

THE ROLE OF CULTURE IN THE PERCEPTION OF PLANNED CHANGES IN THE EMERGENCY DEPARTMENT AND ITS INFLUENCE ON PATIENT SATISFACTION

ACİL SERVİSTE YAPILAN PLANLI DEĞİŞİMLERİN ALGILANMASINDA KÜLTÜRÜN ROLÜ VE HASTA MEMNUNİYETİNE ETKİSİ

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ABSTRACT

The paper aims to determine the role of (sub)culture(s) in the perceptions of planned changes made today in health care quality and patient satisfaction in a problematic emergency department (ED) between 2006-2010 by comparing the findings of two-period of time. Both qualitative and quantitative designs were used. First qualitative data through observations and interviews were gathered in the Kocaeli State Hospital Emergency Department (KSHED), and then quantitative data through the two questionnaires we developed was collected. Five hundred ED patients in 2006 and 366 in 2010 responded to the surveys. Chi-square test for categorical data and paired samples t-test for ratio were used to analyze the relationships and differences between demographic characteristics and dimensions of satisfaction and perceived cultural changes of health quality by years.

Several planned changes implemented in the ED between 2006 and 2010 were perceived positively by the patients and contributed significantly ($p < 0.001$) to year all patient satisfaction and health care quality in 2010. Among the perceived cultural changes, human to human interactional dimension of improvements were most drastically moved up (from 44.1% to 64.4%) and assessed satisfactorily.

KSHED has a unique culture consisting of two subcultures, institutional and organizational, through which patients and health staff interpret the meanings in their perceptions and expectations, and interact, accordingly determines the degree of their satisfaction and perceived health care quality, resulting in the successful management of organizational culture changes. The more their reciprocal expectations are overlapped; the more organizational culture changes are positively perceived and the more their relations satisfactorily function.

Keywords: Emergency department culture, organizational culture, perception of change, patient satisfaction, healthcare quality

ÖZ

Bu makalenin amacı sorunlu bir acil serviste (AS) sağlık bakım kalitesini ve hasta memnuniyetini geliştirmek için, 2006-2010 yılları arasında yapılan planlı değişimlerin algılanmasında alt kültür(ler)ün rolünü belirlemektir.

Araştırmada nicel ve nitel tasarım birliktedir. İlk olarak Kocaeli Devlet Hastanesi Acil Servis'inde (KDHAS) gözlem ve mülakatlarla nitel veri toplandı, sonra iki anket uygulamasıyla nicel veri toplandı. Beş yüz AS hastası 2006'da ve 366 2010'da katılımcı anket formu doldurdu. Değişkenler arasındaki ilişkiyi belirlemek amacıyla kategorik veriler için Ki-kare bağımsızlık testi ve iki yıl arasındaki değişim farklılığını belirlemek amacıyla eşleştirilmiş gruplar t testi kullanıldı.

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AS'de 2006-2010 yılları arasında yapılan planlı birçok kültürel değişim hastalarca olumlu algılandı ve 2010'da toplam hasta memnuniyetine ve sağlık bakım kalitesine anlamlı ölçüde ($p < 0.001$) katkı sağladı. Algılanan kültürel değişimler arasında insanlar arasındaki etkileşim boyutu en keskin olarak artan (%44.1'den %64.4'e) iyileşme olup, memnuniyet verici olarak değerlendirildi.

KDHAS kurumsal ve örgütsel olmak üzere iki ayırt edici altkültüre sahiptir. Hastalar ve sağlık personeli algılarındaki anlamları ve beklentileri bu altkültürlere göre yorumlamaktadırlar ve buna göre etkileşimde bulunmaları memnuniyetlerinin ve algılanan sağlık bakım kalitesinin derecesini belirlemekte ve örgütsel kültür değişimlerinin başarılı yönetimiyle sonuçlanmaktadır. Karşılıklı beklentiler ne kadar çok örtüşürse örgütsel kültürel değişimler o kadar çok olumlu algılanmakta, hasta ve personelin ilişkileri memnuniyet verici olarak işlemektedir.

Anahtar Sözcükler: Acil servis kültürü, kurum kültürü, değişim algısı, hasta memnuniyeti, sağlık bakım kalitesi

INTRODUCTION

Understanding the nature of the patient–health staff interaction and its impact on patient healthcare has received increasingly more attention since the onset of managed healthcare in the late 1980s (Tasso and Behar-Horenstein, 2008). In the process of improving healthcare systems and policies, the patients' perspective and the management of organizational culture are becoming increasingly a necessary and integrated part of the health reforms (Tasso and Behar-Horenstein, 2008; Romanow, 2002) to deliver a proper health service. The Romanow Commission (Scott, Davies, and Marshall, 2003b) underlies the crucial importance for successful healthcare reform of working with core public cultural values since they shape our views, and play a central role in defining how we view the critical issues facing the future of healthcare, in deciding which problems should have the highest priority, and in shaping the solutions we choose to adopt or change, and in determining whether radical change or fine-tuning is necessary.

Turkey also, from the beginning of the 21st century, has engaged in considerable reform efforts to improve its healthcare and drive better and fairer health outcomes by making fundamental changes in the behavior of public hospitals. The regular implementation of measurements of quality performance and patient satisfaction in public hospitals are among the recent policies of change. Apart from regular surveys at hospitals, the Turkish Ministry of Health also carried out two patient satisfaction studies throughout Turkey. They found an overall 39.5% satisfaction in 2003 and 63.4% in 2008 (TUIK, 2015). This swift increase in patient satisfaction can be assessed as an indication of the well-planned organizational changes by the introduced policies.

