

Evaluation of the Efficiency of Human Resources Management in Businesses with Four C Performance Model

Nurullah SOYHAN *
Songül AGAR **

Abstract

The human resources in the institutions describe the persons who perform the productive activities directly or indirectly. Human resources management, on the other hand, is the entirety or system of employing the employees in an effective and efficient manner. The organizations are required to create a human resources management system, evaluate and monitor the activities and policies in order to reduce the costs and increase the efficiency and quality.

In this study, it was targeted to increase the quality, productivity and performance in Karabuk State Hospital with setting up a successful and effective human resources management system as well as with evaluating and monitoring the efficiency of the system.

The study was carried out by evaluating healthcare personnel and other general administrative services personnel with 4c performance model. Face-to-face interviews regarding the basic components of the model were done with focus group through a preliminary study. Considering the interviews, questionnaires were prepared and findings were evaluated according to questionnaire results. These results were assessed on general and profession bases and it was put emphasis on focus of the problem. Results has showed that goal congruence and harmonization between employees and business goals is weak and commitment of employees is at high level. In the context of harmonization, it is quite important to provide cooperation between personnel and administrative staff and to ensure goal congruence. Low level of sufficiency in administrative staff has revealed the necessity of general pre-training and professional training of administrative staff. Continuity of inservice training in the business will ensure the sufficiency of employees and increase the quality and performance of services.

Keywords: commitment, cost efficiency, four c performance model, harmonization, human resources, successful and efficient human resources management, sufficiency
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Introduction

In order for an organization to be successful, it required physical resources, financial resources and human resources. Although all the above mentioned subjects are of utmost importance for success, the human resources and the management thereof will provide competitive advantage.

Technology, finance and marketing techniques used in production can be imitated; however, acquiring same results is not so possible even though human resources management practices are tried to be imitated. Therefore, efficient human resources management has become one of the most important goals for all organizations and managers whether they seek profit or not (Benligiray & Geylan, 2004, p. 3).

Human resources management includes gaining the human resources that will provide a competitive advantage for today and distant future, keeping it, establishing policies

and strategies by increasing individual and organizational performance, preparing, directing, coordinating and controlling programs (Benligiray & Geylan, 2004, p.6). In contrast to industrial institutions which are rather dependent on machinery and technical hardware, medical institutions can not function without having enough number and quality of staff (Kavuncubaşı & Ersoy, 1998, p. 4). Although hospitals also take advantage of advanced technology like other institutions of utility, they achieve their goals using labour and extensive technology (Kavuncubaşı, 2000, p. 198). Necessary activities for medical institutions to function effectively are carried by staff groups which have different education and experience working simultaneously (Kavuncubaşı & Ersoy, 1998, p. 6). Medical institutions are institutions of utility. Main determinant of service delivery is the staff and quality of the service largely determined by medical personnel (Kavuncubaşı, 2000, p. 199). There are two dimensions of

*Assoc. Prof. Dr., The Senior Consultant of Karabuk Education and Research Hospital, University of Karabuk, Karabuk, Turkey.
E-mail: seyfiiii@hotmail.com

** MBA, The Human Resources Executive of Karabuk Education and Research Hospital, University of Karabuk, Karabuk, Turkey.
E-mail: songul_agar@hotmail.com

service quality. Technical (scientific) quality and the art of service application. Main condition of providing service patients proper to scientific norms and standards is that the medical personnel have strong scientific background. Scientifically insufficient medical personnel may cause unrecoverable results in future for the patient. Medical personnel's attitude and behaviour towards patients is the most important factor that affect patient satisfaction which is a quality indicator. Researches suggest that first of the factors which affect patient satisfaction is the behaviour of doctor and nurse that are in close relation with patient (Esatoğlu, 1997, pp. 7,9). As the Snook says medical institutions are where humans provide service for humans (Kavuncubaşı, 2000, p. 200).

The majority of the costs in medical institutions consist of personnel expenditure. In the U.S.A, 55-60% of the total hospital costs comprise personnel expenditure. The vital characteristics of the medical services, the importance of the role of personnel in providing service, and the characteristics of the medical personnel have increased the importance of human resources management, have contributed to improvement of influence area of human resources management, and have revealed the necessity of a successful and effective human resources management.

