Study of factors affecting the performance evaluation of Iranian health centers

Firouz Amraie,[1] Soad Mahfoozpour,[2] Shaghayegh Vahdat,[3] Somayeh Hesam[3]

[1]Health Services Management Islamic Azad University South Tehran Branch, Tehran; [2]Safety Promotion and Injury Prevention Research Center, Shahid Beheshti University of Medical Sciences, Tehran; [3]Department of Health Service Administration, South Tehran Branch, Islamic Azad University, Tehran, Iran

Abstract

Organizations urgently need evaluation in order to be aware of the desirability and quality of their activities, especially in complex and dynamic environments. The aim of this study was to determine the effective factors on the performance evaluation of Iranian health centers in 2020. This study was a cross-sectional study conducted on 88 managers, deputies, physicians, and experts working in the headquarters of health deputy and health centers of the township in Ahvaz (Khuzistan province, Southwest of Iran), Lorestan, and Ilam (West of Iran) provinces. We used two questionnaires to collect data. The first included demographic variables and the second was a researcher-designed questionnaire to determine the effective factors on the performance evaluation of health centers. Finally, Univariate and Multivariable Linear Regression model was used for data analysis by SPSS 24 software. The number of men was 50%. The most people were in the age group of 41-45 and 46-50 years with 23.9% and 30.7%, respectively, and the factors of planning was β= 0.122. Resource management β=0.119, combined index (β=0.200), information technology (β=0.132), customer satisfaction (β=0.327), education and empowerment (β=0.191), dealing with the crisis (β=0.344), committees, working groups (β=0.223), research and creativity (β=0.216) were in order the most important predictors of performance evaluation in Iranian health centers. All of the above factors are important predictors for performance evaluation in health centers. Therefore, paying attention to these factors in the performance evaluation of Iranian health centers seems to be necessary.

Correspondence: Soad Mahfoozpour, Safety Promotion and Injury Prevention Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
Tel.: +98 912 1471390.
E-mail: smahfoozpour@yahoo.com

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Introduction

Performance determination can be defined as a control system in any organization that monitors its daily activities.[1] Performance evaluation is a valid and fundamental method to show the level of success, achieve goals, and identify the strengths and weaknesses of an organization.[2] The lack of evaluation and control system in a system is considered as the lack of communication with the internal and external environment of the organization, the consequences of which are burnout and ultimately the death of the organization.[3]

In the last century, the health system as an organization has played an important role in increasing life expectancy and quality of human life. Health centers are responsible for providing comprehensive and accessible preventive and curative care to meet the most common health needs of the community along with other levels of the health system.[4-6] Continuous monitoring and evaluation of the performance of health centers like other organizations is necessary.[7] In health centers, performance evaluation is done to ensure the quality of performance and services provided, and the ultimate goal is to improve the quality of patient care and ensure safety.[8]

The designing and implementing a comprehensive performance appraisal program can increase the quality of services, efficiency and effectiveness of health services. Hence, evaluating the performance of health centers has special importance for health policy makers.[9,10] Performance evaluation in health care centers is a multidimensional issue and each dimension is affected by different factors. Studies conducted in Iran have shown that common methods of evaluating the performance of health centers in the country's medical universities do not follow the scientific model and do not use any national or international model.[11] However, studies in Iran have shown that conducting evaluation and monitoring programs on the performance of health centers will improve

health indicators in the health system.[12] In addition, evaluating the performance of health care centers is essential to ensure the best performance of health care services so that managers can take the necessary measures and reforms to improve the efficiency of these centers.[13] Performance evaluation enables the development and progress of organizations and can provide information about the strengths and weaknesses of organizations. Evaluating the performance of health centers also shows how to implement the predicted programs in these centers and identifies the shortcomings that have occurred.[14,15] Since there is no single evaluation model that can meet the health, political and social situations for health centers in Iran, this study was designed to determine the factors affecting the evaluation of the performance of health centers on managers, deputies, physicians, and experts working in the headquarters of health deputy and health centers in Iran during 2020.

Materials and Methods

Study design and subjects

This study was a cross-sectional descriptive-analytic study. The study population included 88 managers, deputies, physicians, and experts working in the headquarters of health deputy and health centers of the township in Ahvaz (Khuzistan province, southwest of Iran), Lorestan, and Ilam (west of Iran) provinces. In this study, cluster sampling method was used. First a list of city health centers and health deputy headquarters in the three provinces of Ahvaz (Khuzistan province, Southwest of Iran), Lorestan, and Ilam (West of Iran) provinces was prepared, then, several centers were randomly selected, and the people of these centers were examined.