A vast majority of literature on the organizational culture of hospitals has examined the United States or other high-income countries, and little is known about hospital culture in countries with different socio-cultural environments (Zhou et al, 2011; Helfrich, 2007) like Turkey. Previous studies often deal with how organizations shape, or shaped by, culture (Pedersen and Dobbin, 2006) or discuss how culture is spread and maintained in an organization (Oliver, 1992) or consider a perspective on deinstitutionalization to explore issues of resistance to subcultures, change and power within organizations (Kondra and Hurst, 2009). A few studies assume two different cultural forms can coexist in organizations (Greenwoods and Hinings, 1996). Specifically, past studies do not much consider deeply the role of embedded and collectively shared values, perceptions, expectations, beliefs and habits of a people in understanding what individuals and groups view as appropriate responses to illness (Olafsdottir and Pescosolido, 2009) in an environment of change and intensive social interactions like EDs, where the communicators are under high pressure and within a different state of mind (Seltzer, et al, 2012).

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This paper is a comparative analysis of the previous two studies we conducted in the KSHED. The first study was carried out in 2006 to determine the causes of the problems such as long waits, overcrowd, mistrust, and to measure the level of patient satisfaction and healthcare quality, and to introduce some suggestions to the Hospital Management (HM) for the implementation of planned strategic organizational changes in the ED culture. After obtaining from the HM information on what organizational changes in the ED culture they implemented between 2006 and 2010 we conducted the second study in 2010 in order to examine how the patients perceived the planned changes, and to compare findings of the two-period of time, and to determine the role of the culture in the perception of organizational changes, and its influence on patient satisfaction and healthcare quality. Some academics and many policymakers are showing renewed interest in the quantitative measurement of organizational culture to determine its relationship with satisfaction, performance and quality of care (Davies, Nutley and Mannion, 2000). The paper aspires some suggestions for further research and better healthcare policy and management, and thus to contribute further to the gap in the literature regarding the role of (sub)culture(s) in the perception of planned organizational changes in EDs (Zhou, et al, 2011).

The meanings individuals assign to illness and the meanings they assign to responses to illness provide important insight into the cultural beliefs individuals have about the social world (Fakhoury, 1998). Interaction and satisfaction depend on how role players perceive culturally predetermined-symbolic meanings and interpret them co other role players' expectations. The paper explores how meanings are derived from social interactions, and perceived and interpreted in a problematic ED. Thus, we have attempted to combine both applied and theoretical perspectives in one study. As Cockerham (2001) states there has been a general evolution of work in medical sociology that combines both applied and theoretical perspectives, and the utilization of theory has become increasingly common as a framework for explaining or predicting health-related social behavior.

The Role of Organizational Culture in the Perception of Changes and Its Influence on the Patient Satisfaction

Even though in the literature little consensus exists over precise definition of organizational culture, Cockerham (2001) and Schein (1990) define it as the pattern of shared basic presumptions and beliefs, invented, discovered, or developed by the members of an organization, as they learn to cope with its problems of external adaptation and internal integration, that have exerted sufficient influence to be considered valid and, therefore is to be taught to new members as the correct way to perceive, think, and feel in concern to those problems. It signifies a broad range of social phenomena, including an organization's shared signs, symbols, language, oral and written traditions (norms), artifacts, behavior patterns, practices, beliefs, values, assumptions, perceptions, expectations, rituals, and modes of deference; all of which serve to define an organization's identity and character (Brown, 1995; Scott, et al, 2003a; Scott, et al, 2003c), by which members of the group can differentiate themselves from other group (Hatch and Cunliffe, 2006).

Culture refers specifically to the deep structure of organizations, which is rooted in the values, beliefs, and assumptions held by organizational members (Denison, 1996), and complex health systems comprise a variety of coexisting cultures (mostly considered subcultures), some of which may share a common orientation and similar espoused values, and some of which may be disparate subcultures that clash or maintain an uneasy symbiosis (Martin and Seihl, 1983; Romanow, 2002).

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Complex health organizations made up of a large number of subgroups with which people identify and from which are derived distinctive values and norms for health behavior may be labeled *organizational subcultures* (Jandt, 2003). A subculture resembles a culture, however, subcultures have some important differences in that they coexist within dominant cultures and are often based on economic or social class, ethnicity, or geographic region (Jandt, 2003) or religious, occupational, departmental, ward, specialty, or other affiliations (Scott, 2003c).

The practice of patient care in an ED is fundamentally cultural due to the nature of its tasks and organization (Vosk and Milofsky, 2002). Each organization can create its own culture (Person, Spiva and Hart, 2013; Scott, 2003c) that goes beyond what is written down as organizational norms (Person, Spiva and Hart, 2013), rules and regulations.

In this paper, we assume that KSHED has a unique organizational culture consisting of two different subcultures, and that is sometimes in conflict due to ED's very nature. For a deeper understanding, we have distinguished the ED culture as *institutional (sub)culture* and *organizational (or enterprise) (sub)culture*. By *institutional culture* we mean patients and their families' persistent patterns of behavior, attitudes, values, assumptions, perceptions and expectations internalized and shared commonly in their social settings, and by *organizational culture*, we mean 'script' written policies, rules, [Turner, 1982] held values, assumptions, patterns of thinking, perception and expectation represented by the ED staff, that arise from their specialized training and education, daily practice of work and interaction with peers and other occupational groups.