In order to evaluate the success of human resources management in medical institutions, the researchers from Harvard University have developed 4-C performance model. The human resources managers have to deal with the following four main criteria while evaluating the activities and policies. Said criteria are competence, commitment, congruence and cost effectiveness. The managers are expected to provide constructive solutions for the problems regarding the human resources by means of said model. The criteria and the evaluation types thereof are as follows.

1-Competence: The competence means that the employees have the required information and experiences for performing their jobs. Is measuring and evaluating the competence enough in the institutions? - Do the employee management processes attract adequate employee for the institution, employ and develop them in terms of today's and future's needs?

2-Commitment: It means the commitment level of the employees in their jobs and the medical institution. How competent is the employees in the medical institution and their jobs? - Do the employees adopt the institution and their jobs? Said criterion can be evaluated by means of interviews and questionnaires. Another information resource is the records regarding absenteeism, release and personnel commitments. The information gathered is analyzed and thus, how the human resources management processes can increase the commitment of the employees in the institution can be determined.

3-Congruence: Is there congruence, or agreement, between the basic philosophy and goals of the company and its employees? Is there trust and common purpose between managers and employees? The strategic nature, culture and values of an organization affect the congruence (Wei, 2006, p. 54). The nature of the strategy includes conditions such as uncertainty of the strategic targets and the clarity thereof. Schein (1997, p. 12) describes the organization culture as the beliefs shared regarding how the organization can successfully react to the variable demands in the outer environments (congruence) and the beliefs shared regarding the protection of processes ensuring the continuity of the functional relations within the organization (integration). All the

organizational processes are performed and shaped within the organizational culture. Thus, organizational culture and values also shape the human resources applications (Bowen & Ostroff, 2004). The values and organization culture are created by leaders and managers. In this context, the relation between leaders and the culture is another important factor in terms of carrying out the human resources management applications. The choices of the managers reflect the points of views regarding the truth, in other words, the beliefs and norms directing them during their careers (Schwartz & Davis, 1981, p. 35). Said choices also strengthen the organization culture again and enhance the expected behaviors within the organization.

Congruence level, strike, the frequency of the conflicts the managers and the employees, and the complaints of employees are analyzed and determined by means of interviews and questionnaires. If the congruence level is lower between personnel and the managers, the mutual trust will diminish and the tension and stress will increase.

4-Cost- Effectiveness: Can human resources management processes provide results worth for the expenditure in terms of costs, social aids and services, personnel transfer, absenteeism and other criteria?

Human resources managers are required to evaluate the activities included within their professional fields in terms of said criteria and provide solutions for the possible problems. In order to increase commitment, congruence, competence and cost effectiveness, the medical institutions design human resources management processes and enhance the capacity for keeping up with the changes around. Developing and applying 4-C model contribute to achieving the following results.

1- High Competence: The employees gain the required information and abilities in order to perform their jobs in an effective manner and adjust to the occupational chances in an adequate manner.

2- High Commitment: A better communication between the managers and the employees is ensured, mutual trust is established, and a working environment wherein two parties are sensitive to the needs and interests of each other, is created.

3- High Congruence: The managers and the employees cooperate in order to solve the problems and achieve the common goals; the goal confusion is eliminated and trust is established.

4- Cost Effectiveness: The expenditures of the employees (costs, social aids and so on) are regulated and thus, service expenditures are reduced.

This study aims measuring Karabük Public Hospital's human resources efficiency according to four main criteria (sufficiency, dependency, harmony and cost) and evaluating the performance of human resources administration and according to this evaluation, establishing policy and strategies based on personnel's perception and expectations, finding positive solutions for human resources problems by managers, generally increasing personnel's motivation, work dependency and sufficiency.

Methods

In 2010, this study involved 226 personnel working in Karabük Public Hospital N=10 doctor, N=96 nurse-obstetrician-health officer-att, N=19 administrative personnel (managers), N=28 officer, N=16 assisting services (cleaning, security and so on). N=57 other (psychologist, physio-therapist, audiometry technician, radiograph technician, Laborant, technician and so on). Sample selection is done in categories of doctor, nurse/health officer/emergency medical technician, officer, administrative personnel, assisting services and other in order to reflect intended population.

