MOTIVATION OF DOCTORS AND NURSES IN THE CHANGING HEALTH SECTOR

[1]AYKUT EKIYOR, [2]MERVE YAĞCI

[1]Ankara HacıBayramVeli University Faculty of Economics and Administrative Sciences, Department of Health Management, Ankara, Turkey[2]Health Sciences University Ankara Numune Training and Research Hospital, Ankara, Turkey
E-mail: [1]aykutekiyor1974@yahoo.com, [2]mrvygc55@gmail.com

Abstract - Health care services have been going through a fast development process in recent years. Health professionals who are integrated into the institution and are conscious of their mission and responsibilities have been able to increase the performance and efficiency of their institution working with high motivation. Conscious managers aware of this situation have been trying to solve the problems and increase the efficiency of the institution determining the factors increasing, decreasing or hindering the work motivations of the medical staff. This study aims to determine the factors affecting the motivations of doctors and nurses working for the medical institutions and the factors increasing motivation. The basic problem of this research has been specified as"Are there any differences between the motivations of doctors and nurses in the health sector?" Voluntary doctors and nurses who worked for public hospitals in Ankara province in the year 2017 constitute the research population. A questionnaire was given to200 doctors and nurses selected through random sampling and accepting the survey participation. The survey consists of two parts. The first part includes questions about the demographic information and the second part includes questions related to the organizational, executive, psychological and social, economic factors and questions about the factors in the workplace. Questions about the motivation in the second partranged between "I certainly disagree" and "I certainly agree" in the Likert scale with 5 options.At the end of the research, descriptive statistics of the collected demographic data was performed. In analyzing the data about motivation Kolmogorov Smirnov Test,Mann Whitney U and Kruskal-Wallis H Tests were used.According to the results of the analysis, itwas concluded that there were no motivational differences between doctors and nurses considering their jobs but that there were difference between some demographic features and their motivations.

Keywords - Doctor, Nurse, Health Sector, Motivation, Turkey.

I. INTRODUCTION

Health sector has been experiencing a fast change depending on the technological developments in medical field,the increase of the alternatives for caring service- getting people and on the increase of health costs,accordingly.Diversification of demands related to health brings radical changes with it. With this change an unpredictable professionalism in the management of health care has been realized.It is known by the managers that the staff integrated to the organization they work for, conscious of their mission and responsibilities and thoroughly motivated to the business they do and these institutions which own labor and intensive technology would increase performance and efficiency.

With the aim of achieving health,protecting it and providing the continuity of it, the structure which institutions producing health-related products form has been explained as health business.In thehealth businesses which have labor-intensive technology a great number of services are provided by nurses and doctors.The situation of doctors and nursesbeing aware of the importance of their duty and responsibilitiesand being motivated in their jobs will contribute positively to the institutional performance.
The issue of motivation is crucial in every organization.Since health services are essential for patients and their relatives,with regards to the features of services given to patients and their relatives(being cheerful, professional care, conscientiousness, privacy, etc.) well motivated employees are needed.Employees' working suitably for these qualifications will provide themselveswith positive feedback,too.This case will enable patients and their relatives to behave the medical staff in a more sympathetic way and will enable the staff to do their job better with the peace of having the patients recover their health.This interaction,affecting the quality of communication between the two groups positively will be influential in the advancement of the service quality the staff offers[1].

Motivation is a performance factor activating people,directing behavior to the target and the sum of all the efforts made to activate towards a specific goal[2]. Motivation leads all the elements which provide employees with a high performance in their profession and help them work more efficiently and increase the desire of people to live.Therefore,motivation can be said to be a directive power in human life.However, for people to be motivated- first,elements that motivate them should be known well[3].This inner power of a person activated by various stimulants can affect the whole life of a person.Highly motivated people can both lead a happier life seeing the beauties of life and help the motivation of people surrounding. This driving power, generally finding areas of application in business life, encourages individuals to be more successful at work and to do their job willingly[4].

This study was performed with the aim of determining the factors affecting the motivation levels of doctors and nurses who work in health institutions and diagnosing the factors which strengthen in-house motivation.

II. LITERATURE REVIEW

Motivation is a concept for satisfying human needs. Motivation is a force stimulating the required behaviours to meet a need[5].Labour rate a person gets in exchange for his job meets his need to purchase and job motivation leads to job satisfaction and his being happy with his job.Hence,there is a direct relationship between human relations and motivation[6].