Data collection

We used two questionnaires to collect data. The first included demographic variables such as age, sex, education, work experience and organizational position. The second was a researcher-designed questionnaire and included effective factors on the performance evaluation of health centers, whose variables were extracted from similar studies and the opinions of relevant specialists. This researcher-designed questionnaire had 9 dimensions and 20 questions, and its answers were based on the Likert scale. These 9 dimensions included planning (4 questions), resource management (3 questions), combined index (1 questions), information technology (1 questions), customer satisfaction (1 questions), education and empowerment (1 questions), dealing with the crisis (1 questions), committees and working groups (3 questions), research creativity (2 questions), and other questions (3 questions). To assess the validity of a panel of ten health services, the management specialists were used. The content validity index (CVI) was obtained more than 0.77 and content validity ratio was more than 0.62 for all questions. Furthermore, Cronbach's alpha was used to assess the reliability of the questionnaire, which resulted in 0.895.

Statistical analysis

Data were collected and analyzed using SPSS version 24. In the descriptive analysis, mean and Standard Deviation (SD) were used for quantitative variables, and for qualitative variables the number and relative frequencies were used. Pearson correlation coefficient was applied to evaluate the relationship between the performance evaluation and factors affecting it in the health centers under study. Finally, Univariate and Multivariable linear regression analysis was employed to determine the effect of research variables on performance evaluation in the health centers under study. Finally, the crude and adjusted coefficient regression (β) with 95% Confidence Interval (CI) was estimated. Also, P-Value <0.05 was considered as a significant level.

Ethics statement

Before data collection, the aims of the research were explained to the participants, and informed consent was then obtained. This study was performed according to the principles expressed in the Declaration of Helsinki and the protocol was approved by the Deputy of Research of the Islamic Azad University, South Tehran Branch (Iran).

Results

Table 1 shows demographic characteristics of people under study. As shown, the number of men was 50 % and most people were in the age group of 41-45 and 46-50 years, respectively. Also, in this study most of the work experience was related to the group of 16–20 years of experience at work (29.5%).

In terms of education, people with a bachelor's degree (B.S) followed by a master's degree (MSc) had the highest frequency with 51.1 and 35.2 %, respectively. In terms of organizational position, most people held the position of expert (33%) and head of department (22%). It should be noted that health centers in 3 provinces of Ilam (33%), Lorestan (34%), and Khuzestan (33%) were surveyed. Other details of these variables can be seen in Table 1.

Table 2 shows mean and standard deviation (S.D) of factors affecting performance evaluation in health centers under study. We can see that the highest mean (±S.D) was related to education and empowerment factors (8. 68 ± 0.61) and the lowest mean was related to committees and working groups (7.47±0.95). In addition, the mean performance evaluation score was 8.14 (±0.54) in the present study.

Table 3 demonstrates Pearson correlation coefficient between the performance evaluation and its effective factors in health centers under study. As it is clear, the result of this test shows a direct linear relationship between all factors under consideration with the performance evaluation.

Also, the strongest and weakest correlation coefficients were related to research and creativity (r= 0.81; P-value <0.001) and resource management factors (r= 0.47; P-value <0.001), respectively.

The Multivariate Linear Regression Model was applied to determine the effect of research variables on the performance evaluation in health centers under study (Table 4). After adjusting for the confounding variables, a statistically significant association was found between all the factors under consideration with the performance evaluation (P-Value<0.05). For example, the values of β for the dealing with the crisis factor was 0.344; this means that if the effect of other factors remains constant, for every 1 unit increase in the mean of dealing with the crisis factor, the performance evaluation is increased an average of 0.344 units (Table 4).