Study data is gained in two steps. First step is face to face meeting with focus group which involves a questionnaire for 18 persons composing of questions based on harmony, sufficiency, dependency and cost 4c performance model developed by Harvard University researchers and this questionnaire evaluates understandability and fitness for purpose of questions. Second step is a questionnaire for 226 persons measuring 4c odel components. In the questionnaire made by institution's human resources administration system team, reliability of the study is provided by giving information to participants about the study. Applications are done in every personnel's working space and data collecting took 10 minutes for every participant. Statistical analysis of the data is done using "SPSS 15" statistics package program. 4 point likert scale is used in questionnaire and it has different closed ended questions for each component.

According to the data found in the first step, human resources administration system will evaluate according to harmony, dependency, sufficiency and cost efficiency criteria and plan strategies and reformation. After completing these strategies and reformations, the questionnaire will be done again and the results will be compared.

Results

The occupational distribution of the employees in Karabük Training and Research Hospital, who were enrolled in the study, is given in Table 1. 4.42% of the attendants were doctor (N= 10), 42.47% were nurses, midwives, health civil servants, and emergency medical technicians (N=96), 8.40% were administrative personnel (managers) (N=19), 12.38% were civil servants (N=28), 7.07% were assisted service officers (cleaning, security and so on) (N=16), and 25.22% were other personnel (psychologist, physical therapist, audiometry technician, radioscopy technician, laboratorian, technician and so on) (N=57).

Every occupational group is involved in order to get correct evaluation. 226 out of total 416 personnel is involved and the rate of participation in 54,32% (Table1).

Table 1. Occupational Distribution of the Attendants

Occupational Group	N (226)	%
Doctor	10	4.43
Nurse	96	42.48
Administrative Personnel	19	8.40
Civil servant	28	12.39
Assisted Services	16	7.08
Other	57	25.22
Total	226	

Table 2. The Point Averages of 4-C Performance Model Components

4-C Model Components	N	%
Competence	226	74.66
Commitment	226	79.08
Congruence	226	65.55
Cost Effectiveness	226	71.73

Table 3. The Point Averages of 4-C Performance Model Components Based on Groups

Groups	N	% Competence	% Commitment	% Congruence	% Cost Effectiveness
Doctor	10	80.62%	89.16%	79.16%	87.50%
Administrative Personnel	19	65.78%	75.87%	55.26%	71.71%
Civil servant	28	68.75%	67.85%	58.33%	72.32%
Nurse, Midwife, Health Civil Servant, Emergency Medical Technician	96	77.34%	78.92%	68.05%	73.95%
Assisted Services	16	73.82%	80.21%	63.02%	67.18%
Other	57	75.49%	82.45%	65.49%	66.22%
Total	226				

The averages of the points of the attendants in accordance with the 4-C performance model components were as follows; competence was 74.66%, commitment was 79.08%, congruence was 65.55% and cost effectiveness was 71.73% (Table 2).

The point percentages of the 4-C performance model components of the attendants in accordance with the occupational groups are given in Table 3.

Evaluations according to the collected data:

The average points of 4-C performance model components of doctors in Karabük State Hospital were as follows; competence was 80.62%, commitment was 89.16%, congruence was 79.16% and cost effectiveness was 87.50%. These values were higher when compared to the other groups.

Doctors have high dependency on their job and institution. This affects adopting the philosophy and aims of the institution and other components positively. Specialists and practitioners are evaluated together; doctors in administrative area are evaluated in administration group as they only service on administration.

The average points of 4-C performance model components of nurses, midwives, health civil servants, emergency medical technicians in Karabük State Hospital were

as follows; competence was 77,34%, commitment was 78.92%, congruence was 68.05% and cost effectiveness was 73.95%. Moreover, the congruence criterion is lower in this group as in the other groups. Harmony criteria is low but except for doctor group it is in good condition compared to other occupational groups. This group is important as it constitutes a big part of human resources.

According to 4c performance model, Karabük Public Hospital's average points: sufficiency 65,78%, dependency 75,87%, harmony 55,26% and cost efficiency 71,71%. This shows sufficiency and harmony are the lowest components. The fact that administrative personnel is not educated according to their current services causes sufficiency to be low. Low harmony in administrative personnel cause orther human resources harmony in the institution to get lower.

