees in the Department of Medical Science (medical science assistants) Department of Health Researches (health assistants), Department of Education (education assistants), Department of Food and Drug Administration (food and drug assistants), office support, students’ affairs, and Department of Culture and Treatment (culture and treatment assistants) in Isfahan in 2012. Based on staffing unit information, they numbered 1347. Doing a preliminary study in a group of people was necessary to determine the variance. So, 30 persons were selected randomly from a population and then were distributed questionnaires for getting information. By using Cochrane’s formula, a sample size of 350 persons was obtained, but only 323 questionnaires were returned.

**The method of sampling**
As there were different deputies in Isfahan Medical Sciences University, we applied stratified random sampling based on their workplace. Table 1 shows that the distribution of sample size was based on stratified random sampling.

**Measurement tools**
In this research were used two kinds of questionnaires.

**Weisbord organizational pathology questionnaire**
The Weisbord questionnaire (1976) was used in this research. The questionnaire contains 35 closed questions with five options each (strongly agree, agree, no opinion, disagree, completely disagree) which were granted the scores 5, 4, 3, 2, 1, respectively. This inventory measures the organizational pathology in 7 dimensions. Weisbord reported the validity and reliability to be 0.80 and 0.87, respectively. To assess the reliability of the questionnaire, a pilot study was conducted to determine the variance of the questions; the Cronbach’s alpha coefficient was calculated as 0.85. To determine the content validity of the questionnaire, some lecturers were given a 35-item and finally they agreed on all 35 items in the questionnaire. Then, the content validity of the questionnaire was confirmed.

**General health questionnaire**
The GHQ questionnaire was introduced by Goldberg in 1972. He reported a validity and reliability of 0.88 and its internal consistency showed that all questions have a high correlation to the total score. The reliability coefficient obtained was 0.86 by Cronbach’s alpha. For measuring the validity of the structure of GHQ, correlation coefficient was used based on the scale as shown in Table 2.

The four subscales of GHQ are as follows:

- **Physical symptoms subscale:** This subscale studies the general health status and physical symptoms.
- **Anxiety subscale:** This subscale studies the clinical signs of hard anxiety, pressure, angry, worries, and stress.
- **Social performance subscale:** This subscale studies personal ability in doing daily work, feeling satisfied in doing duty, feeling useful, and the ability to learn and enjoy doing daily activities.
- **Depression subscale:** This scale studies special depression symptoms such as invalidity, hopeless, feeling worthless in life, thoughts of suicide, wish to die, and not doing work.

**Table 1: Frequency of the population and percentage distribution**

| Isfahan medical science University | Population | Sample | Percentage |
|-----------------------------------|------------|--------|------------|
| Deputy of support                 | 620        | 132    | 21         |
| Deputy of research (research staff) | 185       | 39     | 21         |
| Department of health (health assistants) | 179      | 38     | 21         |
| Department of treatment (treatment assistants) | 156      | 33     | 33         |
| Deputy of culture and student affairs | 227      | 48     | 21         |
| Food and drug administration (food and drug assistants) | 149      | 32     | 21         |
| Department of education (education assistants) | 131      | 28     | 21         |
| Total                             | 1647       | 350    | 21         |

**Table 2: The construct validity of GHQ based on correlation coefficient**

| Scale                  | Anxiety | Social performance | Depression | Total scale (28 items) |
|------------------------|---------|--------------------|------------|------------------------|
| Physical symptoms scale | 0.58    | 0.52               | 0.33       | 0.79                   |
| Anxiety scale          | -       | 0.57               | 0.61       | 0.90                   |
| Social performance scale | -     | -                  | 0.44       | 0.75                   |
| Depression scale       | -       | -                  | -          | 0.62                   |

GHQ = General health questionnaire
The total of these subscales showed the personal mental health.

**The methods of analyzing**

*Data analysis methods*

Data were analyzed using SPSS software version 15 (SPSS Inc, Chicago, IL, USA). For analyzing the information, the statistical methods of correlation coefficient and regression coefficient, univariate t-test statistics, Kolmogorov–Smirnov test, Multivariate Analysis of Variance (MANOVA), and Univariate analysis of variance (ANOVA) were used.

**FINDINGS**

For evaluation of the meaningful level, t-test was used. \( \alpha = 0.05 \) level was used in deductive analysis. Based on Table 3, the mean of organizational pathology model and the obtained means in goal, structure, leadership, useful mechanism, and attitude to change were higher than 3 and the obtained “t” values were higher than 1.97, but the obtained mean of rewards component was lower than 2.63 than the hypothetical mean.

Also, when measuring mental health score for Isfahan Medical Sciences University employees by t-test (\( \alpha=0.05 \)), it was found that the mental health mean (18.47) was smaller than the mental health point scale cutoff value (22.5). (\( t = 3.93 \)).