Discussion

The aim of this study was to determine the effective factors on the performance evaluation of Iranian health centers in 2020. The

study population included 88 managers, deputies, physicians, and experts working in the headquarters of health deputy and health centers of the township in Ahvaz (Khuzistan province, Southwest of Iran), Lorestan, and Ilam (West of Iran) provinces. The results showed a direct linear association between the performance evaluation with planning, resource management, combined index, information technology, customer satisfaction, education, empowerment, dealing with the crisis, committees, working groups, and research creativity. The strongest and weakest correlation coefficients were related to research and creativity (r= 0.81; P-value <0.001) and resource management factors (r=0.47; P-value <0.001), respectively. In addition, after adjusting for the confounding variables by Multivariate Liner Regression Model was found statistically significant association between all the factors under consideration with the performance evaluation (P- Value<0.05) and dealing with the crisis (β=0.344) and combined index (β=0.119) were the strongest and weakest predictors of performance appraisal, respectively.

Due to the lack of similar studies in this regard, we were forced to compare the results with some less similar studies. A study by Dargahi *et al.*,[6] aimed to evaluate the performance of health centers in the health network of the south of Tehran, showed that the performance of all health centers studied was below average and the factors of age, level of education, number of referrals, and the reason for referral showed a significant relationship with some evaluation indicators of the studied health centers. Finally, this study concludes that all centers under review need to improve the performance, which can be done through intervention or modification of activities, goals, and performance of managers.[6]

Structurally, three levels of country, province and city have been designed for the health system of Iran. The Ministry of Health has also considered the issue of management development and organizational development in order to strengthen the reform process and appropriate capacity building to establish important goals of the health sector. In this regard, based on the three general principles of responsibility, performance and accountability, five strategic plans have been considered. Fourteen criteria have been proposed to evaluate the performance of the Iranian health system.[16,17] These criteria include 175 performance evaluation indicators in Iran, which will provide a good opportunity for policy makers to improve the performance of the health care system over time. The proposed criteria for evaluating the performance of the health care system in Iran include health status, access, health expenditures, financing and justice, primary care, geriatric care, service quality, insurance system, hospital performance, health outcomes, privatization, efficiency, productivity, research, development, and innovation.[18-20]

In general, there is no simple formula for evaluating the performance of a health care organization, and no country has ever developed an ideal model in this regard.[21] Different countries have used various models to evaluate the performance of their health care system based on the governmental, political, social, economic

Table 1. Demographic characteristics of people under study.

Variable	Frequency (N)	Percentage (%)
Sex		
Female	44	50.0
Male	44	50.0
Total	88	100.0
Age (yr)		
30-35	5	5.7
36-40	20	8.22
41-45	21	23.9
46-50	27	30.7
51-60	15	17.0
Total	88	100.0
Work experience (yr)		
5-10	11	12.5
11-15	19	21.6
16-20	26	29.5
21-25	19	21.6
26-30	13	14.8
Total	88	100.0
Educational attainment		
Bachelor's degree	45	51.1
Master's degree	31	35.2
Doctoral degree and higher	12	13.6
Total	88	100.0
Organizational position		
Expert	29	33
Head of the group	20	22.7
Group manager	15	17.1
Physician	9	10.2
Executive vice president and technical vice president	6	6.8
Head of the center	6	6.8
Vice chancellor for health affairs	3	3.4
Total	88	100.0
Distribution of health centers		
Ilam province	29	33.0
Lorestan province	30	34.0
Khuzestan province	29	33.0
Total	88	100.0
Academic field		
Health	39	44.3
Medical laboratory sciences	8	9.1
Healthcare services management	10	11.4
Medicine	±12	13.6
Psychology	6	6.8
Midwifery	3	3.4
Biology	2	2.3
Nutrition	6	6.8
Epidemiology	2	2.3
Total	88	100.0

Table 2. Mean and standard deviation (S.D) of the effective factors on the performance evaluation of health centers under study

Variable	Number	Mean	S.D
Planning	80	8.56	0.61
Resource management	80	8.29	0.66
Combined index*	80	8.43	0.90
Information Technology	80	8.43	0.69
Customer satisfaction	80	8.04	1.16
Education and empowerment	80	8.68	0.61
Dealing with the crisis	80	7.75	1.34
Committees and working groups	80	7.47	0.95
Research and creativity	80	7.61	1.008
Performance evaluation	80	8.14	0.54

*Average score of health indicators in each group according to the weight coefficient of each of the indicators in that group.

