Relationship between Service Quality and Patient Satisfaction in Case of TRNC

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ABSTRACT

The purpose of this thesis is to measure the hospital service quality in Turkish Republic of Northern Cyprus (TRNC) from the perspective of patients and analyze the relationships between service quality and patient satisfaction. Correlation matrix, Independent Samples Test, one-way ANOVA and multiple regression techniques are conducted to investigate the hospital service quality as well as the relationships between service quality and patient satisfaction. The results show that patients perceive service quality in a different way and they perceive the quality in private hospitals higher than in public hospitals. The results also provide several useful guidelines to the administration of hospitals in TRNC and the most important satisfaction factor is estimated as quality.

Keywords: service quality, patient satisfaction, independent sample test, ANOVA analysis, OLS, hospitals of TRNC

ÖZ

Bu çalışmanın amacı hastaların bakış açısından KKTC'de hastane hizmet kalitesini ölçmek, ve hizmet kalitesi ve hasta memnuniyeti arasındaki ilişkileri analiz etmek. Koralasyonanalizi, t değerleri ve ANOVA analizi kullanılarak hastane hizmet kalitesini ve hizmet kalitesi ile hasta memnuniyeti arasındaki ilişkileri ölçer. Ampirik sonuçlar hasta algılamasının hizmet kalitesini farklı yönde algıladığı ve bu algının özel hastahanelerde devlet hastahanelerine gore daha yüksek olduğu yönündedir. Sonuçlar ayni zamanda birçok mevzuatın hastahanelerin hizmet gelişimine fayda getirdiğini göstermiştir. Ayrıca, en önemli hasta memnuniyetinin hizmet kalitesi olduğu da yapılan analizler sonucunda ispat edilmiştir.

Anahtar Sözcükler: t-testi, Anova analizi; EKKY; hızmet kalitesi, hasta memnuniyeti, KKTC hastaneleri

To my both Aliyev and Abdalbari families

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LIST OF ACRONYMS/ABBREVIATIONS

CS: Customer Satisfaction

SQ: Service Quality

IN: Infrastructure

PQ: Personnel Quality

PCC: Process of Clinical Care

AP: Administrative Procedures

SM: Safety Measures

TRNC: Turkish Republic of Northern Cyprus

Chapter 1

INTRODUCTION

The health of a nation is the most important factor of existence and reproduction of human capital in the modern conditions of the world community development. Health care in this regard has particular importance because it aims the restoration, protection and support of physical, mental and social well-being of population. From the point of psychological view, the desire to get medical care, according to the humanistic theory of an American psychologist A. Maslow (1943), refers to the security needs, which is located at the base of "hierarchy of needs" only one step higher than the satisfaction of human physiological needs.

Today satisfaction of patients with hospital services is considered as one of the most important indicators of its quality, since patient satisfaction is an estimated integrative indicator of a hospital institution and the whole health system, and from the economical and marketing point of view it is a predictor of repeated requests of patients for medical care in the given hospital. Researches about treatment satisfaction allow creating a development strategy of the medical organizations to compare the popularity of individual treatment programs, the activities of healthcare organizations and offices in their structure as well as doctors. Further, a study on patient satisfaction of medical services, identifying the causes of dissatisfaction and the factors influencing it, as well as monitoring and ensuring patient satisfaction help to improve the quality of care. Causes of dissatisfaction can depend on either

organization or patient. The first depends primarily on health care organizations: dissatisfaction with the organizational moments (timetable of the organizations and individual queue, shortage of staff), breach of ethics and deontology by medical personnel, violation of methods of testing and treatment, lack of skills, poor material and technical base. The second depends on the patient: unreasonable requests and requirements for medical personnel, violation of doctor's instructions (as a consequence, the lack of effect of treatment). Therefore, conducting market research to explore patients' expectations of health care is crucially important to understand the expectations of patients.

Service quality has become the focus of considerable attention in respect of satisfying and retaining customers in the service industry (Spreng and MacKoy, 1996; Reichheld and Sasser, 1990). Therefore, service quality is one of the major predictors of customer satisfaction, the measurement of which can be used to gain insights about organizational functioning.

This thesis presents the results of a service quality perception study designed to find out the perceptions and expectations of patients' about service quality in three TRNC based hospitals, using the multidimensional, generic, internationally used market research instrument proposed by et al. Padma (2009).

1.1 Motivation for the current study

Increased patient satisfaction with the healthcare service quality is one of the most important tasks that any medical institution faces. In today's conditions for searching new approaches to advance the quality of health services, the opinions of patients may be one of the criteria in the comprehensive evaluation of hospitals. If the results

of researches on satisfaction with the quality of service provided accurately reflect either the positive and or negative trends in a hospital, the factors that reduce health care patient satisfaction will be identified. This allows taking corrective actions timely, and serves as an objective base for making decisions by the management of an institution. Currently satisfaction score is mainly done on the basis of the use of the sociological approach, which consists in the study of the views of patients on the various aspects of healthcare quality on the basis of specially developed questionnaires. In terms of the process of improving the quality of hospital services outlined approach calls more interest among specialists in the field of health.

1.2 Objectives of study

The aims of the study corresponding to the motivation of the research are the followings:

- To construct a comprehensive tool conceptualizing service quality perceptions in health institutions from the perspective of patients in TRNC, and
- To observe the relationship between service quality and patient satisfaction from the perspective of patients.
- To compare the quality standards in public and private hospitals of TRNC

The result of this paper will complement the general understanding of the quality of hospital service and its influence on patient satisfaction which results in patients' loyalty.

1.3 Structure of Thesis

Chapter 1 is introductory part. Chapter 2 reviews the recent evidence on the issue. Chapter 3 contains an overview on the concept of healthcare industry in the North

Cyprus economy. Chapter 4 describes data collection procedure, methodology and the instrument which are used in this study. Chapter 5 presents empirical results. Chapter 6 concludes remarks, managerial implications and provides some recommendations for further studies.

Chapter 2

THEORETICAL BACKGROUND

The study examines the service offered by hospitals based on the concepts of "service quality" and "patient satisfaction". In the following section literature reviews on appropriate constructs are discussed in order to create the research hypotheses.

2.1 Service Quality

With an increase of service establishments and their types, the demands of consumers also increase. This usually depends on their environments. Consumers gain knowledge through advertising which makes them increase their disposable incomes. In addition, they became highly dependent on services. Because of and inadequate management, insufficient labor skills, high employee turnover and lack of technology make service industry fail in responding to the demand of consumers. As competition rises, delivering better service becomes extremely important. Together with other forerunners of customer satisfaction as personality of the customer, price of service and the situation (Natalisa and Subroto, 1998), the quality of service also plays a distinct role in marketing since it is within the management of the service provider, and with an improvement of service quality, customer satisfaction will be improved as a consequence, which in turn affects the customer's purpose to purchase the service.

