EXAMINING FACTORS THAT HAVE AN IMPACT ON HOSPITAL PREFERENCES OF UNIVERSITY STAFF*

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ABSTRACT

This is important that factors that affect hospital preferences of individuals in medical service are understood by managers. Purpose of this study is to determine factors that have an impact on preferring or not preferring university hospital academic and administrative staff in Suleyman Demirel University and to present information about being a preferred hospital to hospital administrators by centering on these factors.

Population of the study constitutes academic and administrative staff in Isparta Suleyman Demirel University, in January-March 2017. The total number of administrative and academic staff of Süleyman Demirel University is 2800. All scope is tried to be reached without going to whatsoever sample choice in the study. The study is based on volunteerism and 709 people agreed to participate in the study. Surveys that take part in the literature to measure factors that have an impact on hospital preference of university staff.

This is seen that two third of university staff prefer available hospitals without research and application hospital but research and application hospital is the most preferred hospital with %34,3 prefential rate when every hospital is evaluated separately at the end of the study. The most important reasons to prefer university hospital; being near to workplace, being given priority to appointment and development of technological infrastructure over the most important reasons not to prefer; a long wait, getting examined by resident physician and staying in the same room of different clinical patients in the services.

Keywords: Hospital preference, Healthcare management, administrative and academic staff

1. INTRODUCTION

Competition environment constitutes among hospitals nowadays. Hospitals should have knowledgeable and experienced staff, developed technological infrastructure and quality service to be preferred. What is effective to be preferred or not to be preferred by individuals for whatsoever hospital besides these to be preferred by patients is must to be known. It is found that factors generally that affect hospital preferences are similar with others in the studies that are done about what has an impact on hospital preferences of patients. The preference for a hospital is when a healthcare consumer or his / her caregiver chooses one of the healthcare facilities if he / she has the choice (Tengilimlioğlu, 2001). According to study of Berkowitz and Flexner (1981), it shows that attitudes and behaviors of hospital staff, quality of health service that is offered, cleaning of hospital, physical opportunities of hospital and image of hospital has an impact on hospital preferences of patients. In the study of Boscarino and Steiber (1982), it is found that being given notice of hygiene and cleaning, attitudes and behaviors of staff, being near to the house, having attending physician and technological equipment, past experiences about hospital, expenditure of service, size of hospital, religious affiliation is effective in hospital preference of patients. According to Lavi (1983), patients consider quality of service, proximity of hospital, finance and accessibility, proximity of hospital to home, communication of hospital staff and religious affiliation in the hospital preferences. As regards Verma and Khandelwal's study (2011), medical quality, hygiene, infrastructure, method of payment, duration of therapy, technological potentiality, physical potentiality, image and reputation of hospital, size of hospital, attitude and behavior of staff, speediness of service, advice of doctors and relatives, varieties of services, waiting period and location of hospital has a role in hospital preferences of patients.

According to Dubey and Sharma (2013), proximity of hospital to home, having attending physician, taking care of staff's business on time, enough technical equipment, good communication between doctors and patients, rapid patient admission process, reliable treatment that is done and hospital introduction is effective in hospital preferences of patients. When studies that are done in literature are examined, it is said that attitudes and behaviors of staff, hygiene, physical possibilities of hospital, quality of service, proximity to home and technological equipment has an impact on hospital preferences of patients.

2. MATERIALS AND METHODS

2.1. Purpose of the Study

The main purpose of this study is to determine factors that are effective in the fact that Suleyman Demirel University academic and administrative staff prefers Suleyman Demirel University Research and Application Hospital and to reveal relationships of these factors with demographic variables. Another purpose is to give an advice to become more preferable hospital to hospital administrators.

2.2. Population and Sample

Scope of the study constitutes academic and administrative staff in Isparta Suleyman Demirel University, in January-March 2017. The total number of administrative and academic staff of Süleyman Demirel University is 2800. All scope is tried to be reached without going to whatsoever sample choice in the study. The study is based on volunteerism and 709 people agreed to participate in the study.