Activating the individuals and intensifying their energy on specific directions have been obtained through motivation[7].One of the topics motivation is related to is efficiency.One of the elements affecting the increase of the productivity of people who work in organizations is motivation.The more individuals are made eager by motivation,the higher their efficiency will be[8].Productivity depends on the work force in hospitals, which are one of the health institutions.Thus,it comes out that the importance of the health staff is an undeniable fact[9]. The more importance the health staff are given,the more productively health institutions give the health service.According to Volent,care systems in health,if the managers don't attach the necessary importance to the staff they work with, they cannotachieve their aim.Researchers state that productivity goes up in the occasions and conditions where motivation is at the forefront,but in weak ones whatever talents the staff have their efficiency will be low[10]. Because health services are humanitarian it requires a continuous and very careful study and as the members of this profession are demanded to provide the best service they can,it is obvious that motivation is more important for the people working in health-care [11].
When the literature is examined;factors influencing motivation are seen to line up as economic,socio-psychological factors,organizational and managerial factors.Economic factors include the necessary money and money-like elements to meet the physiological needs of people.Socio-psychological factors are explained as people's being appreciated in the businesses they do.Organizational and managerial factors include physical working conditions,authority,responsibility,communication and the like.

In literature, a number of studies have been performed about the motivation of medical staff.Dielemanet al[12] examinedthe factors affecting the job motivation of rural health professionals in a study they conducted in Vietnam.At the end of their study, they concluded that economic and moral incentives increase the motivations of health professionals.In a study conducted by Peters et al [13]about the motivation and job satisfactions of public and private sector health professionals, it was pointed out that elements motivating medical staff were work area and opportunities to develop skills besides financial factors.In the study Erdoğan and Çelik[14]performed in DenizliPamukkale University Hospital Surgery Department with the aim of determining the relationship between team work and moral-motivation level,they couldn't find meaningfulcorrelations.In the study Toode and others[15]did in Esthonia to measure how organizational factors affected the work motivation of nurses,they found that most nurses were motivated by intrinsic effects rather than extrinsic.It was seen in the study by Ekiyor and Karagül[16]entitled "The Effects of Staff Strenghtening on Worker Performance and Intrapreneurship in Health Sector" that staff strengthening in health sector had a positive impact on worker performance and intrapreneurship.The studies in the Literature were seen to focus on economic,socio-psychological,organizational and administrative factors which affected the motivation of workers.

III. RESEARCH METHOD

Purpose of the Study

The main aim of this study is to determine the factors affecting the motivations of doctors and nurses working in health institutions and to identify the factors increasing motivation.The main problem of the research has beendetermined as "Are there any differences in the motivations of doctors and nurses in health sector?".

Research Methodology

Survey technique was used in the research as the tool of data collection.Data collection tool used for the research was obtained through the scientific studies done on staff motivation in previous years.Questionnaire used in the research is composed of two parts.In the first part,multiple-choice questions in which demographic features are asked and in the second part questions about economic socio-psychological organizational and administrative factors affecting motivation are included.Questions included in the second part of the questionnaire were formed in the five pointedLikert scale system(1: I certainly disagree 5: I certainly agree).In the first part questions about demographic features and in the second part questions about supplier choice variables were prepared.Voluntary doctors and nurses who worked in public and university hospitals in Ankara province in 2017 constitute the research population. The questionnaire was administered to 100 nurses and 100 doctors- totally 200 health personnel chosen in random sampling methodand agreed to take part in thequestionnaire. To be able to make a comparison

between the two occupation groups,equal distribution is preferred.Vast majority of the questionnaires wereconducted face to face, and pointswhich seemed confusing to the participants were explained to them.
At the end of the research, the statistical data were put to computer and frequency analysis,Kolmogorov SmirnovTest,Shapiro Wilk, Mann-Whitney U and Kruskal-Wallis H Tests wereperformed using SPSS.