For finding the correlation between the organizational pathology dimensions (goal, structure, leadership, reward, useful mechanisms, and attitudes against change) and mental health, Pearson test was used which showed that “r” was positive and meaningful between organizational pathology and useful mechanisms and attitudes to change with employees’ mental health at 0.05 level, while the organizational pathology did not show meaningful correlation with goal, structure, leadership, and reward dimensions [Table 4].

For predicting the mental health of Isfahan Medical Science University employees, regression coefficient was used based on organizational pathology dimensions (goal, structure, leadership, communications, reward, useful mechanism, and attitude to change). In Table 5, the determination coefficient shows that relationship, useful mechanisms, and attitude to change with a score of 0.18 have effects on mental health, while goal and structure, leadership, and reward dimensions do not have any effect on mental health.

With F meeting \( P < 0.05 \), a significant difference is observed only in reward component based on sex, while among other components there is no significant difference based on employees’ demographic characteristics like sex, age, education, employment status, years of service, and marital status.

**DISCUSSION AND CONCLUSION**

The findings of this study on the organizational pathology of Isfahan Medical Sciences University showed that there was no organizational pathology in the goal, structure, leadership, relationship, useful mechanism, and attitude to changes, but there was organizational trauma in the reward area because of lack of reward satisfaction based on proportion, lack of satisfaction of facilities and the level of services, lack of growth and development in the university, lack of evaluation of members, and lack of satisfaction services.

The organizational pathology model is an effective method and coordinates, managers and employees for obtaining organizational success. So, in each organization, maybe there is organizational pathology, and this subject has been reported in different studies. Rahimi reported that there is organizational pathology in all components of colleges of Isfahan Medical Science University, with the maximum trauma in motivation and reward areas and the lowest in the area of useful mechanism. Most of the researches show that there is organizational pathology in the reward system. The employees believed that their salary fits to their duties, but they were not paid enough to live.

| Table 3: Comparison of the dimensions of organizational pathologies (goals, structure, leadership, communications, rewards, helpful mechanisms, attitude change) |
|---------------------------------|-------|--------|-----|------------------|
| Dimension                       | Average | SD   | t    | Significance level |
| Goals                           | 3.43   | 0.66  | 12.02 | 0.001            |
| Structure                       | 3.34   | 0.76  | 8.21  |                  |
| Leadership                      | 3.41   | 0.72  | 10.37 | 0.001            |
| Communications                  | 3.48   | 0.68  | 12.78 | 0.001            |
| Award                           | 2.63   | 0.70  | 973   | 0.001            |
| Useful mechanism                | 3.34   | 0.68  | 9.04  | 0.001            |
| Attitude of change              | 3.39   | 0.67  | 10.64 | 0.001            |

SD = Standard deviation. Also, when measuring mental health score for Isfahan Medical Sciences University employees by t-test (\( \alpha=0.05 \)), it was found that the mental health mean (18.47) was smaller than the mental health point scale cutoff value (22.5). (\( t = 3.93 \)).

| Table 4: Relationship between organizational pathology in dimensions (goal, structure, leadership, communications, reward, useful mechanisms, and attitude to change) and employees’ mental health |
|---------------------------------|-------|-------|-------|------------------|
| Resources                       | Frequency | \( r \) | Effect coefficient | Meaningful level |
| Goal with mental health         | 323     | 0.03  | 0.0009 | 0.53             |
| Structure with mental health    | 323     | 0.06  | 0.04   | 0.25             |
| Leadership with mental health   | 323     | 0.04  | 0.002  | 0.43             |
| Communications with mental health| 323    | 0.22  | 0.05   | 0.001            |
| Reward with mental health       | 323     | 0.30  | 0.0004 | 0.70             |
| Useful mechanisms with mental health| 323   | 0.25  | 0.09   | 0.001            |
| Attitude to change with mental health| 323 | 0.25  | 0.06   | 0.001            |
The results of employees’ mental health status of Isfahan Medical Science University showed that the employees do not face any problem or have any mental disorder. Keeping the employees in good health and well-being has three benefits: (1) Organizational benefits: Keeping the employees in good health prevents temporary or permanent separation of ill or injured persons and the work getting stopped; (2) Individual benefits: Only healthy staff are in mood to make a good relationship with other employees and (3) social benefits: First, active labor force is inseparable from the production cycle and second, this factor leads into decreasing health insurance costs for organization.[29] The employees’ mental health issues cause effects such as loss of useful hours of work, leave from job, moving and changing jobs, lack of energy, and lack of using their abilities and skills for the organization; and managers must work toward minimizing the employees’ mental problems. Goli Garmkhani and Soltaaniyan showed that one-third of employees suffered from mental disorders,[30] and Cole (2005) showed that employees’ health disruption caused increasing absence and leave from job, waste of human resource and losing the comfort and safety in workspace, and decreasing job satisfaction that caused serious injury in the long term for the organization.[31]