Parasuraman et al. (1985) defined service quality as "the global assessment or attitude of overall distinction of service". Consequently, it is the gap between customers' expectations and perceptions of the delivered service. Since the investigation is concentrated on examining the patients of public and private hospitals, the health service quality is defined as "the overall excellence of hospital services that satisfy patients' expectations".

There is a variety of service quality measurements, proposed by different researchers across the world. Martilla et al. (1977) proposed Importance-Performance analysis instrument for service quality measurement. This technique was used to identify the items which need immediate improvement and the resources the distribution of which are improper. While studying the four service industries as banking sector, credit card companies, long-distance telecommunication firms and motor repair shops, Parasuraman et al. (1985) found out SERVQUAL with initial ten dimensions of service quality: reliability, responsiveness, courtesy, credibility, access, communication, understanding and knowing the customers, security, competence and tangibles. In 1988 the number of dimensions was decreased till five (responsiveness, reliability, empathy, assurance and tangibles). Cronin and Taylor (1992) found out performance only measurement scale which they named SERVPERF. According to Sureshchandar et al. (2001) the dimensions of service quality are core service or service product, human element of service delivery, systematization of service delivery, tangibles of service, and social responsibility. The tool suggested by Haran et al. (1993) offers that doctor, drug, diagnosis, duration, distance, affordability and prompt service are the main determinants of customer satisfaction. The Attribute Service Quality Model claims that an organization provides excellent service if it

meets customer needs and expectations systematically (Haywood-Farmer, 1988). This model states that services have three basic attributes to determine the quality: physical facilities and processes; people's behavior, and professional judgment. The model proposed Brogowicz et al. (1990) states that company image, external influences and traditional marketing activities are the three main determinants of quality measurement. The model of Perceived Service Quality and Satisfaction was designed by Spreng and Mackoy (1996) to gain insights about the relationship between perception of service quality and customer satisfaction. The model underlines the impact of expectations, perceived performance, desired congruency and expectation disconfirmation on overall service quality and customer satisfaction. An integrative model of customer value, service quality and customer satisfaction suggested by Oh (1999), is concentrated mostly on post purchase behaviors of customers. The model consists of key variables such as perception, consumer satisfaction, service quality, customer value and intentions to repurchase that are the factors affecting functional and technical quality.

2.2 Customer Satisfaction

The quality of service and customer satisfaction are undoubtedly the two main dimensions that are the essence of the theory and practice of marketing. In today's highly competitive world in order to provide high quality product companies should have sustainable competitive advantage which in turn will lead to satisfied customers. Serving customers and providing them with satisfaction have become the motto of modern marketing theory (Mishra, 2010).

Kotler (1996) described customer satisfaction as the level of customers' feeling resulted from the comparison of perceived and expected performance of the service.

In the case of health industry it is the level of service quality performance of a hospital that meets patients' expectations. As Sureshchander (2002) suggested, the evaluation units of customer satisfaction should be produced with the same factors as service quality.

During the tests of SERVQUAL scale modification Ruyter et al. (1997) identified the effect of service quality on customer satisfaction and concluded that service quality is the forerunner of customer satisfaction. Sureshchandar et al. (2002) also mentioned high impact of service quality on customer satisfaction. Bitner and Hubert (1994) stated that SERVQUAL instrument which is a good determinant of service quality can be a good predictor if customer satisfaction as well.

Whilst there is a general similarity between customer satisfaction and service quality according to one group of researchers, others use different instruments to scrutinize them separately. For example, Taylor and Cronin proposed one scale item to identify satisfaction of a customer by asking single question about overall feeling towards a company. However, this tool fails to recognize the multidimensionality of customer satisfaction in its nature. Shemwell et al. (1998) used five-scale item to measure customer satisfaction with the service provider, while Price et al. (1995) constructed six-scale item for the same purpose. Westbrook and Oliver (1981), Suprenant and Solomon (1987), Oliva et al. (1991) have also suggested multi-scale items to determine customer satisfaction with the service suggested.

2.3 Customer Loyalty

Oliver (1997) defined loyalty as a deeply held aspiration to repurchase or patronize desired product consistently in the future, regardless of situational factors and

marketing efforts having the possibility to induce switching behaviors. Customer loyalty is concerned with the chance of a consumer returning, providing strong word-of-mouth references and publicity, and making business referrals, (Bowen&Shoemaker, 1998), which generates measurable positive financial results (Duffy, 2003).

The result of literature review shows that there is a great relationship between the three concepts and it is necessary to underline that the customer loyalty is the outcome of satisfaction which in turn is the outcome of service quality. So the adequate measurement and management of the quality of a service delivered can be a good predictor of an organizational success.

Many studies are done to study the relationship between customer satisfaction and customer loyalty. H.M. Goncalves and P. Sampaio (2012) studied the link between customer satisfaction and customer loyalty. According to their findings, customer satisfaction has direct positive impact on customer loyalty, but demographic variables such as gender and age can act as moderators.

M. Fraering and M.S. Minor (2012) surveyed undergraduate and college graduate students in Texas, Indiana, Virginia, Utah, Florida, North Carolina and New Mexico, as a result of which 493 questionnaires were received. The majority of respondents indicated that customers which are satisfied with the service mostly have repurchase intention.

The study in Stanford University, USA was performed as a result of data collection from 678 different hospitals. The results showed patient satisfaction is positively correlated with the decision to return to a specific hospital. However, in regions with more than ten hospitals, loyalty level is not high, since patients have several choices (D.P.Kessler, 2009).

2.4 Service Quality in Healthcare

Zeithaml *et*. al. (1990) defined service quality as the perception of how well a service meets or surpasses the expectations and it is evaluated by consumers not by organizations. This feature compels marketers to scrutinize the service they provide from consumers' viewpoint. Therefore, it is vital for a company to identify what consumers wait for and then develop products that meet or surpass their expectations. R. R. Ramsaran-Fowdar (2007) states that patients who perceive they are content with services are likely to exhibit favorable behavioral intentions that are beneficial for the long-term success of hospital. The researches which were made do identify the quality dimensions and the level of quality in the hospitals of Saudi Arabia, India, Bangladesh, Bangalore, USA, Mauritius, Malaysia, Thailand and Korea are described below.

2.4.1 Examples of Service Quality Measurement across the World

H.M. Al-Borie (2010) has studied Saudi Arabian hospitals to investigate the SERVQUAL dimensions and the relationship of those dimensions and demographic factors (age, sex, education, income and occupation) of the population. 1000 questionnaires were distributed to randomly selected patients from each demographic category in five hospitals. 749 questionnaires were analyzed and SERVQUAL was proved to be suitable and reliable instrument. The results revealed that education,

sex, occupation and income were statistically important in affecting patients' satisfaction; only patient age was not significant.