IV. RESEARCH FINDINGS

According to statistical results concerning demographic features;
Of the 200 personnel participated in the questionnaire 50.0% were doctors and 50.0% were nurses.When the educational levels of the doctors were examined,54.0% were university graduates,27.0% were postgraduates and 19.0% PHD graduates.Of all the nurses 49.0% were university graduates 29.0% had associate degrees,14.0% were medical vocational high school graduates,and 8.0% were post graduates.While 54.0% of the doctors were single and 46.0% married,63.0% of the nurses were married and 37.0% were single. On analyzing the number of patients the doctors examineda day, it was found that 46.0% of them examined 100 and over 100 patients,26.0%between 5 to 50,25.0% between 51 to 100,3.0% between 1 to 4 patients per day. Of nurses,57.0%looked after between 5 to 50 patients,25.0% between 1 to13.4% 100 and over 100,and 5.0% between 51 to 100 patients. Looking at doctors' and nurses' work experience,we see that 41.0% of the doctors have between 0 and 5 years,29.0% 6 and 11 years,19.0% 12 and 17 years and 11.0% between 18 and 24 years of experience. 34.0% of the nurses have experience of between 6 and 11 years,23.0% between12 and 17 years,16.0% between 18 and 24 years,15.0% between 0 and 5 years and 12.0% 25 years of experience and more.When the doctors' employment time in the institution was examined; it was found that 52.0% had experience between 0 and 5 years,20.0% between 6 and 11,15.0% between 12 and 17.1% between 18 and 24,3.0% 25 years and over.On the other hand, 35.0% of the nurses were found to have experience of 6-11 years,31.0% 0-5 years,15.0% 18-24 years,12.0% 12-17 years,7.0% 25 years and over.74.0% of the doctors had a salary of 5.000 Turkish Liras and over,66.0% of the nurses had a salary between 3.000 and 4.999 Turkish Liras.75.0% of the doctors workedon day-night shift,22.0% workedon day shift and 3.0% on night shift.66.0% of the nurses worked on day-night shift,30.0% on day,and 4.0% on nigh shift.When their weekly working time was examined, it was found that 95.0% of doctors and 66.0% of nurses worked over 40 hours.When the participants' units were examined,31.5% of them were found to work in more than one units,23.5% to work in services,8.0% in intensive care,17.0% in emergency,7.0% in surgery,and 13.0% in polyclinics.
Kolmogorov-Simirnov and Shapiro-Wilk Test was performed to determine whether or not the research data had normal distribution.

According to the results of Normality Test,as p-values are smaller than 0.05 that is accepted as the limit of significance in statistical significance measurements,it shows that distributions are not normal.For this reason,in the testing of research hypotheses to determine the significance of the differences between two independent groups Mann-Whitney U was performed and in the comparison of the measurements of dependent variables between two or more groups Kruskal-Wallis H Tests were used.

In the research scale,the mean for the four dimensions were determined for motivation and their standard deviations were found.

Table1: Normality Test

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	p	Statistic	df	p
General	.081	200	**.003**	.951	200	**.000**

According to table 2 in the evaluation of doctors and nurses with regards to 4 factors determined for motivation,it is clearly seen that means are similar and high.It was found that doctors and nurses, when evaluated according to the factors,the highest mean was in working area and organizational and executive dimensions;however,the lowest mean was in the economic and socio-psychological factors.When means are studied according to the variables determined for the factors,for doctors the hygiene of the working area,ventilating and letting some fresh air in,lightening is important($\bar{x}$=4.88)having private rooms for a personand their sufficiency affects my motivation level($\bar{x}$=4.83)my self-confidence increases my work efficiency when I do my job($\bar{x}$=4.59)as seen the highest means these statements haveit is vital to get a high salary without having any interests or compliments($\bar{x}$=3.00), a high salary is enough for me to be motivated($\bar{x}$=3.17)financial rewards are more important than moral rewards($\bar{x}$=3.50)and all these

statements have the lowest mean.For nurses,when needed having the opportunity to complain and being offered fair solutionsincreases my motivation($\bar{x}$=4.63)having enough number of staff in the working area affects my motivation($\bar{x}$=4.62) sufficiency of medical devices and conformity to the current technology is important($\bar{x}$=4.60) the highest participation has been in these statements;whereas, the lowest participation has been in the statements: financial rewards are more important than moral rewards($\bar{x}$=3.43) it is vital to get a high salary without having any interests or compliments($\bar{x}$=3.48) a high salary is enough for me to be motivated($\bar{x}$=3.70).According to these results,it is understood that doctors and nurses give more importance to working area plus organizational and executive factors in motivation.

Table 2:The Means of Motivation Factors and Their Standards

	Occupation	n	$\bar{x}$	Standard Deviation
Organizational and Executive Factors	Doctor	100	4.38	.651
	Nurse	100	4.35	.576
Socio-Psychological Factors	Doctor	100	4.02	.631
	Nurse	100	4.21	.558
Economic Factors	Doctor	100	4.02	.790
	Nurse	100	4.12	.741
Working Area Factors	Doctor	100	4.52	.604
	Nurse	100	4.58	.542

Testing of the Research Hypotheses

To test the hypotheses determined in the research Mann-Whitney U and Kruskal Wallis H Tests were done.

$H1_1$: Motivations of doctors and nurses differ according to economic factors.

$H1_2$: Motivations of doctors and nurses differ according to socio-psychological factors.

$H1_3$: Motivations of doctors and nurses differ according to organizational executive factors.

$H1_4$: Motivations of doctors and nurses differ according to working area factors.