The planned cultural changes the HM implemented for the improvement of satisfaction and quality performance in the ED in the period 2006-2010 building up the suggestions of our first study concentrated on three basic types of interactions (i) *human to human* (like personnel's interactive training (coping with stress, and communication, empathy, and motivation, placement of reception staff, triage application, personnel's yearly professional training about emergency care), (ii) *human to equipment* (revised number system, establishment of an illuminated sign device for teaching the rules and regulations to the patients, preparation of the information placards and boards), and (iii) *human to physical structure* (like that the number of treatment rooms was doubled and extended, a tomography unit was established, tea-coffee automats were placed, and washrooms and toilets were renovated).

How these discernible cultural changes were perceived and the meanings attributed to them were interpreted by patients might influence their satisfaction in one way or other. It is believed that visible and tangible cultural elements such as buildings, policies, and written procedures, etc. are alterable, whereas sublimated and/or taken for granted elements of culture are not so easily changed (Kondra and Hurst, 2009). If managers wish to successfully manage to change the culture in their organizations, they must become aware of the many elements that can distort or create an incomplete understanding of culture and produce resistance (Kondra and Hurst, 2009). In this regard they should consider the view as much as patients perceive the changes as parallel to their expectations shaped by health organization culture, they will be satisfied, and patient-health staff interaction will improve (Linder-Pelz, 1982; Williams, 1994).

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The social contexts have their subcultures, and can potentially affect individual perceptions, attitudes, and behavior (Ulmer and Wilson, 2003) and as a result, while line and definition of *sick* ('who and how patient') do not pose great importance in other polyclinics they are very critical in EDs. While interacting, many times patient-physician expectations –that are the fundamental determinants of ED culture- come into conflict with one other due to, first and utmost, its nature and their roles are not clearly described and sufficiently internalized. So, EDs are the places where people are the most sensitive, skeptical, egoist, anxious and stressful (Holm and Fitzmaurice, 2008). Organizational changes in the ED without changes in its cultural features would often fail (Umiker, 1999).

METHOD

This is a longitudinal trend study. Trend studies are those that study essentially dynamic issues like performance and change within some general population over time and uncover *net* changes (Babbie, 1986).

Owing to the complex and dynamic nature of the health phenomena, comprehensive research in this area should soundly implement multi-method and multi-disciplinary, drawing on quantitative and qualitative designs (Young, 2004; Benzies and Allen, 2001). Therefore, the studies 2006 and 2010 based both on surveys via questionnaires (qualitative method), and on observations and interviews (qualitative method) to eliminate the contradiction of quantitative and qualitative research findings and their discrepancy and insufficiency when used alone (Mechanic, 1989).

Sample of the Study

KSH is situated in the city centre and is easy to reach. Approximately 500 patients visit it daily. After written permissions were obtained from the HM we conducted the studies. In the first study a sample of 500 and in the second a sample of 366 individuals, 18 years and over, visiting the ED within the 7/24 days were randomly selected. Since the physical and physiological health conditions of patients were not well, some of them did not take part in the study. And the questionnaire was not applied to the relatives of patients with too serious conditions. Semi-filled forms were extracted.

Data Collection Tools

In the study both unstructured observation form as qualitative method's data collection tool and questionnaire as quantitative method's tools were used. Since it is unlikely that any single instrument will ever provide a valid, reliable, and trustworthy assessment of an organization's culture, and so a multi-method approach will always be desirable (Scott, et al a) for complex social settings like emergency departments.

Data Collection and Analysis Process

After getting official permission from the KSH management, at first the relevant literature (KSH's newspaper archive inclusive) was reviewed and then direct observations were made unobtrusively in the ED by the researcher and two nursing students he

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trained. The observations of the first study took us a month (120 hours), the second study one week (18 hours) three times a day, mostly in intensive hours (19:00-23:00).

We focused mainly on three types of interactions (i) human to human, (ii) human to equipment, and (iii) human to the physical structure. We recorded verbal and nonverbal interactions of patient-staff. Such interactions included their talk, tone of voice, body language, complaints, medical treatment, prioritizing patients, acceptance to the triage room, sitting, standing, and giving them information, the volume of the waiting hall, hygiene etc. Thus we tried to determine meanings behind the verbal and nonverbal interactions, and certain points worthy of taking into the examination in the study.

Along with the observations, we interviewed with the patients, their relatives, the ED physicians and other staff to understand how they structure their external world in critical contexts by their perceptions and interpretations of what they conceive that world to be. These qualitative data revealed valuable information that aided the development of the study hypothesis, the preparation of the questionnaires and explanation of the quantitative findings that the quantitative measures could not highlight.

Finally, we traced the quantitative method by preparing questionnaires. There were 37 questions on the questionnaires. Both years' questions were almost the same, but we added some new questions to measure the direction of the perceived changes that the HM informed us to have implemented. We thus combined qualitative data with quantitative data through the structured questionnaires within the same study.

Patients were asked to rate specific issues concerning their perception of the changes resulting with satisfaction on a 3-point Likert-type scale (*improved/increased, stayed same, deteriorated/decreased*) and degree of satisfaction (quality) on a 5-point Likert-type scale (*very satisfactory to very unsatisfactory*) by years. The questionnaires were mostly filled out using a face-to-face interview technique by putting a tick on a box, and a small portion of them was self-administrated. The respondents were sufficiently instructed about the purpose of the study to give genuine answers, thus the confidentiality was tried to maintain.

