

Medical Personnel Satisfaction Survey Relating to Newly Opened Emergency Laboratory

Yeni Açılan Acil Laboratuvar ile ilgili Sağlık Personeli Memnuniyet Anketi

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ABSTRACT

This research was conducted to examine the effects on medical personnel of the newly established emergency laboratory in the emergency service of Sakarya Training and Research Hospital.

In the study, all medical personnel working in the emergency service were used as material. The survey technique was used as a quantitative research method for data collection. A question form was created for the "Medical Personnel Satisfaction Survey". The research is a survey study. The content of the survey consisted of 5 questions. The data obtained were evaluated with the SPSS 22.0 package program.

A total of 78 people, 16 of whom were assistants, 2 specialists, 1 faculty member, 39 nurses and 20 other medical personnel, participated in the survey study. To the question "Did it affect patient satisfaction positively", 93% of the participants answered yes. To the question "Did it cause the test results to come out faster", 97% of the participants answered yes. To the question "Did it shorten the duration of patients' stay in the emergency room?", 69% of the participants answered yes. According to this survey, the participants were found important in terms of gender ($p<0.001$) and those who gave positive or negative answers ($p<0.05$).

The results obtained will provide an objective perspective for future studies and will contribute to the satisfaction of the emergency service personnel. This research has shown that; It has been concluded that having emergency laboratories in the emergency service will give better results.

Keywords: Emergency laboratory, Emergency service, Job satisfaction, Medical personnel, Speed of test result.

ÖZ

Bu araştırma, Sakarya Eğitim ve Araştırma Hastanesinin acil servisinde yeni kurulan acil laboratuvarının sağlık personeli üzerindeki etkilerini incelemek amacıyla yapıldı.

Çalışmada, materyal olarak acil serviste çalışan tüm sağlık personeli kullanıldı. Verilerin toplanmasında kantitatif araştırma yöntemi olarak anket tekniği kullanıldı. "Sağlık Personeli Memnuniyet Araştırması" için soru formu oluşturuldu. Araştırma, anket çalışması niteliğindedir. Anket içeriği, 5 sorudan oluştu. Elde edilen veriler, SPSS 22.0 paket programı ile değerlendirildi.

Anket çalışmasına 16 asistan, 2 uzman doktor, 1 öğretim üyesi, 39 hemşire ve diğer sağlık personelinin 20 kişi olmak üzere toplam 78 kişi katıldı. "Hasta memnuniyetini olumlu yönde etkiledi mi" sorusuna, katılımcıların %93'ü evet cevabını verdi. "Test sonuçlarının daha çabuk çıkmasına sebep oldu mu" sorusuna, katılımcıların %97'si evet cevabını verdi. "Hastaların acil serviste kalma sürelerini kısalttı mı" sorusuna ise, katılımcıların %69'u evet cevabını verdi. Bu ankete göre katılımcılar cinsiyet açısından ($p<0.001$) ve olumlu-olumsuz cevap verenler ($p<0.05$) açısından önemli bulundu.

Elde edilen sonuçlar, gelecek çalışmalar için objektif bir bakış açısı sağlayacak ve acil servis personelinin memnuniyetine katkı sağlayacaktır. Yapılan bu araştırma göstermiştir ki; acil laboratuvarlarının acil servis içerisinde olmasının daha iyi neticeler vereceği kanaatine varılmıştır.

Anahtar Kelimeler: Acil laboratuvarı, Acil servis, İş memnuniyeti, Sağlık personeli, Test sonuç hızı.

The ethics committee approval of this study was taken from the ethics committee of Sakarya University Medical Faculty (Data: 02.07.2018, Number: E.9269).

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INTRODUCTION

Problems in modern job life cause dissatisfaction in personnel, burnout syndrome, decrease in job satisfaction, insincerity in job, decrease in confidence and consequently quitting the job. The health sector is one of the sectors with these problems. Factors such as intensive stress, time pressure, role uncertainty, excessive workload, deficiency of organization and coordination in healthcare, working under risk, negativity in patient care, deficiency of agreement between personnel's and low number of personnel are some of the problems affecting medical personnel.^{1-3.}

Today, the working population must communicate with more people in the work area. These difficulties are particularly seen in the service sector. Intensive work tempo may cause some problems for the personnel. One of these problems is burnout syndrome. Although burnout syndrome is seen in many areas, it is a more common problem in the health sector, education, and banking, etc. Health services are one of the most important tools of social policies and one of the most important indicators determining the welfare level of the country. A quality health service is only possible with the efficient use of medical personnel in the appropriate location.^{4-6.}

Some researchers reported that personnel satisfaction has a direct effect on service quality and patient satisfaction in healthcare institutions.⁷ There is a significant interaction between medical personnel and patients. For this reason, efforts have been focused on increasing personnel satisfaction in medical services.