Researchers generally divide quality into technical and functional. Technical quality describes technical accuracy and procedures of an organization, whereas functional quality exists to define in which manner service is delivered to customers. Research undertaken in five hospitals of Bangalore with sample of 500 patients indicated that perceptions of quality differ from customer to customer (R. Rohini, B. Mahadevappa, 2006). Analyses also showed that there is a difference between customer perception of quality and company's perception about customer expectations. SERVQUAL instrument was used to measure the quality. According to findings, the quality rate differs in all five hospitals and there is a substantial gap between five quality dimensions (Reliability, Responsiveness, Assurance, Empathy, Tangibles) among the five hospitals of Bangalore.

Since healthcare providers in developing countries ignore customer perceptions of quality, patients do not have the confidence to choose among health care facilities. The study about service quality perceptions and patient satisfaction in developing countries proposed by S.S Andaleeb was patient-centered (2001). The purpose of it was to identify quality factors that are important to patients. Secondary research took place first to find out the background information about health service quality in Bangladesh. Qualitative research was conducted with 20 patients. 300 questionnaires were distributed in 57 hospitals and clinics of Dakha City and 216 of them were completed. The investigation suggested analyzing 5 factors - responsiveness, assurance, communication, discipline and baksheesh (tip). The result showed that all

five dimensions were important to determine patient satisfaction. Discipline has the highest effect on customer satisfaction, followed by assurance, responsiveness, communication and baksheesh.

In the modern life a company seeks to collect the maximum amount of information about its customers in order to be able to satisfy them. In the study of Indian hospitals by P. Padma, C. Rajendran and L. P. Sai (2009) authors compared two instruments SERVQUAL and SERVPERF, as a result of which they found out that SERVPERF acts as a better measurement of customer satisfaction. It was also proved that service quality in any organization leads to customer satisfaction, which in turn changes the behavioral intentions.

In the study of service quality and its impact on customer satisfaction in Indian hospitals the authors evaluate quality of health care in terms of 8 factors: Infrastructure, Personnel quality, Process of clinical care, Administrative procedures, Safety indicators, Hospital image, Social responsibility, Trustworthiness of the hospital (P. Padma, C. Rajendran and P. S. Lokachari, 2010). Questionnaires were given to both patients and attendants in order to have understanding about their perception of quality. The result of analyses revealed that personnel quality which refers to quality of all staff in delivering service was the most important indicator of service quality to both patients and attendants. Personnel should be responsive, reliable, sincere and friendly with patients and their attendants. Among other indicators, customer satisfaction has significant relationship with clinical care, hospital image and trustworthiness, whereas attendant satisfaction was impacted by infrastructure and administrative procedures. These findings show that health service

providers are expected to focus on the needs of both patients and attendants to be able to achieve the holistic view of their service.

When the birth and death rates are balanced and diseases are not widespread, the population will be prosperous. Therefore, the quality of healthcare is important. India, which was not well known with its health quality in the past, is a competitive country with its both public and private hospitals today. Healthcare in India is focusing on customer expectations and aims to provide high quality service. The study in Chennai aimed to identify patient-perceived dimensions of total service quality in healthcare industry (M. Duggirala, C. Rajendran and R.N. Anantharaman, 2008). As a result of pilot survey, questionnaires were developed and distributed to 300 patients across India. Only 33% of sample responded. The study tested the relationship of Infrastructure, Personnel quality (Doctor's care, Nursing care, Paramedical and Support staff quality, Safety indicators, Overall experience of medical care, Social responsibility dimensions with patients' perception of health care quality. Responses and analyses revealed that all 7 dimensions have a positive relationship among each other and are important predictors of customer satisfaction in healthcare.

During the last decade, more attention has been paid to evidence-based strategies in delivering high quality health care. The Veterans Health Administration (VHA) has achieved a considerable success in improving health care through the use of clinical performance measures (T. J. Craig, J. B. Perlin, B. B. Fleming, 2007). To measure performance 24 performance measures were used and divided into 5 categories, including outpatient screening, counseling for tobacco users and patients with

hypertension and obesity, outpatient and inpatient heart sicknesses, diabetes mellitus and immunization. 92 out of 162 facilities scored high performance at least from 1 measure. Those facilities that scored highest in performance measures were asked about their strategies. Most commonly used strategies were organizational change, clinical reminders, feedback to providers and staff education.

The cross-sectional study of 4 hospitals in US emailed survey questionnaires to the sample of 6000 randomly selected patients. The instruments used to measure quality were admission process, nursing care, physician care, compassion to family/friends, pleasantness of surroundings, and discharge process (Otani, K.Kurz, Richard S., 2004). The aim of this study was to identify the importance of six attributes and their rank orders in determining customer satisfaction. The result showed that the impact of nursing care on service quality is higher than other attributes, thus, nursing care is more significant in refining overall patient satisfaction and behavioral intentions. The finding also revealed that over time nursing care, surroundings and compassion to family/friends will have a diminishing marginal utility function and decrease the patients' satisfaction and repurchase intentions.

While studying Total Quality Management (TQM) tools and techniques it is inescapable not to search about determination of customer satisfaction as well as factors of dissatisfaction as it is the main ingredient of TQM. The Thai researcher M. A. Shareef (2006) aimed at identifying the elements of patient satisfaction, by gathering information through both written questionnaires and interviews, and then statistically defining interrelation between factors and elements of dissatisfaction. Customers were divided into two categories: inpatients and outpatients, the

operational quality of which was related with in-patient (IPD) and out-patient departments (OPD) of the private hospital respectively. Interviewing patients from both departments helped to identify quality factors: cleanliness, service of doctors, service of nurses, service of officers (staff for financial, reception and pharmacy services), other services (food, test, etc.). Questionnaires were conducted, 300 sets of them were distributed to out-patient and 160 to in-patient departments. It was found out that the doctoral and nursing service should be improved; carelessness, long waiting time and lack of consultation are disliked by patients most.

Competition is one of the most significant factors that encourage service providers to improve the quality of product. An increase in the number of hospitals raises the rights of patients because consumers have the chance to switch to competitor's hospital. A hospital, especially large-sized one, can be considered successful only if it meets customer expectations. The study in Seoul, capital city of Korea was concentrated on quality factors affecting the value of care and patient satisfaction, and assesses the connection among the value of care, patient satisfaction and re-visits intention (Y. Kim, C. Cho, S. Ahn, I. Goh, H. Kim, 2008). Sample was chosen from large-sized university hospital located in Seoul, Korea with more than 1000 hospital beds. 500 questionnaires were distributed by instructed investigators and 423 of them were responded. According to the result of findings, value of care has an important effect on patient satisfaction and re-visits intention, so patients receiving hospital service are either satisfied or dissatisfied by evaluating the cost and benefit of service. Even though generally hospital facility is known to have influence to patient satisfaction, this study showed that there is no effect of that factor on patient satisfaction in large-sized hospitals. This phenomenon exists because some patient

requirements can cause high dissatisfaction if not accomplished, but if accomplished have only insignificant influence on satisfaction (Kano et al., 1984). The reason for that is customer expectation from service providers. Hospital facility is the factor which customers expect so provision of it will lead to very limited satisfaction but not achieving will be the cause of high dissatisfaction.