2.3. Data Collection Tool

Data that is used in the study is obtained in consequence of making survey that is prepared by

benefitting from surveys in literature and develop by using five point likert scales to university staff with face to face meeting. When participants' answers are evaluated, it means 1 *"totally disagree"* and 5 *"totally agree".*

Table 1. Findings of Factor Analysis

Below are the results of factor analysis.

Items	Component	
	Factor 1	**Factor 2**
I prefer this hospital because priority is given to me about appointment in consequence of being university staff.	.912	
I prefer this hospital because priority is given to my relatives (mother, father, partner ext.) about appointment in consequence of being university staff.	.903	
I prefer this hospital because hospital is close to my workplace.	.749	
I prefer this hospital because interest and attention is shown in consequence of being university staff.	.859	
I do not prefer this hospital because I get examined by resident physician instead of specialist physician.		.685
I do not prefer this hospital because there are students during the medical examination beside doctor who get examined.		.711
I do not prefer because there is a negative experience of my relative about this hospital.		.727
I do not prefer this hospital because some academicians care patient costly.		.764
I do not prefer this hospital because different clinical patients stay in the same room.		.750

The items related to the reasons why university personnel preferred Suleyman Demirel University Research and Application Hospital were subjected to factor analysis. In factor analysis, "Principal Component Analysis" and "Varimax Vertical Rotation" method were used. ıtems that are included in more than one factor and which are included in more than one factor with a difference of less than 0.10 with a factor load less than 0.30 and expressions that do not conform to the theoretical framework have been extracted.

According to the data of the questionnaire on the reasons for choosing Süleyman Demirel University Research and Application Hospital, as a result of factor analysis, it was divided into two factors as "preference status" and eme non-preference status". These factors explain 62.40% of the variance. Factors are as follows.

Factor 1- Preference Status: Factor 4 consists of expressions and factor loadings are between 0.749 and 0.912. The Cronbach Alpha value of the factor was 88.3%.

Factor 2 - Non-preference: Factor consists of 5 expressions and factor loadings are between 0.685 and 0.764. The Cronbach's alpha value of the factor was 78%.

3. FINDINGS AND DISCUSSION

3.1. Demographical Findings

**Table 2: Demographical Attributes of Participants to the Research**

Variances					
Gender	**Number**	**%**	**Educational Background**	**Number**	**%**
Male	451	63.6	High School	57	2.1
Female	258	36.4	Associate Degree	59	8.4
Total	709	100	Bachelor's Degree	91	13.0
Age	**Number**	**%**	Master's Degree	156	22.2
≤ 30	201	29.2	Doctor's Degree	339	48.3
31-40	222	32.2	**Total**	702	100
41 ≥	266	38.6	**Level of Income (TL)**	**Number**	**%**
Total	686	100	≤3000	181	28.2
Marital Status	**Number**	**%**	3001-4000	220	34.3
Married	525	74.3	4001≥	240	37.4
Single	182	25.7	**Total**	641	100
Total	707	100	**Working Time**	**Number**	**%**
Occupation	**Number**	**%**	≤ 9	402	60.0
Academic	490	69.9	10-18	165	24.6
Administrative	211	30.1	19 ≥	103	15.4
Total	701	100	**Total**	670	100

Demographical information of 709 people who participated in the research is seen in Table 1. According to Table 1, 63.6% of the participants are male, 36.4% are female and 74.3% are married. Also, 69.9% of the participants are academic staff, 30.1% are administrative staff. When the working hours are examined, it is seen that the employees who work equal to nine hours and less than nine hours are 60%. In addition, 48.3% of the participants have a doctor's degree.

3.2. Analysis of Questions About Using Health Services

When the question of " How many times do you and your family go to a hospital per a year?" directs to the staffs who participated in the study, it reveals that staffs go to a hospital approximately 11,7 times. When the question of "What do you think that how many of them is to Suleyman Demirel University Research and Application Hospital?" directs to them, it is seen that this rate consists of 4.72 university hospital. According to these findings, it is said that more than half of hospital preferences of staffs who participated in the study is other hospitals except university hospital.