The questionnaire included mainly three sets of the questions; (i) personal characteristics such as age, sex, education (Table 1) and waiting time (Table 2) as independent variables, and (ii) the dimensions of satisfaction with the perceived changes cover general service performance, staff's respect and concern, number of doctors, numbering system, physical structure, duration of waiting time, quarrel and disturbances (Table 2), and (iii) the dimensions of quality cover general health service efficiency, respect and concern, medical appliances, hall capacity, hygiene, and triage practice (Table 3).

Patient satisfaction questions to rate the perceived changes were asked in the survey of 2010 only to the participants who had previously visited the ED, and healthcare quality questions were asked to all of them to compare the differences between the two periods. Thus, we aimed at measuring the alteration in the perceptions of cultural changes and its influence on patient satisfaction and service quality. We used χ^2 test for the determination of the relations between the independent and dependent categorical variables, and paired-samples t-test for comparison of quantitative data analysis of the two years.

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RESULTS

As illustrated in Table 1 median age of the respondents was 32 in 2006 and 2010, and although gender difference was great in favor of females in both samples, since it did not pose a significant effect on the satisfaction, we did not attempt to equalize the gap by conducting more surveys. Their other features were also close to each other, not disrupting the overall performance score of the satisfaction measurement.

Table 1. Demographic features of the participants

Features	2006	2010
Age		
Mean	35.3	34.7
Median	32	32
Gender	%	%
Female	66.4	56.0
Male	33.6	44.0
Total	100.0	100.0
Education		
Illiterate or only literate	6.9	11.2
Elementary school	41.6	34.9
High school	33.8	29.4
University	17.7	24.4
Total	100.0	100.0

The survey data of 2010 showed that 279 out of 366 of the participants (76.4%) visited the ED before at least once. As illustrated in Table 2 nearly half of, or the majority of the participants perceived most of the dimensions of satisfaction with the planned cultural changes in a positive direction, an exception is a physical structure that is neutral.

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Table 2. Participants' satisfaction with perceived changes in 2010

Dimensions of satisfaction	Perceived Changes %			χ^2 P-Value				
	Improved	Stayed Same	Deteriorated	Sex Male Female	Age* 18-35 36 \geq	Education* ≤ 12 13 \geq	Wait Time*	Number of visits*
General service performance	65.2	20.2	14.2	0.348	0.004	0.006	0.008	0.816
Duration of wait time	53.4	24.7	21.9	0.526	0.100	0.038	0.027	0.455
Staff respect & concern	49.4	28.5	22.1	0.217	0.002	0.069	0.004	0.799
Number of doctors	42.8	30.9	26.4	0.173	0.057	0.057	0.001	0.337
Numbering system	47.8	27.8	24.4	0.932	0.253	0.554	0.268	0.049
Physical structure	16.7	66.5	16.7	0.016	0.303	0.298	0.756	0.077
Quarrel & disturbances	47.5	37.6	14.8	0.872	0.057	0.491	0.667	0.158

*Categories of participants' characteristics were split into two subcategories because of the rules of Chi-Square test implication can be maintained more accurately.

Majority of the participants (65.2%) believed that the general healthcare service performance increased and only a small portion (14.2%) believed it decreased. Nearly half of the participants (49.4%) perceived the changes concerning *concern and respect* improved as compared to previous years, 22.1% believed it decreased; during our observations a middle-aged frustrated patient suddenly shouted "May God give doctors a little bit (feeling of) mercy; they behave (us) as if they would not die a day" in order to express her dissatisfaction, as she could not achieve friendly or kind behavior as much as she expected to be. But that 42.8% declared that the number of physicians increased, although their number stayed same, assists a significant part of the participants perceived the changes satisfactory. Just as 53.4% perceived the examination duration reduced.

More than half of the participants (58.5%) evaluated the numbering system fair and proper, and 23.5% expressed dissatisfaction that underscores the lack of confidence and trust. We observed some patients were anxiously asking the guards when their turn would come, although the turn-indicator was on. One elderly (in his 65s) whose daughter was ill stood up, wondered a little in the hall and challenged by shouting: "I wished I were in my crazy (youth) days! For I do well know what to do!.." that was his expression of frustration.

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Of the participants, 53.4% perceived the waiting time for examination shortened and evaluated satisfactorily. Only 21.9% perceived it longer than before. During our observations, we encountered some undesired events such as quarrel or strife between patients and staff mostly in the waiting hall and rarely in the examination room as the waiting time longed and a crowd formed. Even though such inappropriate behaviors were significantly decreased from 47.5% to 14.8% there was still some lack. And though some physical changes such as the transformation of an empty room into a triage room, improvement of the examination rooms were realized in the ED, it seems that placement of a police cabin (we did not suggest it) and tea-coffee automat might reduce its functionality. Therefore, a great majority of the participants (66.5%) did not perceive any structural changes.

We investigated the statistical associations between the participants' characteristics and various dimensions of satisfaction and found them differ in the level of significance (shown in Table 2). Among the most significant characteristics associated with satisfaction were age, education and waiting time variables, and sex and number of visits were the least significant. Statistically significant associations were determined between general healthcare service performance satisfaction and age ($p=0.004$), education ($p=0.006$) and waiting time ($p=0.008$); between perceived waiting time and real waiting time ($p=0.027$) and education ($p=0.038$); between staff respect and concern and age ($p=0.002$) and waiting time ($p=0.004$); between number of doctors and waiting time ($p<0.001$) age ($p=0.057$) and education ($p=0.057$); between new numbering system and only number of visits ($p=0.049$); between physical structure and sex ($p=0.016$); between quarrel and disturbances and age ($p=0.057$). The general direction of associations was: satisfaction increases as the patients get older; the educational level increases satisfaction decreases; waiting time increases satisfaction decreases.