2.5 Constructs in the study

The section describes five dimensions which were used in this paper. All these five concepts have been evaluated from the perspectives of patients in both private and public hospitals. The tools used to gather data about patient's perceptions from both types of hospitals are same.

Infrastructure, process of clinical care, personnel quality, administrative procedures, safety indicators are the five construct instrument suggested by Padma et al. (2009) to measure SQ perceptions of patients in public and private hospitals.

2.5.1 Infrastructure

Infrastructure is one of the dimensions of the instrument which absorbs the tangible characteristics of a delivered service, such as equipment, exterior of the facility, resources, signage, etc. In other words infrastructure is an artificial physical environment of the firm. The objects are supposed to be visually attractive as well as hygienic, especially in healthcare industry.

Even though services are intangible, consumers evaluate the quality of services in accordance with the tangible aspects of services. Hospital infrastructure also includes the technological environment of the firm, involving equipments to test and treat different kinds of sicknesses. "Tangibles" is one of the dimensions of SERVQUAL

instrument suggested by Parasuraman et al. (1985). In the study of US hospitals Tomes and Ng (1995) assigned "physical environment" as one of the factors of service quality in health industry. Rao et al. (2006) has also mentioned "clinic infrastructure" as one of the key functions in hospitals, along with other dimensions. Table 1 bellow shows the questions of IN dimension.

Table 1: Questionnaire (Survey Instrument) Infrastructure

cleanness and comfort of lavatory and wardroom	1	2	3	4	5
timely availability of necessary drugs	1	2	3	4	5
overall security level in the hospital	1	2	3	4	5
well-timed and clean food supplied to wardrooms	1	2	3	4	5
availability of equipments in proper working condition	1	2	3	4	5
availability of nurses and physicians when they are needed	1	2	3	4	5
good house-keeping facilities such as cans, pillows, mugs, bed sheets	1	2	3	4	5
accessibility of life-support services to control any sudden impairment in health condition such as ambulance services	1	2	3	4	5

2.5.2 Personnel quality

The quality of all staff playing role in providing service, precisely, nurses, doctors, paramedical and support staff is referred to personnel quality. The service offered by staff is supposed to be responsive, reliable, friendly and courteous. Friendly and sincere personnel tend to improve service quality and perceptions of patients' about the health care institution. Parasuraman et al. (1985) underlined the significance of assurance, empathy and responsiveness dimensions in SERVQUAL instrument which are directly related with the quality of personnel. In the study of Rao et al. (2006) it has been stated that interpersonal skills have significant effect on customer satisfaction. Baalbaki et al. (2008) as well as Otani and Kurz (2004) stated that

nursing has the strongest relationship with patient satisfaction among other dimensions. In table 2 the question related to PQ dimension are distributed.

Table 2: Questionnaire (Survey Instrument) – Personnel Quality

nurses' attention and responsiveness to you	1	2	3	4	5
politeness demonstrated by the hospital administrative personnel to you	1	2	3	4	5
competency and skill of doctors	1	2	3	4	5
promptness of physicians while performing ward rounds	1	2	3	4	5
collaboration conducted by physicians and nurses	1	2	3	4	5
proficiency and skill of paramedical and support personnel	1	2	3	4	5
interactions among doctors of appropriate specialties with regard to your medical care	1	2	3	4	5
doctors' caring and friendly manner with due understanding of your needs and feelings	1	2	3	4	5
politeness of the hospital management to your visitors.	1	2	3	4	5

2.5.3 Process of clinical care

The main point in delivering service is the process of clinical care which explains the deep of a service and which is the technical quality of healthcare service. Patients take this construct of service for granted. If the firm lacks in delivering this aspect, customers do not pay any attention to other aspects. For instance if doctors are not competent and skillful, patients do not perceive the quality of the service as high even if the staff is friendly and sincere. Kang and James (2004) mentioned the technical quality in their research as technical capability and immediate outcomes. In the study on hospitals of Malaysia Rose et al. (2004), stated that technical quality is the most essential predictor of quality in both public and private hospitals. Duggirala

et al. (2008) had also noted the process of clinical care as an evaluation tool of service quality. Table 3 bellow shows the questions of PCC dimension.

Table 3: Questionnaire (Survey Instrument) – Process of Clinical Care

effectiveness of the medical treatment	1	2	3	4	5
therapeutic recommendations and instructions given by physicians during your discharge	1	2	3	4	5
clarification about curing procedures suggested by the doctor and results	1	2	3	4	5
correct assessment of your health condition, health checkup and healing procedures	1	2	3	4	5
speed of handling unexpected complications by the medical team	1	2	3	4	5

2.5.4 Administrative procedures

The processes of admission, stay and discharge of patients are administrative procedures of hospital. Not surprisingly, according to many investigations, patients are not satisfied with the waiting times regardless of location. The simplicity of these procedures is crucial in ensuring an encounter-free healing to patients, which in turn increases the quality of a service. In every contact with patients during the treatment period all personnel should exhibit care to patients. In the research of Pakdil and Harwood (2005) it was found that patients mostly were dissatisfied with long waiting time. Thus, well-structured administrative procedures are essential to make patients pleased with hospitalization period. Table 4 illustrates the questions designed to measure AP dimension.

Table 4: Questionnaire (Survey Instrument) – Administrative Procedures

prompt, simple and clear admission processes and procedures	1	2	3	4	5
easiness and reasonable waiting time of consulting with doctors	1	2	3	4	5
simplicity of getting diagnostic tests done	1	2	3	4	5
proper visiting policy	1	2	3	4	5
ease of discharge procedures and bill payments	1	2	3	4	5
help suggested to you by the personnel in organize additional care or services such as physiotherapy	1	2	3	4	5
punctuality of your scheduled admission/surgery	1	2	3	4	5
understandable information and instructions proposed by the hospital administration to you about hospital rules	1	2	3	4	5

2.5.5 Safety indicators

One of the obligations of the firm is to make its customers feel secure and safe, since it is closely related with survival concern, which is the basic need of a human being. Since people visit hospitals to enhance the quality of their lives, a hospital has to be organized in safety issues in order to provide a better service. Some of the safety actions provided by a hospital such as constructing ramps and elevators and testing drugs which may cause allergic reaction inpatients are crucial to provide a comfortable hospitalization for patients. In addition, older and physically disabled people demand special facilities which should also be considered by hospitals. Questions in Table five are designed to measure SM dimension.