structure, as well as the expected structure and goals of the health system.[22] However, in the late twentieth century, in terms of structure, the idea of a community-based health care system and performance has also placed a lot of emphasis on the effectiveness and benefits of the health system.[23] Setting realistic goals is very important, difficult, and complex for the health system performance evaluation process. At the beginning, the evaluation of the performance of the health system should be based on correct and logical goals, then gradually to create or develop indicators appropriate to the performance frameworks and adapt it to the system information. Economic or governmental changes can affect policies and priorities, so developing a comprehensive framework with a number of flexible indicators can be exploited. Although evaluating the performance of the health system has well potential; however, it is useful when it can reduce the gap between overall evaluation, individual performance, and interventions.[24,25]

Evaluating the performance of the health system requires the commitment, determination and enthusiasm of individuals and governments. The time and resources needed to evaluate the performance of the health system are crucial. Such investments can help the improvement of the health system, the capacity building, and ultimately they can improve and stabilize the long-term performance of the health system. In evaluating the performance of the health system, an approach should be used that can identify the strengths and weaknesses of the system, then prioritize the main obstacles and important areas of intervention and provide potential solutions.[26,27]

The evaluation of health system performance can strengthen the understanding of health system performance at different levels of local, regional, and national. The national health performance evaluation system is primarily a national project with national goals. However, for a successful implementation of the exploitation process, local and regional authorities must both understand and accept the health system performance evaluation. Therefore, future efforts should be focused on developing evaluations at the local and regional levels.[27,28] Many researchers believe that evaluation criteria should be derived from strategies as much as possible. In evaluating the performance of the health system, it is necessary to establish a relationship between the activities of the system and health outcomes and also the time period as important factor, since the health outcomes are measurable in it, should be considered. In addition, in evaluating the performance of the health system, both processes and results should be considered. However, the indicators should better point out the results. In developing a performance appraisal model, it should be noted that the appraisal criteria are consistent with the performance of the system and the documentation related to health outcomes.[27] The occurrence of diseases has caused problems for the society and the health system.[29-33] The health system and services include education, prevention, care, screening, outpatient treatment, referral to health centers, and this type of management leads to improving the level of health in the community.[34-41] The results of a study in New Zealand showed that the factor of continuity of care scored higher in the evaluation conducted in health centers.[42] Some stud-

Table 3. Pearson correlation coefficient between performance evaluation and its effective factors in health centers under study

Variable	Performance Evaluation		
	Number	Pearson correlation coefficient (r)	P-value
Planning	80	0.56	<0.001
resource management	80	0.47	<0.001
Combined index	80	0.51	<0.001
Information Technology	80	0.54	<0.001
Customer satisfaction	80	0.66	<0.001
Education and empowerment	80	0.61	<0.001
Dealing with the crisis	80	0.56	<0.001
Committees and working groups	80	0.69	<0.001
Research and creativity	80	0.81	<0.001

Table 4. Effect of research variables on performance evaluation of Iranian health centers by Multivariate Linear Regression Model

Components	β	Non-standardized coefficient Standard Error	Standardized coefficient β	t	P-value
Constant	0.207	0.155	-	11. 338	0.001
Planning	0.109	0.017	0.122	6. 240	0.001
resource management	0.098	0.015	0.119	6. 607	0.001
Combined index	0.120	0.012	0.200	9. 969	0.001
Information Technology	0.104	0.014	0.132	7. 444	0.001
Customer satisfaction	0.153	0.009	0.327	16. 120	0.001
Education and empowerment	0.168	0.6	0.191	10. 472	0.001
Dealing with the crisis	0.140	0.007	0.344	20. 331	0.001
Committees and working groups	0.126	0.011	0.223	11.192	0.001
Research and creativity	0.333	0.034	0.216	11.849	0.001

ies have shown that the performance of health centers and community health centers in these countries are above average.[43,44] The results of a study by Bakhshi *et al.*[45] showed that a significant relationship was found between job performance and gender and education level. There was also a significant relationship between the dimensions of feedback and environment with gender and support dimension with the type of employment.[45] The success and advancement of any organization is based on the high job performance of the employees of that organization. Performance appraisal is often one of the most difficult aspects of work management. The process of performance appraisal is one of the features of today's world of work that is useful in creating an effective workforce. The type of attitude of employees towards various organizational issues, especially towards the job and profession that they perform, plays an important role in increasing their motivation and causes them to perform their assigned tasks efficiently, which in turn leads to increased effectiveness and to performance organization.

Conclusions

A special model has not been recommended to evaluate the performance of the health system at the international and national levels due to the need to design specific performance evaluation models in accordance with the political, economic, and social structures of each country. Finally, the factors of planning, information technology, customer satisfaction, staff training and empowerment, and research creativity are the most important predictors of health system performance evaluation.