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REFERENCES
1. Farhangi AA. Study on knowing the statues of regional water company of Kerman, presenting some of problem and solving it for increased productivity moderator: Applied research center. Iran: Tehran Management College; 2000.
2. Harrison ML. Diagnosing organizations: Methods, model and process. California, USA: Sage Publication; 1998.
3. Rahimi H. Organizational health, the educational development process. California, USA: Sage Publication; 1998.
4. Pour R, Naderi S, The model of organizational pathology, First publication. Isfahan: Kankash Publication; 2009.
5. WHOQOL Group. WHOQOLBREF introduction, administration, scoring and generic version of assessment. Geneva: World Health organization; 1996.
6. Fouladvand KH. Relationship between organizational climate and employees’ mental health at Ilam city hospitals. Iran: Journal of Ilam Medical Science University, Isfahan, Spring and Summer 2011. No. 6, p: 10-9.
7. Parsa Moin K, Nazem F. The relationship between entrepreneurship and organizational commitment and job burnout. Journal New Industrial/Organizational Psychology, 2010;3:7-17.
8. De Raeve L, Kant I, Jansen NW, Vasse RM, van den Brandt PA. Changes in mental health as a predictor of changes in working time arrangements and occupational mobility: Results from a prospective cohort study. J Psychosom Res 2009;66:137-45.
9. Mirzae Ahranjani H. Analysis of factors affecting social conscience and discipline in the organization, Tehran, Gavzin Islamic Azad University, 2004.
10. Zali MR. The organizational diagnosis in a Public Company. J Exec Manage 2008;21:28-45.
11. Pour H. Study on pathology of Department of Physical Education in Kohgiluie and Boier Ahmad, MA thesis, management of physical Education. Iran: Tehran Payam Nour University; 2010.
12. Najafi M. Organizational Pathedology of youth sports General Administration, MA thesis. Iran: Khorasgan Islamic Azad University; 2010.
13. Mohammadi R. The relationship between the role of management, job satisfaction and mental pressure factors and nurses’ mental health of private and state hospitals in Tehran, PhD Thesis. Iran: Tehran Islamic Azad University; 1997.
14. Ramezani Nejhad R, Hamedi Nejhad M, Mohammadi M. Study on occupational stress factors of Physical Education and Sport teachers, Olympic magazine, Spring 2004, No 25, p: 27-36.
15. Dortaj F. Study on inner organizational and inter-personal factors on managers’ and employees’ mental health statuses of Martyrs and Veterans Affairs, Educational Psychology Journal (Psychology and Educational), winter 2007, No. 3, p: 104-29.
16. Savadkuhi A, Manuchehr K, Hassan S. The relationship between neurotic aspects and employees’ mental health from their points, the new industrial/organizational psychology magazine, Second years, Garmasr, 2011, No. 6, p: 53-63.
17. Orayzi H, Darmi Z. Study on mental health and migraine headaches among employees due to imbalance effort-reward model. Iran job health magazine, Tehran, 2012, Volume 9, No 1. P: 17-29.
18. Banishashemian K, Golestani Jahromi F, Ghanbari P, Kashani N, Sharafi M. The relationship between managers’ leadership style and its impact on mental health and job satisfaction of employees in Shiraz University of Medical Sciences, Iran. Journal of Tehran University of Medical Sciences (Health Payavard); 2011;5:32-40.
19. Mardani M, Sharaki A, Ebrahimi E. Mental health nurses of Tehran Medical Sciences, Iran Journal of Nursing, the twenty-fourth year, Tehran, 2011, No. 74.Volume 4, p: 28-35.
20. Fugue DR, Kuprius DJ. Conceptual models in organizational consultation. J Couns Dev 1993;71:607-18.
21. Bissel CM. Organizational diagnosis: The role of contagion groups. Int J Organ Anal 2008;16:7-17.
22. Stoetzer U, Ahlberg G, Johansson G, Bergman P, Hallsten L, Forsell Y, et al. Problematic interpersonal relationships at work and depression: A Swedish prospective cohort study. J Occup Health 2009;51:144-51.
23. Vicic V. Organizational changes according to Burke- Litwin model in the head nurses system of management in health care and social welfare institution. Ireland: Elsevier Ireland Ltd; 2009.
24. Burke WW, Litwin GH. A causal model of organizational performance and change. J Manag 1992;18:523-45.
25. Enache R. Forms organizational pathology among the teaching staff in prahova conty, The New Educational Review, 2010, Vol. 20, No. 1.
26. Safikhani K. Comparison among share of organizational health of physical activity levels among Isfahan Al Zahra education Center employees, MA thesis. Iran: Isfahan University; 2011.
27. Weisbord MR. Organizational diagnosis, six place to look for trouble with or without a theory. J Group Organ Manage 1976;1:430-47.
28. Goldberg D. The detection of psychiatric illness by Questionnaire. London: Oxford University Press; 1979.
29. Mirsepasi N. Strategic human resource management and labor relations. 30th ed. Tehran: Amir Press; 2011.
30. Goli Garmkhanie R, Soltanian N. Study on employees’ mental health in martyr Foundation in Kermanshah. Kermanshah, 2004.
31. Cole D. Quality of working life indicator in canadian occupational medicine. Health Care Organ 2005; 2:54-9.