The average points of 4-C performance model components of civil servants in Karabük State Hospital were as follows; competence was 68.75%, commitment was 67.85%, congruence was 58.33% and cost effectiveness was 72.32%. While the highest criterion is commitment in the other groups, the highest criterion is cost effectiveness in this group.

Back up system is used for every occupational group except for doctors but it is not used for officer group. This raises cost efficiency criteria forcibly in this group.

Conclusion

Karabük University Karabük Training and Research Hospital is a public hospital in Turkey, Karabük city center, associated with T.C Ministry of Health where diagnosis and treatment services are provided. The hospital is put into service in 1967 with the name Karabük Public Hospital. Since then to 2010 it provides service with 233 inpatient bed availability, total 416 personnel of 36 doctor, 144 nurse, obstetrician, health officer and ATT, 19 administrative personnel (5 head physician and deputies, 7 manager and deputies, 7 head nurse and deputies) 56 officer, 65 assisting services and 96 other. In 5th of July 2012, it was unified with other Public Hospitals in Karabük by Ministry of Health and became "Karabük University Karabük Training and Research Hospital" associated with Karabük University. After unification and changes its capacity increased. It continues to provide service with 400 inpatient bed availability, total 1022 of 1 associate professor doctor, 14 deputy associate prof. dr., 85 specialist, 9 practitioner, 400 nurse, obstetrician, health officer and ATT, 9 administrative personnel, 121 officer, 224 assisting services and 139 other. The fact that authors are hospital personnel is reason for preference for ease of study.

In the study, human resources management system performance of Karabük Public Hospital is measured, in order to make reformation for intended population it is evaluated in diffraction of occupational group.

According to the evaluation results:

1. Consistency between employees and the vision and mission of the business in Karabuk State Hospital is quite low (%65.5).

2. Strategic goals and targets of Karabuk State Hospital are not clear and they could not be well understood and shared by personnel.

3. Doctors is the group in which most harmonization (76.16%) was observed whereas the least harmonization (55.26%) was observed in administrative staff.

4. In Karabuk State Hospital, commitment of employees to their jobs and business is at high rate (79%).

5. Commitment, sufficiency and adaptation of officers in Karabuk State Hospital to the business is lower as compared with other personnel.

6. It is thought that low level of adaptation, commitment and sufficiency besides high level of cost effectiveness criterion may stem from not having a backup system for officers.

7. Sufficiency of employees in Karabuk State Hospital is at good level.

8. Sufficiency level of other groups except administrative staff and officers is high and it shows that this condition possibly results from healthcare personnel's comprising other groups in general and their having vocational training.

9. Cost efficiency criterion is at low level in assisted services whereas it shows parallelism with average rate in other groups.

Result

1. In Karabuk State Hospital, it would be more appropriate to define strategic goal and targets and main values with employees. Accordingly, it has been agreed upon that organizational culture and values will be shared with employees and consistency between employees and targets of the business will be achieved.

2. Organizational culture is a system that generates shared values, beliefs, organizational structure and behavioral patterns forming the way of business work. In Karabuk State Hospital, putting this system into practice will enable employees to adopt cultural values and ambiguity of strategic goals will decrease and necessary harmony will be achieved.

3. Making improvement firstly in administrative staff in the hospital is important in terms of establishing a positive basis for improvements regarding other staff.

4. Commitment of employees will enable them to adopt improvements in harmonization criteria.

5. A backup system should be set for officers in the hospital.

6. Inservice training for administrative staff and officers in the hospital should be enhanced and continuity in general inservice trainings should be achieved.

7. That the lowest level of sufficiency was observed in administrative staff than in other groups indicates the necessity of making country-wide regulations regarding the training of managers.

8. Since unproductiveness and inferiority in working areas of groups in which low cost efficiency was observed, improvement regarding these groups should be planned in Karabuk State Hospital.

9. Short and long term strategies should be determined by human resources management in Karabuk State Hospital.

10. In the hospital, group based and overall improvements should be done and necessary plans for increasing commitment, motivation and productivity of the personnel and also the quality of services.

In line with the abovementioned findings, human resources management in the institutions will both measure the individual performance of the employees and the system; and, taking a different approach to human resources management is of utmost importance for the medical sector that serves for both humans and provides them with value, and the other sectors.

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