Table 5: Questionnaire (Survey Instrument) – Safety Measures

adequacy of hygienic procedures demonstrated by the hospital staff (e.g. wearing gloves)	1	2	3	4	5
existence of safety and comfort indicators such as handrails in aisles, ramps designed for wheelchairs	1	2	3	4	5
infection-free environment proposed by the health institution	1	2	3	4	5

2.5.6 Patient satisfaction

The importance of customer satisfaction in the context of healthcare industry is well researched. Andale (1998) found that cost, communication, competence, facility and demeanor are a distinct construct for hospital service quality. According to M. Amin and S. Nasharuddin (2013), the main predictors of patient satisfaction in hospital services are admission, medical service, overall service, discharge and social responsibility. Each dimension affects the service quality in hospitals significantly. In the research of Duggirala et al.'s (2008) on hospitals it was found that infrastructure, process of clinical care, personnel quality, administrative processes, safety indicators, overall experience of medical care and social responsibility are the elements which determine patient satisfaction. Table 6 shows the 5 point Likert scale to evaluate patient satisfaction.

Table 6: Questionnaire (Survey Instrument) –Patient Satisfaction

Overall I am satisfied with this hospital	1	2	3	4	5

Chapter 3

HEALTHCARE INDUSTRY IN TRNC

3.1 General Background of TRNC

Cyprus is located in the eastern part of the Mediterranean Sea, which is just 70 kilometers away from the coast of Turkey. Nearest neighbors of Cyprus across the sea are Syria (which is only 100 km), Lebanon (264 km), Israel (472 km) and Palestine (390 km). The Turkish Republic of Northern Cyprus or simply Northern Cyprus is a young country with ancient historical roots. The history of Cyprus began with the invasion of island by Egypt in 1450 BC, and in following ages the island was occupied by Africans, Greeks, Romans, Arabs, Persians, French, Venetians, British and Turks.

The Northern fraction of the third largest island located at the crossroads of north-south and east-west routing paths which was the part of the British colony, announced itself independent on 15th November, 1983 deserving the right to name itself Turkish Republic of Northern Cyprus (E. Gundogan, 2010).

The total territory of Northern Cyprus is 3355 sq. km., which takes 35% of the whole island. The population of Northern Cyprus is about 287 000 people and the capital city is Nicosia. Turkish Cypriot origin makes up a probable 70% of the population, the population from Turkey is 27% and the other nations build up remaining 3% of the whole population of Northern Cyprus. The population has increased by 11.2%

since 2006. The 2006 census states that 96% of the people are literate and 87% has at least concluded primary school (preliminary results from the 2011 Population and Housing Unit Census)[1]. The official language of Northern Cyprus is Turkish, however as the island of Cyprus is a former British colony; English is widely spoken as a second language.

The economy of TRNC is established on the free market system in which the private sector is the basis of economic activity. The state follows a challenging economic policy which promotes and maintains favorable investment circumstances and encourages private initiatives where it is considered necessary. The financial, legal and fiscal systems of island are basically British. Business law is very similar to the rules and regulations of the United Kingdom. All organizations are obligated to register with the Registrar of Companies.

There is a strong advancement in tourism and education sectors in Turkish Cyprus today. Tourism and education are important sectors that have a positive input to the growth in the economy of the country and which are the real indicators of its development. However, the offshore financial center development gained an even more significant emphasis today. Offshore facilities are executing a range of actions subject to the provisions of their memorandum of association (Safavi, 2012).

3.2 Medical services in Northern Cyprus

Medical care in North Cyprus can be divided into public and private hospital services.

[1] www.devplan.org

Public hospital services are either cheap or free of charge. Both private and state-funded hospitals can be found in Kyrenia, Famagusta, Guzelyurt and Lefke as well as in smaller towns and some villages, but the central state hospital is located in Nicosia. Doctors in both types of clinics are usually instructed abroad so many of them often speak an admissible level of English. Ambulance services are free of charge for both citizens and foreigners; however the treatment procedures may incur payment.

Majority of private clinics are located in Famagusta, Nicosia and Kyrenia. North Cyprus is also gaining a good reputation overseas for such expert areas as fertility cure, eye laser and cosmetic surgery as well as dentistry. Therapy prices in Northern Cyprus are well bellow of the major European countries.

Public hospitals are categorized in proportion to their concrete task. Burhan Nalbantoglu State Hospital is situated in Nicosia and this hospital is the only specialization hospital in TRNC. Kyrenia Dr. Akcicek State hospital, Famagusta State Hospital and Cengiz Topel State Hospital are local hospitals, and the rest are specialized branch hospitals namely Baris Nervous and Mental Diseases Hospital, Chronic Diseases Hospital, Thalassemia Center, Hematology-Oncology Center, and finally Endocrine and Diabetes Center.[2]

Because of the shortage in the advanced technology and specialized staff in specific field, the healing of some complicated diseases is not possible in TRNC. In such situations since the Ministry of Health is not able to deliver the required medical

[2] www.devplan.org

service to the patients, it forwards those patients to either South Cyprus or Turkey to get the necessary cure for their sicknesses. Mostly these sicknesses are cancer, and vessel and heart surgery; and year by year these diseases are in a growing trend.[3]

3.2.1 Insurance services

According to Business Law Provisions and Retirement Fund of Public Sector, socially and economically weak workers are provided with health insurance by The Department of Social Services. All workers over 18 years old, except civil servants and the poor are required to enter their names to the scope of social insurance law. Also house wives that do not work can also act as insured persons optionally. In case of occupational accidents health care assistance, provision of prostheses and sending the insured person abroad for treatment if necessary is provided by the insurance. Health insurance meets the treatment costs in public hospitals, the costs of jaw and palate prosthetic devices, 80% of medication expenses to private physicians and the treatment cost abroad if cannot be treated domestically. The period of health insurance is 6 months but it can be extended to 18 months if needed (Sargutan, 2006).