Graphic 1: Preference Rates of Hospitals
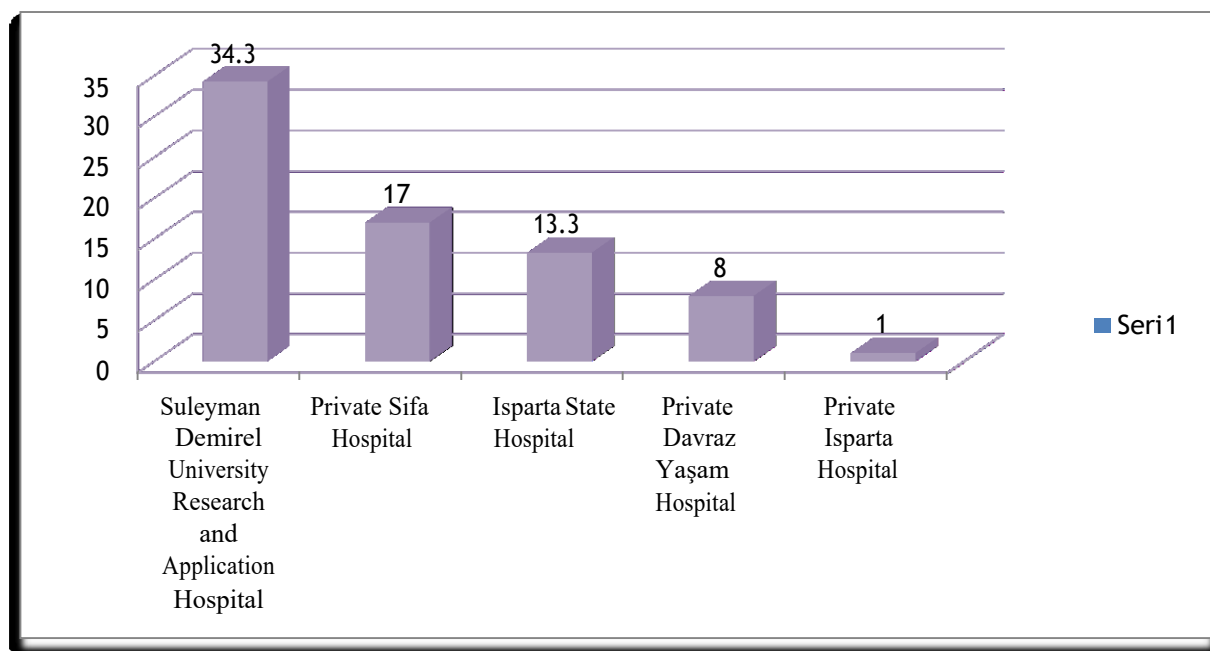
When the most preferable hospital to take health service is asked to the staffs who participated in study, %34.3 of them answer as Suleyman Demirel University Research and Application Hospital, %21.5 of them answer as Özel Sifa Hospital, %17 of them answer as Isparta State Hospital, %13.3 of them answer as Ozel Davraz Yaşam Hospital, %8 of them answer as Private Isparta Hospital, %1 of them answer as Maternity and Children Hospital and %1 of them answer as others (Gafik 1).

When the question of "Do you advice Suleyman Demirel University Research and Application Hospital?" is asked to staffs who participated in the study, %34.5 of the staffs answer as "neutral", %19.6 of them answer as "always advisable", %19.2 of them answer as "advisable", %13.2 of them answers as "ı never have not adviced", %13.5 of them answer as "ı do not advice". It is said that approximately %40 of them advice university hospital despite hospital of staffs' institution.

Reasons to Prefer and not to Prefer Suleyman Demirel University Research and Application

Hospital Arithmetic mean and standard deviation about hospital preferences reasons of staffs who participated in the study is shown in Table 3.