To determine the degree of satisfaction we compared the findings of the years 2006-2010, thus we aimed at measuring the role of culture in the perceptions of cultural changes in the ED.

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Table 3. Participants' evaluation of the degree of satisfaction (quality) by years

Dimensions of satisfaction	Year 2006						Year 2010					
	Very Satisfactory	Satisfactory	No Idea	Unsatisfactory	Very Unsatisfactory	Average Performance	Very Satisfactory	Satisfactory	No Idea	Unsatisfactory	Very Unsatisfactory	Average Performance
General service efficiency	3.5	38.1	23.1	28.1	7.2	60.5	15.7	48.4	10.8	18.1	7.0	69.6
Respect & concern	3.6	40.5	14.3	32.1	9.4	59.3	15.1	49.3	7.2	20.4	7.9	68.7
Medical appliances	2.7	30.0	35.8	27.3	4.2	59.9	8.0	29.9	42.2	15.6	4.3	64.3
Hall capacity	3.8	28.6	31.9	28.4	7.3	58.6	4.6	25.8	7.9	43.0	18.5	51.0
Hygiene	4.0	53.7	9.7	24.7	7.8	64.2	13.2	58.5	5.0	17.6	5.7	71.2
Duration of wait time*	27.4	7.1	-	9.4	38.3	37.6	69.9	15.8	-	7.1	3.3	68.9
Triage practice**							19.7	47.8	13.2	11.5	7.8	72.0

*Duration of taking a patient into examination was split into four categories: *at once, 1-5 minutes, 6-15 minute, 16-30, not yet examined, and we saw the placement of the categories fit as in Table 3.*

***Since triage practice was not practiced in 2006, it was asked only in 2010.*

An overview in Table 3 indicates that besides hall capacity all of the quality dimensions were evaluated more satisfactorily in 2010 than that in 2006. Among all of the dimensions general health service efficiency was rated most satisfactory (after triage system, which was not measured in 2006). While general health service sufficiency was 41.6% it strikingly rose to 64.1%. In the same direction, the quality of staff's respect and attention promoted from 44.1% to 69.5%, but despite a drastic improvement, still, the existence of 27.6% insufficiency should not be ignored in 2010 may reflect negatively on patients' credence to the ED. Improvement regarding the medical appliances was met satisfactorily, rising from 32.7% to 37.9%. We several times heard in 2006 some verbal complaints –usually by exclaiming- on broken-down of, or inexistence of, medical equipment. But, during our second study, we did not encounter such problems. Our qualitative data supported the survey findings.

We observed that the patients spent most of their times in the waiting hall, and most of the verbal and nonverbal interactions occurred there. Insufficiency in the hall capacity rose from 28.4% to 43.0%. The reason for such a negative perception has been explained above.

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Cleanliness sufficiency moved from 57.7% up to 71.7%. In 2006 we observed that when the toilets were not clean as much as the patients expected, they showed their reactions verbally since there was not any complaint box to write their complaints. During the second study, one box was placed.

After the revised numbering system and triage practice were implemented, the security was not calling patients anymore. As a result, 67.5% of the patients found the triage very satisfactory or satisfactory. According to our observational findings, the reason of insufficiency (19.3%) was that the triage unit sometimes remained empty or trainees performed this duty and failed to perform it satisfactorily.

Based on the satisfaction indicators, the average service satisfaction was calculated by 60.5% in 2006 and 69.6% in 2010. Using paired sample t-test, we found the difference meaningful ($t=4.67$, $p<0.001$). Such a high increase indicates that certain changes carried out in the direction of the findings and suggestions of the study in 2006 were positively perceived by the patients compared to their expectations, clearly reflecting on their satisfaction and more proper interaction with the health providers.

DISCUSSION

Most previous researches have taken into account only one or two aspects of satisfaction and quality, (Rahmqvist and Bara, 2010) while our paper focuses on several aspects of satisfaction and quality to obtain a broader perspective and discriminate between the influences of the different factors. The findings expand and deepen the role of the culture of the two groups of people, each of whom has own subculture, through which they construe the same event differently evaluated. It is for the same reason that although the sex distribution of patients officially is almost equal, in both studies the number of the women sampled appeared higher than that of the men. In Turkish society, women follow the tradition of becoming a patient companion and patient visitor more frequently than men (www.haber7, 2010).

In the previous studies, different outcomes were obtained as regard to the relationship between patient characteristics and patient satisfaction (Efe, 2007). The results of our analyses confirmed the findings of other studies that satisfaction is associated with the participants' age and education. Age was highly significantly related to satisfaction (χ^2 $p=0.004$). Many other studies have found that older patients are more satisfied than younger (Rahmqvist and Bara, 2010) almost regardless of culture, country, (Romanow, 2002) and as the level of education increases the level satisfaction decreases ($p=0.006$). Since the patients with high education level have higher standard expectations (Bostan, Acuner and G. Yilmaz, 2007). But like us ($p=0.348$), they also could not determine any significant difference between men and women regarding the level of satisfaction (Yilmaz, 2000; Scott et al, 2003a).