3.2.2 Statistical Facts in the Past

Towards the end of 1980s, the Turkish Cypriot medical system composed of few healthcare institutions which precisely were two general, two regional and one psychiatric state-administered hospitals and four private specialized health establishments. For the purpose of curing less significant sicknesses there were also ten state health centers. Between the years of 1963 and 1989, the number of doctors serving in the state hospitals grew from 76 to 116, including both practitioners and specialists. During the same period, the number of nurses grew from 225 to 315, and

[3] www.devplan.org

the number of beds rose from 497 to 833 in state healthcare institutions, while the number of beds in private hospitals was 193 at the same period. With these enhancements, the ratio of persons per doctor decreased from 1,908 in 1963 to 685 in 1989. At the same time, the number of hospital beds per 1,000 patients was 661. The number of dentists rose till 18 in public and 82 in private in 1989. [4]

Medical services were operated by two directorates under the Ministry of Health and Social Welfare, the State Laboratories Directorate and the Directorate of Medicine and Health, in addition to the Social Assistance Services Office. Medical care was made public in the TRNC, although some components of privatization stayed. As in any country, the basic purpose of the Health Ministry and Social Welfare of Northern Cyprus was to assure basic medical services for the citizens of an island. The responsibility of promoting the satisfactory public use of such services was high which requires substantial fund for supply. Since the government faced financial challenges, there was a trouble in supplying rapid medical services. Moreover, when the treatment for the specific sickness was insufficient the state sent patients to get the medical care overseas, mainly to Turkey and England, with covering all the expenses including transportation. The district welfare offices in areas with higher population were administered by the Directorate of Social Welfare. The main objective of the Directorate of Social Welfare were child and family prosperity, remedy of teenage delinquents, the disabled and the victims of intercommoned struggle, the treatment of senior citizens and general society services. There were accommodation institutions in the three main cities for rustic and poor children which had the chance to attend schools there.

[4] http://www.country-data.com/

Other than that, the state was responsible to supply and retirement benefits, which were quite comparable with those of the developed Western countries in the beginning of 1990s. In the year of 1989, the Social Insurance Capital was provided to 75,000 citizens. Besides reimbursement for medical services, the insurance guaranteed retirement benefits and financial support to people in need, also it helped to those disabled and survivors which got harm during intercommoned strife. In October 1989, about 9,000 citizens got monthly payments from that capital.[5]

The number of physicians working in all the private and public hospitals and clinics are rising. The number of doctors was in private hospitals 327 in state hospitals and 270in the year of 2005. The number of patients per doctor were enumerated as 384 people in 2003 In addition, the number of nurses, doctors and other staff working in both types of hospitals increased by 40% from year 2003 to 2005 up to 1438 (Ministry of Health, 2005 statistical book, page 14).

By the year of 2009 the number of personnel in hospitals of TRNC increased till 1649, among which 287 are doctors (Ministry of Health, 2009).

3.2.3 Reforms

Revolving fund and General Health Insurance continue to work on the draft law. Necessary actions are taken to hire specialists in nuclear medicine, child oncology and nephrology experts that are absent in hospitals of TRNC. The MRI machine that plays an important role in the diagnosis and treatment are put into service. Cancer related studies have been continued. Early detection screening centers have formed to find out sicknesses in the early stage and receive better health outcomes. Due to

[5] http://www.country-data.com/

the agreements with Izmir Dokuz Eylul and Ege Universities, patient began to be sent to these universities. In order to provide more effective health services, a new clinic is opened in the campus of Dr. Burhan Nalbantoğlu hospital. Nursing Vocational School has signed a protocol in order to provide training in the Near East University campus and to give a 4-year training program. There has been initiated works on the construction of a new health center to serve in the Karpaz area. The training of the personnel working in health services will be continued by sending staff abroad for education as well as bringing the training teams from other countries (Sargutan, 2006).

3.2.4 Service Quality and Patient Satisfaction in TRNC's Hospitals

In an empirical study of Arasli and Ahmadeva (2004) service quality in hospitals of TRNC was measured by using a public opinion survey. According to the researchers, there was little or no organized data collection about patient needs and expectations, service quality, and patient complaints by the administration of both public and private hospitals. As a result of founding, both types of hospitals lack the high quality equipment, facilities and medicines as well as the service provided by personnel, even though the conditions of private hospitals were better than the public ones.

Arasli, Ekiz and Katircioglu (2006) performed a study in public and private hospitals of TRNC to measure the service quality and customer satisfaction. 48 components of 6-items instrument was used and 454 respondents participated. Empathy, relationships, giving priority to inpatient's needs, professionalism of staff, food, and finally physical environment were claimed to be the main determinants of service quality. The empathy scored the highest result among other dimensions in both types

of hospitals (with 22% variance in public and 40.7% variance in private), whereas relationships dimensions scored least in both public and private health care institutions (with 9% in public and 15.3% in private).

Further, while studying patient satisfaction in North Cyprus researchers as Sarp et al. (2009), Agdelen and Ersoz (2006 and 2007) found out the relationship between working conditions of hospital personnel and patient satisfaction. As a result of analyses doctors, nurses and other staff were not satisfied with conditions provided by hospitals. Parallel research performed by Haydar et al. (2007) aiming to analyze patient satisfaction also revealed that both patients and personnel were significantly dissatisfied with health care service provided by state hospitals. The dissatisfaction of health service providers with health care institutions has been paid considerable attention in recent years since it has influence on patient satisfaction and can adversely impact patient behavior leading to a preference to obtain the service from other countries, as South Cyprus, Turkey and England (Basri, 2009).

SERVQUAL scale with slight modification was used in another research made by E. Direktor (2007) to compare the quality perception in public and private hospitals of TRNC. 692 questionnaires were conducted in both private and public health care institutions in Famagusta, Nicosia and Kyrenia. The results show that the reliability and responsiveness are the most important factors that predict customer satisfaction in both types of hospitals which proves that patients mostly need to feel care and security. The minimal result showed “tangibles” dimension. Also it was derived from analysis that the quality of service in private hospitals that patients perceive is relatively higher than those of public ones.

The conclusions obtained from findings reveal that the administrations of both public and private hospitals and the Ministry of Health should take actions in order to improve the current situation. According to studies mentioned above, the quality of service provided by private hospitals is perceived much more superior than the public health care institutions. The reason for that is that the quality perception of service in state hospitals is much below than patients' expectations if compared with the private hospitals. However, if the private hospitals of TRNC were compared with Turkey's or European countries' private hospitals, probably the results would be different.

Chapter 4

METHODOLOGY

The aim of this study is to measure service quality and patient satisfaction in private and public hospitals of TRNC, using the five constructs as discussed in Chapter 2, section 2.5.

4.1 Presentation of the Study

The data was collected using quantitative questionnaires. These questionnaires target private and public hospitals placed in Northern Cyprus. The questionnaires were divided into three parts. The initial part consists of 3 demographic questions: age, gender and income level. Second section is divided into five parts each of which has its own components (Infrastructure – 8, Personnel Quality – 9, Process of Clinical Care – 5, Administrative Procedures – 8 and Safety Measures – 3), drawing up 33 components in total. Finally the third part aims to measure the overall patient satisfaction and includes a single question.

4.2 Setting and Sampling

The study targeted the population of Famagusta which are above 18 years old. The total number of questionnaires was 200 half of which were distributed to public hospital and the rest were personally handed out to the patients of private clinics. Participants were asked to fill in the questionnaires and were given the guarantee of privacy. 40 of questionnaires were not answered and 160 among 200 questionnaires were collected.