Table 3: Definitive Statistics About Preferences Reasons

Matters	N	$\bar{X}$	Ss
I prefer this hospital because I am pleased with previous service.	688	3.00	1.34
I prefer this hospital because priority is given to me about appointment in consequence of being university staff.	686	3.22	1.53
I prefer this hospital because priority is given to my relatives (mother, father, partner ext.) about appointment in consequence of being university staff.	679	3.01	1.52
I prefer this hospital because hospital is close to my workplace.	690	3.43	1.49
I prefer this hospital because interest and attention is shown in consequence of being university staff.	687	2.79	1.48
I prefer this hospital because I can get examined in hospital by faculty members (professor, lecturer ext.).	689	3.05	1.49
I prefer this hospital because patient privacy is supervised.	678	2.95	1.35
I prefer this hospital because of it's technological infrastructure.	685	3.22	1.31

The most important factor that staff who participated in the study prefers university hospital is to be close to the workplace as being seen in Table 2. Being given priority about appointment, developed technological infrastructure, being gotten examined by faculty members, being given priority to the relatives, being pleased with previous service, being supervised patient privacy and being shown more interest and attention in consequence of being university staff follow this.

Table 4: Definitive Statistics About Reasons About not Being Preferred

Arithmetic mean and standard deviation about reasons of staffs who participated in the study about not being preferred is shown in Table 4.

	N	$\bar{X}$	Ss
I do not prefer this hospital because I get examined by resident physician instead of specialist physician.	675	3.16	1.51
I do not prefer this hospital because there are students during the medical examination beside doctor who get examined.	674	2.73	1.46
I do not prefer because there is a negative experience of my relative about this hospital.	675	2.79	1.46
I do not prefer this hospital because some academicians care patient costly.	673	2.80	1.53
I do not prefer this hospital because different clinical patients stay in the same room.	666	2.97	1.49
I do not prefer this hospital because excessive medical examination is done in the hospital.	678	2.82	1.44
I do not prefer this hospital because waiting period in hospital is so long.	678	3.30	1.46
I do not prefer this hospital because academic unit behaves unrelated.	669	2.61	1.50

According to the research, the most important factor that staff who participated in the research do not prefer university hospital is long wait period as being seen in the Table 4. Being gotten examined by resident physician instead of specialist physician, being studied in the same room by different clinical patient, being done excessive medical examination in the hospital, being cared patients by some academicians costly, being a negative experience of relatives about hospital, being students during the medical examination as well as doctor who get examined and being behaved unrelated by academic unit follows this factor.

When the question of "What do you think about the most important feature that separates the university hospital from other hospitals?" directs to the staff who participated in the research, %21of them answer as technical equipment, %20.4 of them answer as detailed research, %13.9 of them answer as being depend on the university, %9.9 of them answer as getting examination by lecturers and %5.8 of them answer as being accessible.

When the question of " Which hospital is your first preference when you need to consult emergency?" is asked to staffs who participated in the research, %32.8 of them indicate as Suleyman Demirel University Research and Application Hospital, %28.7 of them say as State Hospital, %17.9 of them indicate as Private Sifa Hospital, %12.2 of them state as Private Davraz Life Hospital, %7.9 of them remark as Private Isparta Hospital and %0.4 of them indicate as Maternity and Child Hospital as their first preference during the emergency case.

When the question of "Why is this hospital your first preference during the emergency case?" directs to staffs who participated in the research, %42.2 of them says that the hospital is accessible, %17 of them answer that attention is shown, %16.3 of them says that wait period is short, %5.6 of them indicate that it has better equipment and %5.2 of them says that there is

experienced personal. According to study of Boscarino and Steiber (1982), it is found that proximity of the hospital to home, having an experience about the hospital, advice of the doctor, having familiar staff, quality service has an impact on hospital preference.

When the question of " What is the most important problem to fix in the university hospital?" is asked to staff who participated in the research, %19 of them say as attitudes and behaviors of staff, %14 of them indicate as physical conditions, %9.6 of them state as long wait period, %9.2 of them answer as being crowded and %8.8 of them say as getting examination by assistant.