Satisfaction is a concept related to many factors such as lifestyle, experiences, expectations from the future, individual and social values. People have been giving priority to quality in healthcare services in recent years. Patient satisfaction is a concept that draws more attention in the emergency service literature.⁸ Patient satisfaction, which is associated with the perception of the results of care and meeting the expectations,

can be defined differently by different people or even the same person at different times. Patient satisfaction is not sufficient to explain patient satisfaction; in general terms, the service provided is based on the patient's expectations or the patient's perception of the service provided.^{9,10} Emergency service are different from other departments of hospitals. Emergency service cannot refuse a new patient, even when all beds are full, and patients should be treated rapidly when they arrive in the emergency service.¹¹ In case of emergency, time is complied with and the cost of making mistakes is very high.¹² Rapid test of laboratory test results contributes to patient satisfaction and accelerates patient circulation especially in emergency services. From this point of view, some opinions suggest that the emergency laboratory should be in the emergency service and those who claim the opposite are present.

Job satisfaction is an indicator that determines the quality of institutions and has an important role in human life. Job satisfaction, burnout syndrome, etc. are also important in terms of health sector as in each business. The satisfaction of the personnel with their job has a positive effect in terms of personally and socially. Dissatisfaction with the job negatively affects the physical and mental medical personnel.^{13,14} Job satisfaction, burnout syndrome, etc. affects the satisfaction of the medical personnel, as well as the developments in the sector. According to Parvin and Kabir, people who are satisfied with their job are more motivated. The sincerity of the motivated personnel to the workplace increases even more. As a result, it has been reported that positive results such as higher productivity and personnel turnover ratio have been achieved.¹⁵

Medical personnel can provide a quality service in terms of quantity and quality only if they are satisfied with their work. Satisfaction of medical personnel; It is associated with factors such as job love, fatigue, value given to personnel, motivation.

These factors affect medical services. A successful and productive personnel is always pleasant at work and loves their institution. Otherwise, unwanted negative behaviors such as boredom, quitting work, and absenteeism can be seen. To ensure sustainability in health sciences and scientific research needs to be conducted on a regular basis.

In 2003, the "Health Transformation Program" was implemented by the Ministry of Health. Some of these studies were carried out within the scope of the General Directorate of Health Research (GDHR). In 2010, "Medical Personnel Satisfaction Survey" was conducted to determine the job satisfaction of medical personnel.¹⁶ The aim of this research is;

1. It is the determination of the current situation regarding the job conditions of the medical personnel, their job satisfaction, the comparison with the results of the previous years, and the determination of the changes and causes over time.

2. It is the determination of the sources of satisfaction / dissatisfaction.

3. It is the creation of medical personnel of knowledgeable, capable, working with high motivation.

4. It is to carry out studies for the problems of medical personnel.

This study was conducted with the aim of creating a scale to observe-evaluate the satisfaction level of medical personnel and to compare it with the studies in the literature.

MATERIALS AND METHODS

Material

Survey technique was used as a quantitative research method for data collection. The question form used in the study was developed for the "Medical Personnel Satisfaction Survey". During the creation of the survey questions rather than just develop a survey based on the literature, it aimed to design a survey that reflects Turkey's local conditions. For this, both the existing literature and focus group interviews as a qualitative research method were used. The interviews lasted for a minimum of 5 minutes and the maximum 15 minutes.

In the study, all medical personnel working in the emergency service were used as material. A total of 78 people, including 16 assistants, 2 specialist doctors, 1 faculty member, 39 nurses and 20 other medical personnel, participated in the survey study. The content of the survey consisted of 5 questions. The answers given by the medical personnel were recorded.

Method

The study was conducted in 2018. In 2018, a new emergency laboratory was established

in the emergency service of a Training and Research Hospital. Literature was searched using the keywords "job satisfaction", "emergency laboratory", "medical personnel" on the computer. The articles that appeared in the searches were used. In the examination made in the relevant databases, it was concluded that there are many publications on job satisfaction.

Factors such as academic title, gender, age, marital status, having children, total service duration, working time at the institution, weekly working time, administrative duty status, and the presence or absence of a disease are among the individual characteristics of the participants. A total of 10 questions were used to measure the individual characteristics of all participants included in the survey. In addition, the following 5 questions were used in the interviews.