Our observational findings go parallel with researches that argue EDs are overcrowded (Söyük and Kurtuluş, 2017), stressful and problematic areas, and health providers are under pressure (Söyük and Kurtuluş, 2017, Landau et al, 2018; Person, Spiva and Hart. 2013; Holm and Fitzmaurice, 2008). A correspondingly great deal of disturbances like quarrels and disputes occur there (Öztaş, 2018; Söyük and Kurtuluş, 2017). The paper suggests that while the explicit cause of overcrowding is that most patients visit the ED between 19:00-23:00 leads a longer waiting time and high density, its implicit reason is that people see in

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themselves a legitimate right to visit the ED however their health state is and whenever they wish. Their subculture sustains and provokes them. This result confirms Kondra and Hurst (2009): sublimated and/or taken for granted elements of culture are not so easily changed once gained. However, as the patients did not assess the changes functional, they did not feel enough satisfaction with the physical changes alone; so, degree of satisfaction with the hall capacity declined from 58.6% to 51.0%.

Our survey findings overlap with several studies that have suggested that as the waiting time, real or perceived, increases patient satisfaction decreases ($p=0.019$), and long waits beyond the expectations create unpredictable reactions, which rouse disorder and dissatisfaction in EDs (Öztaş, 2018; Landau et al, 2018; Söyük and Kurtuluş, 2017; Yildirim et al, 2005). Based on our qualitative findings and survey results we suggest that the more overcrowded is a social context, the longer the perceived waiting time, and the more problematic it is.

The paper supports prior survey results suggesting a high positive correlation between the physician respect and patient satisfaction ($\chi^2 p<0.001$). [2,48] The perceived respect and attention drastically increased from 44.1% to 64.4%, and a relatively great part of the participants (42.8%) assessed the number of physicians increased although it remained the same. Some researchers argue that health staff's attention and respect is one of the most significant factors related to global patient satisfaction and the outcome in well-social relations (Franco, Bennett and Kanfer, 2002).

That approximately one-third of the patients did not know in what circumstances they must visit the ED is consistent with the previous studies where researchers found that those patients whose illness did not require emergency care applied to EDs (Kilic et al, 2011; Oktay et al, 2003). But this situation does not legitimate the ED physicians' opinion that 70-80% of the patients do not have symptoms requiring urgent care. For, when the patients' diseases, as written in the questionnaires, were reevaluated by a senior ED physician appointed by the HM, it appeared that the rate of those requiring urgent care was 48.6%, those not requiring was only 11.6% and those in question was 39.8%. That means the number of genuine ED patients is rather high contrary to the physicians' perception ($p<0.001$). Kilic et al. (2011) also found a similar result that 90.7% of the ED visitors were genuine patients. This is an implicit conflicting situation, many times resulting in an improper interaction between physician and patient. Skar, Bruce and Sheets (2015) similarly suggest that ED staff hold the underlying assumption and beliefs that the ED is not the place for older adults with non-urgent needs, and therefore their values impact the respect older adults are given and the care they receive. Here appears that as long as the role players' perceptions and expectations of each other differ, the problem seems to last. For the solution of the problem we recommend physicians should recognize an ill person as one of 'inferior quality, bad in condition, wretched, impolite, improper, incorrect, bad morally, evil in nature or character, malevolent, wicked, vicious, wrong' (Skidmore and Thackeray, 1976), and should accept anyone considering oneself genuinely ill, i.e. deserving emergency care. For any patient one's illness, even though it is unserious in reality, is the most critical illness (Fisek, 2015).

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Despite certain deficiencies and impediments in its exercise as a newly introduced cultural item, the most remarkable process the HM put into practice for promoting the overall healthcare quality and patient satisfaction was the triage practice ($p < 0.001$). This result supports the view that success in the triage is possible with the provision of optimal physical conditions and with the culturally trained and experienced paramedical staff (Saz, Ozen and Karapinar, 2009). The triage had a significant role to the rise of total service performance from 60.5% to 69.6% (t-test: $p < 0.001$) by performing a filtering task and some patients attribute it to the examination period, and perceive the waiting time shortened and equity realized. It allowed for the majority of the patients perceive that they were instantly examined. Fry and Stainton (2005) also found that notions of timeliness, efficiency and equity are embedded in a culture of ED care. The paper reveals that the revised numbering system based on the triage was perceived as more fair and trustworthy (58.5%) as compared to before. But that there is still a considerable amount of dissatisfaction (23.5%) due to a perceived lack of trust and confidentiality proves the view of Seltzer et al.[13] cynical and skeptical attitudes stem from poorly managed internal relationships and interactions.

CONCLUSION

Various planned changes that the HM made in the ED were significantly perceived by patients as satisfactory. Among the corrective measures in the ED culture, the dimension of human to human interactional improvements was perceived more satisfactorily than the others. Health staff interactive training and triage practice played a more critical role in decreasing the problems and promoting satisfaction and service quality. As the perceived general performance of staff increases, their number is perceived positively increased although it remains the same in reality. It appears that high healthcare performance covers some lacks in intensive settings. When planned changes are managed by taking the EDs' subcultures into account implementation of these changes are perceived more satisfactorily since the subcultures influence the likelihood of success for change strategies.