The questionnaire was prepared in English and then translated into Turkish. The Business Administration department issued a letter to hospital administrations in TRNC, requesting them to permit data collection. Permission letter was given to the administration of hospitals, after which questionnaires were distributed to patients from those hospitals.

4.3 Measures

All tests are done in SPSS Statistics. Demographic distributions are done to observe the changes in percentage of respondents from public and private hospitals depending on age categories, income levels and genders.

Reliability was tested using the Cronbach's alpha coefficient, to test each dimension and the whole instrument. The extent to which similar score are obtained for each item under consideration when continually administered is called reliability of an item or the whole instrument. Nunally (1988) described reliability as the ability of a tool to yield consistent outcomes. The test-retest and internal-consistency are most widespread measures of reliability. If a single evaluation tool is directed to a class of respondents on an instance the internal consistency method is eligible for evaluating reliability (Trochim, 1999). The Cronbach's Alpha measure is commonly used reliability coefficient to measure internal consistency (1951). This coefficient fluctuates from 0 to 1. Hair et al. (1998) claims that the generally agreed upon lowest value for Cronbach's Alpha is 0.70.

Correlation analysis was made to check if there is a significant relationship between the five dimensions of service quality. A correlation coefficient is a statistical measure of the degree to which changes to the value of one variable predict change

to the value of another. In positively correlated variables, the value increases or decreases in tandem (Boslaugh, 2012). In other words, the test measures the significance of relationships between variables.

The two common methods to analyze the sampled-data relationships are One-Way ANOVA (Analyses of Variance) and Independent Samples Test. One-way ANOVA was used to test whether any significant difference exists in the perceptions of patients' service quality among the hospitals depending on income level and age categories. The ANOVA is the method that allows analyzing the difference between two or more sample means that could be achieved by subdividing the total sum of squares and its purpose is to test for significant differences between class means which is done by analyzing variances. If only two different means are compared then independent samples means method can be placed.[6] Independent Samples t-test was employed to check the variation on quality perception of patients depending on variation in gender and types of the hotel. The two-sample (independent groups) t-test is used to determine whether the unknown means of two populations are different from each other based on independent samples from each population. If the means of samples adequately differ from each other, then the population means are confirmed to be different. [7]

Multiple regression analysis was used to test hypothesis. This analysis tests the impact of an independent variable on the dependent variable while holding the impact of other variables constant. Multiple regression identifies the individual

[6] http://www.stat.cmu.edu/~hseltman/309/Book/chapter7.pdf

[7] http://www.sagepub.com/upm-data/11886_Chapter_3.pdf

participation of each independent variable, while controlling for the changes of other independent variables. [8]

4.4 Hypotheses of the Study

As a result of literature review six following hypotheses were set:

H1: There is a considerable impact of infrastructure dimension of service quality on patient satisfaction.

H2: There is a considerable impact of personnel quality dimension of service quality on patient satisfaction.

H3: There is a considerable impact of process of clinical care dimension of service quality on patient satisfaction.

H4: There is a considerable impact of administrative procedures dimension of service quality on patient satisfaction.

H5: There is a considerable impact of safety indicators dimension of service quality on patient satisfaction.

H6: There is a considerable difference between the service quality of private and public hospitals in TRNC.

[8] http://www.sagepub.com/upm-data/58381_Chapter_13.pdf

Chapter 5

RESULTS

5.1 Demographic Variables

Tables bellow describe the demographic distribution of the variables collected in the questionnaire. The distribution includes four different parts which are Types of Hospitals, Age, Gender and The Income level of sample.

Table 7: Distribution of Respondents According to Hospital (Public or Private)

Hospital Type	**Number of Respondents**	**Percentage (%)**
Public	100	61.0
Private	64	39.0
Total	164	100.0

Describing the types of hospitals, the bigger part is obviously represented public hospitals, which 61 %, or 100 respondents and 39 % is occupied by the patients of private hospitals which compose 64 people.

Table 8: Distribution of Respondents According to Age Categories

Categories of Age	**Number of Respondents**	**Percentage (%)**
18 - 27	109	66.5
28-37	39	23.8
38-47	8	4.9
48-57	8	4.9

The overwhelming majority of respondents are ranked from the age group of 18 till 27 that composes 66.5% of the sample. The percentage of respondents in the group between 28 and 37 equals to 23.8 %. The groups of people from the age 38 till 47 and 48 till 57 showed the same results (4.9 %, which makes 16 people in total).

Table 9: Distribution of Respondents According to Gender

Gender	**Number of Respondents**	**Percentage (%)**
Male	71	43.3
Female	91	55.5

From the gender part it can be seen that there is not much difference among respondents: 43.3 % are male and 55.5 % are female (1.2 % did not respond this question).

Table 10: Distribution of Respondents According to Income Level

Income Level	**Number of Respondents**	**Percentage (%)**
below 1500	66	40.2
1500-3000	77	47.0
3000-5000	13	7.9
above 5000	2	1.2

Analyzing the last parameter, which is income level of a patient, the following conclusion can be made: the devastating majority of respondents have the income level from 1500 to 3000 TL (47 %) and bellow 1500 TL (40.2 %). The least number of respondents were from the group of people with an income above 5000 TL.

5.2 Reliability

Reliability analysis indicated that the internal consistency of the five constructs was significant. All the variables are above 0.70 showing a strong reliability of the questionnaire.

Table 11: Reliability (Cronbach's Alpha) Analysis Results for the Dimensions

Dimension	**Cronbach's Alpha**
Infrastructure	0.937
Personnel Quality	0.919
Process of Clinical Care	0.929
Administrative Procedures	0.960
Safety Measures	0.960
Overall	0.985

5.3 Correlation Analysis

Table 12: Correlation Analysis Results for the Dimensions

Variables	**IN**	**PQ**	**PCC**	**AP**	**SM**
IN[1]					
PQ[2]	.820**				
PCC[3]	.843**	.843**			
AP[4]	.764**	.813**	.859**		
SM[5]	.757**	.788**	.836**	.823**	
**. Correlation is significant at the 0.01 level (2-tailed).					

IN: Infrastructure, PQ: Personnel Quality, PCC: Process of Clinical Care, AP: Administrative Procedure, SM: Safety Measures.

Two-tailed correlation analysis was conducted between the dimensions of service quality in order to investigate the possible relationships among health care quality perception of patients. Table 12 displays the strong, positive and significant relationships at the 0.01 level among the five measurements of service quality perceived by patients. This fact underlines the relevance of all dimensions. As it seen from Table 12, Personnel Quality is significantly correlated with Process of Clinical Care (0.843), with Administrative Procedures (0.813) and with Safety Measures (0.788). This means the staff of hospitals is friendly with patients in administering all processes during hospitalization. Stevanovich et al. (2005) states, hospital practices and health outcomes can be enhanced if patients' quality perception measurement practices are made systematically. The Infrastructure dimension has significant correlation with Safety Measures (0.757) which shows the consideration of basic safety and hygiene indicators by the infrastructure of hospital. Safety Measures has strong correlation with the Process of Clinical Care (0.836) which indicates that the Process of Clinical Care was carried out considering the safety indicators.