1. What is your title?

2. Was the emergency laboratory opening into the emergency room a positive step for you?

3. Does having a laboratory was opened in the emergency service positively affected the patient satisfaction?

4. Does having a laboratory in the emergency service causing the test results get out more rapidly?

5. Does having a laboratory in the emergency service shortened the standby time of patients?

Ethics Committee Approval: The approval of this study was taken from the ethics committee of Sakarya University Medical Faculty (Data: 02.07.2018, Number: E.9269).

Statistical Analysis

The validity of the survey used as a data collection tool in the study was based on factor analysis. Cronbach's Alpha coefficient

(0.932), which determines the reliability of the scale, showed that the scale is generally reliable.

All data obtained through the survey were analyzed with the SPSS package program. Descriptive statistics were used to describe the characteristics of the participants who answered the survey and the general level of the dependent variables of the study. Descriptive statistics such as frequency and percentage values for categorical variables, mean and standard deviation for continuous variables and questions were calculated. The data were evaluated statistically using the chi-square test using the SPSS 22.0 package program.

RESULTS AND DISCUSSION

In this study, the socio-demographic characteristics (such as profession, age, gender) of the medical personnel, their satisfaction level, burnout syndrome, their commitment levels, and how they affect their opinions and suggestions about the available health system and new practices were examined.

The scales used in questionnaire studies on job satisfaction, burnout syndrome, professional and institutional commitment were examined.

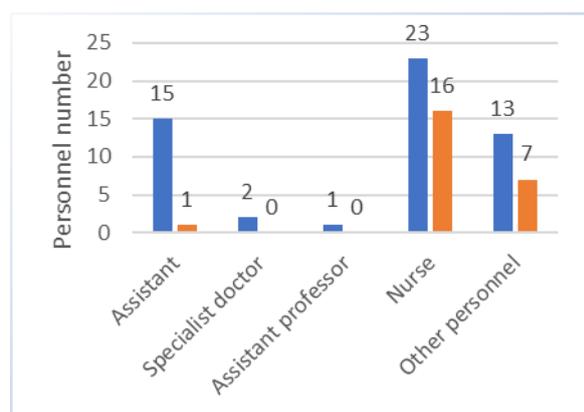


Fig 1. The Number of Personnel who Answered Positively and Negatively to Survey Questions.

Figure 1 shows the number of personnel who gave positive and negative answers to the survey questions. According to Figure 1, a total of 78 people participated in the survey. Their distribution is as follows: 16

assistant, 2 specialist doctors, 1 assistant professor, 39 nurse and 20 others.

The evaluation of the personnel included in the study in terms of gender and marriage is given in table 1. According to this table, the participants were found important in terms of gender ($p < 0.001$) and those who gave positive or negative answers ($p < 0.05$).

The evaluation of the answers to the survey questions was as follows:

Was the emergency laboratory opening into the emergency room a positive step for you? 100% of the participants answered the question positively.

Do you think that the emergency laboratory was opened in the emergency service positively affected the patient satisfaction? 93% of the participants answered the question positively.

Did it cause the test results to go out faster? 97% of respondents answered positively.

Have patients shortened their stay in the emergency room? In the question, 69% of the respondents answered positively. When the results of the survey are evaluated in general; the emergency laboratory was opened in the emergency service and a positive step was taken and the test results were caused to

release more quickly. The measurable control of this information was made by us and Hospital Information Management System (HIMS) data were examined. The duration of the test before and after the emergency laboratory change was compared. After the emergency laboratory was opened in the

emergency room, it was seen that the 45-minute period decreased to 28 minutes according to the HIMS. The reduction rate of this period was 37.7%. In addition, it was seen that the values given by the Ministry of Health were significantly lower than the test results.

Table 1. Evaluation of the Personnel Included in the Survey in Terms of Gender and Marital Status.

Faktors	Assistant	Specialist doctor	Assistant professor	Nurse	Other personnel	P
Gender						
Male	7	1	1	29 ^a	13 ^a	***
Female	9	1	0	10 ^b	7 ^b	
Marital status						
Married	16	2	1	39	20	NS
Unmarried	0	0	0	0	0	
Answers						
Positive	15 ^a	2	1	23 ^a	13 ^a	*
Negative	1 ^b	0	0	16 ^b	7 ^b	
Total	16	2	1	39	20	

*: p<0.05, ***: p<0.001, NS: Not Significant.

In a remarkable finding in our study, "Is the emergency room opened in the emergency room shortened the duration of stay in the emergency room?" is a significant (p<0.001) difference between nurses and others. 59% of the nurses responded positively to this question.

The number of medical personnel in Turkey is 407.136 people. These are nurses (29.2%), doctors (28%) and other medical personnel (26.4%) (Ministry of Health, 2010). According to GDHR's data, there are a total of 29 373 health institutions in Turkey. 71.1% of these are family health units, 14.7% health homes, 3% community health centers and 2.4% state hospitals.