Finally, the paper suggests that satisfaction and healthcare quality can be obtained in a problematic ED as a result of expected reciprocal relations, smooth interactions, depending on the degree of toleration of conflicting expectations, and obedience of the role players to the subcultures of each other. Otherwise organizational changes without changes in organizational culture would fail. However further research is needed for the impact of ED patient-health staff subcultures on the improvement of their relations leading individual satisfaction, organizational order and social equilibrium.

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RESOURCES

- Babbie, E. (1986). *The Practice of Social Research*. Belmont: California.
- Benzies, K. M. and Allen, M. N. (2001). Symbolic Interactionism as a Theoretical Perspective for Multiple Method Research. *J AdvNurs*. 334: 541-7.
- Brown, A. (1995). *Organizational Culture*. London: Pitman.
- Bostan, S., Acuner, T. and Yilmaz, G. (2007). Patient Customer Expectations in Hospitals. *Health Policy* 82: 62-70.
- Choi, Y. F, Wong,,T. W. and Lau, C. C. (2006). Triage Rapid initial Assessment by Doctor TRIAD Improves Waiting Time and Processing Time of the Emergency Department. *Emergency Med Journal* 234: 262-5.
- Cockerham, W. J. (2001). Medical Sociology and Sociological Theory. in W. J. Cockerham (ed). *The Blackwell Companion to Medical Sociology*. Blackwell Publishers: Maiden, Massachusetts. Assessing the Impact of Total Quality Management and Organizational Culture on Multiple Outcomes of Care for Coronary Artery Bypass Graft Surgery Patients. *Medical Care*. 38(2): 207-17.
- Denison, R. D. (1996). What is the Difference between Organizational Culture and Organizational Climate? A Native's Point of View on a Decade of Paradigm Wars. *The Academy of Management Review*. 21(3): 619-654.
- Davies, H., Nutley, S. and Mannion, R. (2000). Organisational Culture and Quality of Health Care. *Quality in Health Care* 9: 111-119.
- Efe, F. (2007). Kocaeli Devlet Hastanesi Poliklinikleri Sorunları, Hasta Beklentileri, Memnuniyeti Araştırması. *Unpublished Report*, Kocaeli State Hospital.
- Fakhoury, K. H. W. (1998). Satisfaction with Palliative Care: What Should We Be Aware of? *Int. Journal of Nursing Studies*. 353: 171-176.
- Fisek, N. *Türkiye'nin Sağlık Sorunları ve Çözüm Yolları*, www.ttb.org.tr/n_fisek/kitap. Accessed: June 02, 2015.
- Franco, L. M., Bennett, S. and Kanfer, R. (2002). Health Sector Reform and Public Sector Health Worker Motivation: A Conceptual Framework. *Social Science and Medicine*. 548: 1255-66.
- Fry, M. and Stainton, C. (2005). An Educational Framework for Triage Nursing Based on Gatekeeping, Timekeeping and Decision-Making Processes. *Accident and Emergency Nursing*. 13: 214-19.
- Greenwoods, R. and Hinings, C. R. (1996). Understanding Radical Organizational Change: Bringing together the Old and the New Institutionalism. *The Academy of Management Review* 21(4): 1022-1054.
- Gürcan, M. and Çolak, C. (2011). Acil Servis Ünitelerinde Hasta Yoğunluğunun Analizi. *Türkiye Klinikleri Bioistatistik*

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Dergisi 3(1).

Hatch, M, J. and Cunliffe, A. L. (2006). *Organizational Theory*. New York: Oxford University Press.

Helfrich, C. D., Li, Y. F., Mohr, D. C., Meterko, M. and Sales, A. E. (2007). Assessing an Organizational Culture Instrument Based on the Competing Values Framework: Exploratory and Confirmatory Factor Analyses. *Implementation Science* 2(13): 1-14.

Holm, L. and Fitzmaurice, L. (2008). Emergency Department Waiting Room Stress: Can Music or Aromatherapy Improve Anxiety Scores? *Pediatric Emergency Care* 24(12): 836-8.

Jandt, F. E. (2003). The Disputes Over Defining of Culture. http://www.corwin.com/upm-data/5244_Jandt_Final_Pages_Chapter_1.pdf. Accessed June 12, 2015.

Kilic, T., Efe, F., Ergüney, Ş., Niyaz, Z., Çetin, M. A., et al. Triajve Numara Sistemi Uygulamalarının Acil Hasta Bekleme Süresine Acil Hasta Memnuniyeti Üzerine Etkisi: Kocaeli Devlet Hastanesi Örneği. In *III. Uluslararası Sağlıkta Performans ve Kalite Kongresi Sozel Bildiriler Kitabı* edited by: U. Beylik, O. Onder, H. Guler, and A. Ozturk. Kasım 2011.

Kondra, A. Z. and Hurst, D. C. (2009). Institutional Processes of Organizational Culture. *Culture and Organization* 15: 39-58.

Landau S. F., Bendalak, J. Amitay, G. and Marcus, O. (2018). Factors related to negative feelings experienced by emergency department patients and accompanying persons: an Israeli study. *Isr J Health Policy* 4;7(1):6.

Larsson, W.B., Larsson, G. and Starrin, B. (1999). Patients views on quality of care: a comparison of men and women. *Journal of Nursing Management* 7(3):133-139.

Linder-Pelz, S. U. (1982). Toward a Theory of Patient Satisfaction. *Social Science & Medicine*. 16(5): 577-82.

Martin, J. and Seihl, C. (1983). Organizational Culture and Counterculture: An Uneasy Symbiosis. *Organizational Dynamics* 12(2): 52-64.