References

1. Mahmoodi J, Pourreza N, Torbati A. A template for identifying key performance indicators using a balanced scorecard and system dynamics. J Polic Organiz Develop 2012 9:29-48.
2. Guerra-López IJ. Performance evaluation: Proven approaches for improving program and organizational performance: John Wiley & Sons; 2008; pp. 320.
3. Rojuee M, Ramezani M, Hesari MR, et al. Designing Performance Evaluation Indicators by Using AHP and BSC Approaches (Case of Study: Social Security Organization of Mashhad). Soc Welfare 2017;17:133-60.
4. World Health Organization. The world health report 2002: reducing risks, promoting healthy life 2002. Available from: https://apps.who.int/iris/handle/10665/67454
5. Sadeghi Bazargani H, Arshi SH, Mortaza Zadeh AA, et al. Health Status among Migrant Tribes (Ashayer) of Ardabil Province. J Ardabil Uni Med Sci 2005;5:150-9.
6. Dargahi H, Darrudi AR. Performance assessment of health care centers in South Tehran Health Network. Managt Strat Health Sys 2019;3:264-75.
7. Miraki T, Rezaei S, Jahanmehr N, et al. Assessment of performance of the hospitals of Kurdistan University of Medical Sciences by use of Pabon Lasso Model (2007-2011). Sci J Kurdistan Uni Med Sci 2014; 19:114-23.
8. Nikpeyma N, Abed-Saeedi J, Azargashb E, et al. A review of nurses' performance appraisal in Iran. J Health Prom Manag 2014;3:74-83.
9. Stewart LJ, Lockamy A. Improving competitiveness through performance-measurement systems: An integrated performance-measurement system can improve competitiveness by meshing the organization's long-term goals with its day-to-day clinical and administrative functions. Healthcare Financ Manag 2001;55:46-51.
10. Witter S, Toonen J, Meessen B, et al. Performance-based financing as a health system reform: mapping the key dimensions for monitoring and evaluation. BMC Health Serv Res 2013;13:1-10.
11. Maleki MR, Nasrollahpour Shirvani SD, et al. Necessity of Reviewing Common Performance Evaluation Methods in Vice-Chancellory for Health of Universities/ Schools of Medical Sciences in Iran Using Excellence Models. Hakim Health Sys Res 2011;14:50-6.
12. Karimi A MM, Nasiripour A, Khorshidi A. The Effectiveness of Supportive Supervision Training on Supervisory Teams' Performance in Health Centers in Ilam Province. Sci J Ilam Uni Med Sci 2014;22:165-70.
13. Hashemian M, Ferdosi M, Moeinipoor M, et al. Efficiency Evaluation and Comparison of Isfahan Provinces Hospitals Before and after the Reform in Health System using the Pabon Lasso Model (1391-1394). J Ilam Uni Med Sci 2017;25:186-200.
14. Goncalves VLM, Lima AFC, Crisitano N, et al. The creation of performance evaluation indicators through a focus group. Revista Latino-Amer de Enfermagem 2007;15:134-41.
15. Sherman SG, Sherman CV. Total customer satisfaction: a comprehensive approach for health care providers. J Healthcare Qua 2000;22:46.
16. Bahrami MA, Vatankhah S, Tabibi SJ, et al. Designing a health system performance assessment model for Iran. Health Inf Manag 2011;8:285-305.
17. Barati A, Maleki MR, Golestani M, et al. Evaluation of the Performance Management System of the Employees of Amiralmomenin (P.B.U.H) Hospital of Semnan making use of the Balanced Score Card 2005-2006. J Health Admin 2006;9:47-54.
18. Khangah HA, Jannati A, Imani A, et al. Comparing the health care system of Iran with various countries. Health Scope 2017;6:e34459.
19. Roberts M, Hsiao W, Berman P, et al. Getting health reform right: a guide to improving performance and equity: Oxford University Press; 2003.
20. Mattke S, Kelley E, Scherer P, et al, Health care quality indicators project: Initial indicators report. OECD Publishing 2006;23-37.
21. Saltman RB, Ferroussier-Davis O. The concept of stewardship in health policy. Bulletin World Health Organ 2000;78:732-9.
22. Murray CJ, Evans DB, Evans D. Health systems performance assessment: debates, methods and empiricism: World Health Organization. 2003;1-2.
23. Banihashemi K, Naeeni S. Experience of Establishing a Society-Based Health Care System: Few Considerations May Lead to So Many Advantages. Int J Healthcare Admin 2006; 4.
24. Chang LC. The NHS performance assessment framework as a balanced scorecard approach: Limitations and implications. Int J Public Sector Management. Int J Public Sec Manag 2007;20:101-117.
25. European regional consultation on the world health report 2000," WHO Regional Office for Europe, Denmark 3-4 September 2001. Copenhagen: WHO Regional Office for Europe. Available from: https://apps.who.int/iris/handle/10665/107386
26. Islam M. Health systems assessment approach: a how-to man-