When the question of "Which kinds of arrangements should be done to prefer Suleyman Demirel University Research and Application Hospital?" to staff who participated in the research, %18.9 of them say that attitudes and behaviors should enhance, %12.7 of them say that lecturers should give free ambulatory care service, %9.3 of them say that priority should be given to the university personal, %8.1 of them say that physical conditions should be fit and %7.4 of them answer that operations (analysis, examination, report) should be put on the fast track that arrangements to prefer the hospital.

When the question of "Is there anything else you would like to add about Suleyman Demirel University Research and Application Hospital?" to staffs who participated in the research, %20.9 of them say that attitudes and behaviors of staff should enhance, %12.2 of them indicate that parking area of hospital should be developed, %9.5 of them state that importance about hygiene should be given, %8.1 of them say that room capacity should be increase and %8.1 of them state that technological infrastructure should be developed.

There has been found a statistically meaningful relationship between "proximity of hospital to the work office", which is the most important factor among the reasons of hospital preference, and gender, age, income level, marital status and job variances. By an increase in the age and salary of the participant, proximity of hospital to the work office has more impact on hospital preference of single than married, women than men and management personal than academic personal.

A meaningful relationship between "getting examined by physician assistant instead of specialist physician" that the most important factor that they do not prefer and age variance is found statistically. when ages of staffs increase, it is said that this reason which examination is done by physician assistant instead of specialist physician is more effective on not preferring the hospital. In the study discussed by Tüfekçi and Asığbulmuş (2016); reliability, availability of specialist physician, ease of transportation and patient satisfaction were the most important criteria for the selection of patients.

Factors about why academic and administrative staffs of Suleyman Demirel University prefer Suleyman Demirel University Research and Application Hospital is tried to be pointed out in this study. At the end of the study, it is seen that two thirds of university staff prefers other hospital apart from research and application hospital but the most preferred hospital is research and application hospital with %34,3 preferences rate when every hospital is evaluated separately.

The most important reasons to be preferred university hospital; this is found as proximity of hospital to work office, priority in appointment, developed technological infrastructure and getting examination by academic staff. Obtained findings from result of study show similarity with findings that is in literature (Berkowitz ve Flexner, 1981; Boscarino and Steiber, 1982; Kamra vd., 2016; Layi, 1983; Akıncı vd., 2004; Verma and Khandelwal, 2011). In a study conducted by Malik and Sharma (2017), it was determined that the reasons for choosing a hospital were the professional competence of the health personnel, the clinical effectiveness of the hospital and the patients being personal. In another study, it was found that distance, advice and price had the most effect on the reasons for hospital preference. (Hoşgör, Gündüz Hoşgör, 2019). In a study conducted by Lee et al. (2008), 16 items were identified as hospital preference criteria and reported to be grouped under 4 factors: price perception, reputation, quality and courtesy and

timely service delivery.

The most important reasons not to prefer hospital; this is found as long wait period, getting examination by assistant and being stayed in the same room by different clinical patients.

As in every study, this study has some limitations. The most important limitation of this study is that only the reasons for hospital preference of employees in a university are determined. Region based universities can be selected and the reasons of hospital preference of the employees working in those places can be searched and compared.

Effective factors for hospital preference should be known to be offered effective health service by hospital administrators. Obtained findings from the study are important to create awareness in hospital administrators. If hospital administrators take turn running by concentrating on these factors, this will aid about more preferable hospital.

As a result of the findings obtained after this research, the university staff can make the following recommendations to prefer the university hospital;

- In order to shorten the long waiting periods, studies are made to ensure the effective use of the appointment system in polyclinic services.

- It can be said that in addition to assistant physicians, specialist physicians will work in the polyclinic. Thanks to the specialist physician, it was concluded that a more reliable environment would be provided for the patient and assistant physician while shortening the patient examination times.

- Lastly, the personnel working in the hospital are subjected to personal development seminars such as "communication techniques, coping with stress, time management yönelik to ensure the satisfaction of patients and their relatives. As a result of this, positive effects will be formed in employee behaviors so that satisfaction will be increased and the reason for preference will be affected positively.

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