Mechanic, D. (1989). Medical Sociology: Some Tensions among Theory, Method and Substance. *Journal of Health and Social Behaviour* 30(2): 147-160.

Oktaç, C., Cete, Y., Eray, O., Pekdemir, M. and Gunerli, A. (2003). Appropriateness of Emergency Department Visits in a Turkish University Hospital. *Croat Med Journal*. 44(5): 585-91.

Olafsdottir, S. and Pescosolido, B. A. (2009). Drawing the Line: The Cultural Cartography of Utilization Recommendations for Mental Health Problems. *Journal of Health and Social Behaviour* 50(2): 2228-244.

Oliver, C. (1992). The Antecedents of Deinstitutionalization. *Organizational Studies* 13(4): 563-588.

Oztaş, İ. (2018). *Acil Servis Hemşirelerinin Şiddete Maruz Kalma Durumları ve Baş Etme Yöntemlerinin Belirlenmesi*, Unpublished Master Thesis, Hasan Kalyoncu Üniversitesi

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RESOURCES

- Pedersen, J. S. and Dobbin, F. (2006). In Search of Identity and Legitimation: Bridging Organizational Culture and Neoinstitutionalism. *Sepecial Issues of American Behavioral Scientist* 49(7):897-907.
- Person, J., Spiva, L. and Hart, P. (2013). An Ethnographic Study: The Culture of an Emergency Department an Ethnographic Study: The Culture of an Emergency Department. *International Emergency Nursing* 21: 222-227.
- Rahmqvist, M. and Bara, A. (2010). Patient Characteristics and Quality Dimensions Related to Patient Satisfaction. *Int. Journal for Quality in Health Care* 22:2: 86-92.
- Romanow, R. J. (2002). *Building Values on the Future of Health Care in Canada – Final Report*. November.
- Saz, E. U., Ozen, S. and Karapinar, B. (2009). Pediatrik Acil Servisler Detriyaj Protokolleri. *Pediatrics*. 184: 289-96.
- Schein, E. H. (1990). Organizational Culture. *American Psychologist* 45(2): 109-9.
- Scott, T., Mannion, R., Davies, H. and Marshall, M. (2003a). The Quantitative Measurement of Organizational Culture in Health Care: A Review of the Available Instruments. *HSR: Health Services Research* 38 (3): 923-945.
- Scott, T., Mannion, R., Davies, H. and Marshall, M. (2003b). Implementing Culture Change in Health Care: Theory and Practice. *International Journal for Quality in Health Care*. 15 (2): 111-118.
- Scott, T., Mannion, R., Davies, H. and Marshall, M. (2003c). *Health Performance and Organizational Culture*. Oxford: Radcliffe Medical Press.
- Seltzer, T., Gardner, E., Bichard, S. and Callison, C.. (2012). Public Relations Review PR in the ER: Managing Internal Organization-Public Relationships in a Hospital Emergency Department. *Public Relations Review* 38: 128-136.
- Skar, P., Bruce, A. and Sheets, D. (2015). The Organizational Culture of Emergency Departments and the Effect on Care of Older Adults: A Modified Scoping Study. *Int. Emergency Nursing* 23(2): 174-8.
- Skidmore, R. A. and Thackeray, M. G. (1976). *Introduction to Social Work*. Prentice-Hall: Englewood Cliffs.
- Söyök, S. and Kurtuluş, A. (2017). Acil Servislerde Yaşanan Sorunların Çalışanlar Gözünden Değerlendirilmesi *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi* 6(4): 44-56.
- Tasso, K. H. and Behar-Horenstein, L. S. (2008). Attributes of Patient-Physician Interactions in a Teaching Hospital. *Hospital Topics: Research and Perspectives on Healthcare* 86:21-29.
- TUIK 2008. www.tuik.gov.tr. Accessed: September 03, 2015.
- Turner, J. H. (1982). *The Structure of Sociological Theory*. The Dosey Press: USA.

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Vosk, A. and Milofsky, C. (2002). The Sociology of Emergency Medicine. *Emergency Medicine News*.Part I-II-III.

Ulmer, J.T. and Wilson, M.S. (2003). The Potential Contributions of Quantitative Research to Symbolic Interactionism. *Symbolic Interaction*. 264:531-552.

Umiker, W. (1999). Organizational Culture: The Role of Management and Supervisors. *Health Care Supervisor* 17 (4): 22-7.

Williams, B. 1994. Patient Satisfaction: A Valid Concept? *Social Science and Medicine* 384: 509-516.

www.haber7.com/haber/Doktor-gozuyle-cins-cins-refakatci.php. Accessed December 11, 2010.

Yildirim, C., Kocoglu, H., Goksu, S., Gunay, N. and Savas, H. (2005). Patient Satisfaction in a University Hospital Emergency Department in Turkey. *ActaMedica (Hradec Kralove)*. 481: 59-62.

Yilmaz, M. (2000). *Ameliyat Oncesi Ogretimin Ameliyat Sonrasi Komplikasyonlara ve Hasta Memnuniyetine Etkisi*, Unpublished Doctoral Dissertation, Hacettepe Universitesi: Ankara.

Young, J. T. (2004). Illness Behaviour: A Selective Review and Synthesis. *Sociology of Health & Illness* 261: 1-31.

Zhou, P., Bundorf, K., Chang, J., Huang, J. X. and Xue. D. (2011). Organizational Culture and Its Relationship with Hospital Performance in Public Hospitals in China. *Health Service Research* 46(2): 2139.