Table 3: Motivational Differences in Professions

	Organizational and ExecutiveFactors	Socio-Psychological Factors	Economic Factors	Working Area Factors
Mann-Whitney U	4614,000	4232,500	4701,000	4787,500
p	,338	,059	,462	,577

In table 3, if there are motivational differences or notbetween doctors and nurses in terms of the factorswas tested.According to test results, it wasfound that doctors and nurses didn't have motivational differences in terms of four factors($p>0.05$) both groups of professions had the same ideas. $H1_1$, $H1_2$, $H1_3$, $H1_4$ hypotheses were refused.

$H1_5$: Motivations of doctors and nurses differ in terms of demographic features

As a result of the testing of the fifth and the last hypothesis in the research ,doctors and nurses differ in demographic features ,in weekly working hours in economic factors($p=.048;p<0.05$),in the educational level, organizational executive factors dimensions($p=028;p<0.05$),in the number of patients they have to examine in one day,in economic factors dimension($p=.020;p<0.05$),in the monthly income in the economic factors($p=043;p<0.05$)and in the style of work in the economic factors dimension($p=.038;p<0.05$).They show difference in these dimensions.This difference is caused by the higher means of nurses in these dimensions.Doctors and nurses don't show any difference in terms of other dimensions($p>0.05$). According to these results $H1_5$ hypothesis was accepted partly.

CONCLUSION AND RECOMMENDATIONS

With rapid improvement of technology depending on the increasing interest in human resources, determining the motivational factors has gained importance.The greatest reason for this is the impacts of motivational factors on workers' behaviours and performances.Human factor is essential in health institutions.Keeping the community health care at the top level depends on the people who work in medical institutions.Besides,high work motivation level of

medical staff is quite an important subject for the citizens who make use of health services to get a better service[17]. Factors motivating the personnel who work in businesses change from person to person.Motivational factor affecting the motivation of one person may not affect the other person.To motivate health workers, firstly it is necessary to determine the factors that affect their motivation. This research aimed to determine the factors motivating doctors and nurses in public hospitals and to observe the motivational differences between these occupation groups.

The results of this research demonstrated that there wereno differencesbetween the motivations of doctors and nurses in terms of organizational-executive factors determined for motivation,socio-psychological,economic factors and factors about the working area.It wasfound that in both groups factors about the working area and means of the variables about organizational-executive factors were high.According to the means specified at the end of the analysis;four dimensions determined in the doctors' and nurses' motivations were thought to be important ($\bar{x}$>4.00).

In the research that Manongi and his friends [18] did in Tanzania to measure the motivations of primary health care workers they found that to increase the efficiency of health care institution it was required to motivate the health workers,financial incentive was insufficient and health workers needed to be supported in the direction of developing their talents.In the research Dielemanet al[19]in the research they did on the relationship between motivation and performance management of healthcare workers they found that in work,financial incentives and salary increased motivation.Additionally,they also concluded that giving workers suitable responsibility affected workers' motivation positively.

In the research Manuel et al[20]conducted in six European countries withhealth workers and managers in public hospitals in health sector,in the research they did about innovation and motivation, the perception of innovation was different for managers and area workers in public health institutions.While the attitude of fieldworkers depended on the performance of the institution,executives were seen to be more active and motivated.In the study Wilson[21]did about job satisfaction of health workers and the intention of leaving the job, he reached a conclusion that there was a meaningful correlation between a few job satisfaction factors and the intentions of leaving the job.Especially in job satisfaction;qualified supervision,doing the suitable job according to the competence,recognition-appreciation,and chance of promotion,autonomy,the feeling for success and communication and support from the executive were seen to be important.Mihail and Kloutsiniotis[22] examined the effects of performance work systems about job wealth,theperception of social change was found to have positive effects on healthcare workers' loyalty.However,the impact of this on job satisfactionwas not found significant.

It was seen that due to doctors' and nurses' demographic features they had differences in weekly work hours,in economic factors dimension,in educational level,organizational and executive factors dimension ,in the number of patients they had to examine in one day,in economic factors dimension,in monthly salary economic factors dimension and way of working in economic factors dimension.

According to the findings obtained, healthcare workers state that having enough number of personnel rooms to rest,having enough number of workers in the unit,having social facilities,having enough number of medical instruments and equipment are the subjects that should be regulated.The more patients, doctors and nurses are responsible for,the more the effects of economic factors increase.Because of this,wage adjustments related to this topic and financial rewarding regulations can be done.Besides,managers' being sensitive about organizational-managerial topics,caring the employees,tendency to appreciating elements is seen to increase motivation of workers.
This research has a geographical limitation.The research wasconducted with the participation of doctors and nurses who worked in the public hospitals in Ankara, therefore, the results obtained should not be generalized. To be able to generalize the results, the research should be done in various regions,hospitals,sectors and with different population.Other researchers can contribute to the development of the research based on the results of this study.

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