ual. Health systems assessment approach: A how-to manual. 2007; p. 374.
27. Nasrollahpour Shirvani SD, Tahmasby B. A review of health systems performance assessment models. Clin Exc 2016;5:98-116.
28. Frenk J, Murray CJ. WHO assessment of health systems performance. Lancet 2003;361:9377.
29. Turan AP, Akca SO. The Quality of Life of Children with Precocious Puberty and Healthy Children in Turkey. Am J Health Behav 2021;45:62-70.
30. Correa-Fernández V, Tavakoli N, Motsenbocker M, et al. Hispanics/Latinos' Cigarette and E-cigarette Use: Behavioral and Self-rated Health. Am J Health Behav 2021;45:95-110.
31. Corches CL, McBride AC, Robles MC, et al. Development, adaptation and scale-up of a community-wide, health behavior theory-based stroke preparedness intervention. Am J Health Behav 2020;44:744-55.
32. Matuan A, Palutturi S, Arifin MA, et al. Factors Affecting Provision of Basic Immunization for Infants at Popukoba Health Center, Jayawijaya, Papua. J Natl Sci Biol Med 2021;12:272-9.
33. Kumar V, Kumar A. Self-reliance in advanced diagnostic imaging for accessible, affordable, and quality health care in India. J Nat Sci Biol Med 2021;12:129.
34. Alshiha AA. Quarantine Hotels: Integration between Hospitality and Healthcare Services to Promote Health Behavior and Quality of Life. Am J Health Behav 2021;45:1059-78.
35. Kamolthip R, Fung XC, Lin CY, et al. Relationships among Physical Activity, Health-Related Quality of Life, and Weight Stigma in Children in Hong Kong. Am J Health Behav 2021;45:828-842.
36. Chen YT, Holahan CK, Castelli DM. Sedentary Behaviors, Sleep, and Health-related Quality of Life in Middle-aged Adults. Am J Health Behav 2021;45:785-797.
37. Leman MA, Claramita M, Rahayu GR. Predicting Factors on Modeling Health Behavior: A Systematic Review. Am J Health Behav 2021;45:268-78.
38. Weaver RH, Jackson A, Lanigan J, et al. Health behaviors at the onset of the COVID-19 pandemic. Am J Health Behav 2021;45:44-61.
39. Leal IM, Chen TA, Correa-Fernández V, et al. Adapting and evaluating implementation of a tobacco-free workplace program in behavioral health centers. Am J Health Behav 2020;44:820-39.
40. Cegelka D, Wagner-Greene VR, Newquist J. Health behaviors of funeral directors in the US: a needs assessment. Am J Health Behav 2020;44:864-75.
41. Hein TC, Muz B, Ahmadi-Montecalvo H, et al. Associations AMONG ACEs, health behavior, and veteran health by service era. Am J Health Behav 2020;44:876-892.
42. Jatrana S, Crampton P, Richardson K. Continuity of care with general practitioners in New Zealand: results from SOFIE - Primary Care. N Z Med J 2011;124:16-25.
43. Muldoon L, Dahrouge S, Hogg W, et al. Community orientation in primary care practices: Results from the comparison of models of primary health care in Ontario study. Can Fam Phys 2010;56:676-83.
44. Shi L, Starfield B, Xu J, et al. Primary care quality: community health center and health maintenance organization. South Med J 2003;96:787-95.
45. Bakhshi E, Kalantari R, Salim N. Assessment of Job Performance and its Determinants in Healthcare Workers in Islamabad-e Gharb City based on ACHIVE Model In 2016. Arak Med Uni J 2017;20:1-9.