In the qualitative research phase within the scope of the study conducted by the Ministry of Health, focus group interviews were conducted with physicians, nurses and other medical personnel working in the family health center, Ministry of Health hospital, university hospital and private hospital. The following five questions were used in the interviews.

1. What do you think are the factors that motivate medical personnel in their job?
2. Which of these are you satisfied with in your workplace?

3. Which of these do you lack in your workplace?
4. How do the following regulations affect your service delivery?
5. What do you think should be done to provide better healthcare services in the current health system?

Interviews are between 75 minutes and 165 minutes. While 4 people attended the focus group meeting held in the family health center, 11 people attended the interview in Numune Training and Research Hospital, 10 people attended the interview at Hacettepe University Adult Hospital and 11 people attended the interview at Private Medicine Hospital.

40.1% of the surveys belong to the first region consisting of Istanbul, Ankara, Izmir, Kocaeli, Bursa, Adana, Mersin, and Gaziantep provinces. 97.4% belongs to urban settlements. 71.5% of the participants provide services in institutions and organizations affiliated to the Ministry of Health, 14.9% in university hospitals and 13.6% in private health institutions.

54.5% of the doctors are specialists, 19.1% are assistants and 26.4% are general practitioners, 62% of them stated that they do

their compulsory service and about 95% of them work in full time status.

In the study, a survey consisting of 148 questions was used to determine the job satisfaction, burnout and commitment levels of the medical personnel and their views on the "Health Transformation Program".

The patients who are brought to the emergency service and especially the patients who bring the patient do not know exactly whether their patients are urgent or not. Therefore, they can be panic and agitated. From time to time, relatives of patients may have aggressive behaviors or even verbal and actual insults. Therefore, early intervention and diagnosis is important for patients. The short duration of the procedures in the hospital, the early exit of the tests, the short duration of the treatment and the short duration of hospital stay will satisfy the patients as well as the satisfaction of the emergency personnel and the fatigue of the patients. In this respect, the involvement of the laboratory in emergency departments contributes to the early exit of the test results (37.7%) as shown in our study.

Testing time is one of the most important components of laboratory service as a determinant of laboratory performance. The test time is a process which consists of the steps of collecting, transporting, preparing, analyzing, reporting, interpretation and result based action stages.¹⁷⁻¹⁹ In some cases, shorter results may be preferred over the analytical quality of the test.²⁰

Waiting time and nursing care are particularly important factors affecting patient satisfaction in the emergency service.^{8,21,22} In the studies conducted, it was found that giving information about the functioning of the emergency service and waiting time to the patients increased the patient satisfaction.^{23,24} Is it necessary for the emergency laboratory to be opened in the emergency department? The answer to the question is important. In our study, the opening of the emergency laboratory within the emergency room led to early exit of the tests, increased the satisfaction of the patients, shortened the waiting time of the

patients, and caused the satisfaction of our personnel working in the emergency room of our hospital.

Approximately 75% of the medical personnel participating in the survey within the scope of GDHR are married and the total working time in the profession is over 5 years. Approximately 70% of the participants are women and have children, working more than 40 hours a week. 41.4% of the participants stated that they work only during the day shift, 8.1% also has an administrative duty and 5.1% stated that they work on temporary duty. In addition, 5.3% defined the general health condition as bad and very bad, and 15.4% said "Do you have a chronic or non-chronic disease that makes it difficult to do your job?" It has been observed that the answer is yes to the question.

When the burnout level of the participants was examined, it was reported that almost one out of every three employees (33.3%) was dissatisfied with their job, and in terms of professional commitment, it was reported that around 40% of those who stated that they could choose the same profession if they had the chance to choose a new profession.

The answers given by the medical personnel to the question "Can you write down the top 3 most important things you want to improve for increased job satisfaction?" are listed: "Wages should be increased, depreciation should be given, job security should be increased, the number of personnel should be increased, physical conditions in the working environment should be improved, working hours should be regulated and additional payments should be reflected on retirement".

When the job satisfaction levels of the health personnel are examined; It is understood that 13.5% of the participants experience job dissatisfaction. All healthcare personnel will behave positively towards their institutions only if their expectations and needs are met. When asked "Health Transformation Program" to the medical personnel, 34.8% of the medical personnel stated that they found this program successful.

CONCLUSION AND RECOMMENDATIONS

In our study, evaluations based on HIMS it was determined that the emergency laboratory was opened within the emergency service and the duration of the examinations were shortened. The early exits of the test

results have minimized the time losses of the patients and emergency service workers and this situation has caused the satisfaction of our personnel working in the emergency room of our hospital.

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