5.4 Testing the Dimensions (IN, PQ, PCC, AP, SM) whether differs according to Income Level

Table 13: One Way ANOVA, Factor: Income Level Dependent List: Five Dimensions (IN, PQ, PCC, AP, SM)

		Sum of Squares	df	Mean Square	F	Sig.
IN	Between Groups	14.729	3	4.910	5.557	.001**
	Within Groups	136.052	154	.883		
	Total	150.782	157			
PQ	Between Groups	13.962	3	4.654	4.859	.003**
	Within Groups	147.504	154	.958		
	Total	161.467	157			
PCC	Between Groups	15.408	3	5.136	4.346	.006**
	Within Groups	181.987	154	1.182		
	Total	197.395	157			
AP	Between Groups	17.668	3	5.889	4.593	.004**
	Within Groups	197.452	154	1.282		
	Total	215.120	157			
SM	Between Groups	6.737	3	2.246	1.879	.135
	Within Groups	184.060	154	1.195		
	Total	190.797	157			
Overall SAT	Between Groups	21.893	3	7.298	4.330	.006**
	Within Groups	259.550	154	1.685		
	Total	281.443	157			
** Significant at the 0.01 level.						

One way ANOVA results in Table 13 show that there are significant differences in all dimensions (except Safety Indicators- 0.135) of service quality-Infrastructure (0.001), Personnel Quality (0.003), Process of Clinical Care (0.006), and Administrative Procedures (0.004) among the different levels of income. This means that the perception of respondents about service quality changes depending on the income of respondents. Only safety measures are similarly important for all respondents. There is also a significant difference in the overall satisfaction with the service delivered among the different income levels.

Table 14: One Way ANOVA, Factor: Income Level Dependent List: Five Dimensions (IN, PQ, PCC, AP, SM)

		Sum of Squares	df	Mean Square	F	Sig.
IN	Between Groups	12.517	3	4.172	4.744	.003
	Within Groups	140.732	160	.880		
	Total	153.249	163			
PQ	Between Groups	10.165	3	3.388	3.300	.022
	Within Groups	164.297	160	1.027		
	Total	174.462	163			
PCC	Between Groups	21.739	3	7.246	6.205	.001
	Within Groups	186.855	160	1.168		
	Total	208.594	163			
AP	Between Groups	37.132	3	12.377	10.437	.000
	Within Groups	189.743	160	1.186		
	Total	226.875	163			
SM	Between Groups	15.235	3	5.078	4.356	.006
	Within Groups	186.540	160	1.166		
	Total	201.775	163			
Overall SAT	Between Groups	27.765	3	9.255	5.596	.001
	Within Groups	264.626	160	1.654		
	Total	292.390	163			

The Table 14 describes one way ANOVA results for the perception of service quality by different age categories. Since p values for all dimensions are higher than 0.05 there is a significant difference in quality perception among the groups with different ages. In addition, the overall satisfaction with a hospital doesn't differ depending on the age of respondents.

Table 15: Independent Samples Test, Factor: Gender Dependent List: Five Dimensions (IN, PQ, PCC, AP, SM)

		t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Overall SAT	EVA	-2.595	160	.010	-.544	-.957	-.130
	EVNA	-2.655	159.331	.009	-.544	-.948	-.139
IN	EVA	-4.167	160	.000	-.61239	-.90262	-.32217
	EVNA	-4.184	152.723	.000	-.61239	-.90157	-.32322
PQ	EVA	-3.582	160	.000	-.56983	-.88402	-.25564
	EVNA	-3.594	152.436	.000	-.56983	-.88305	-.25660
PCC	EVA	-3.174	160	.002	-.55626	-.90239	-.21013
	EVNA	-3.177	151.201	.002	-.55626	-.90215	-.21037
AP	EVA	-2.615	160	.010	-.48176	-.84558	-.11793
	EVNA	-2.640	155.343	.009	-.48176	-.84220	-.12132
SM	EVA	-2.218	160	.028	-.38756	-.73268	-.04244
	EVNA	-2.229	153.194	.027	-.38756	-.73109	-.04402

EVA – Equal variances assumed, EVNA – Equal Variances Not Assumed

The table 15 displays the relationship between gender and the perception of quality dimensions**.** In the t-test result it is seen that there is a significant difference in the perception of different genders of all the quality dimensions, since all values are significantly lower than 0.05.

Table 16: Independent Samples Test, Factor: Gender Dependent List: Five Dimensions (IN, PQ, PCC, AP, SM)

		t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Overall SAT	EVA	-12.518	162	.000	-1.919	-2.222	-1.617
	EVNA	-14.613	144.458	.000	-1.919	-2.179	-1.660
IN	EVA	-11.484	162	.000	-1.32748	-1.55575	-1.09920
	EVNA	-12.864	160.051	.000	-1.32748	-1.53127	-1.12369
PQ	EVA	-10.576	162	.000	-1.35131	-1.60361	-1.09900
	EVNA	-11.386	160.335	.000	-1.35131	-1.58570	-1.11692
PCC	EVA	-11.987	162	.000	-1.58509	-1.84621	-1.32396
	EVNA	-13.637	155.926	.000	-1.58509	-1.81468	-1.35550
AP	EVA	-11.983	162	.000	-1.65281	-1.92518	-1.38045
	EVNA	-13.608	156.537	.000	-1.65281	-1.89272	-1.41290
SM	EVA	-9.458	162	.000	-1.35625	-1.63941	-1.07309
	EVNA	-11.017	145.616	.000	-1.35625	-1.59955	-1.11295

EVA – Equal Variances Assumed, EVNA – Equal Variances Not Assumed

The Independent Samples t-test is done for hospitals to determine if there is a significant difference between the service quality in private and public hospitals in TRNC. Looking at the result in the Table 16 it is possible to state that there is an overwhelming difference between two hospital types in quality of medical service delivered. All the dimensions (IN, PQ, PCC, AP, SM) in public hospitals significantly differ from those of private hospitals. According to analysis, respondents perceive the quality in private hospitals higher than in public one. Therefore, we accept the Hypothesis 6.

Table 17: Regression Analysis - Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
	Constant	-.543	.211		-2.569	.011			
	IN	.027	.108	.020	.253	.801	.735	.020	.010
	PQ	.083	.107	.064	.783	.435	.769	.062	.030
	PCC	.261	.117	.221	2.230	.027	.823	.175	.086
	AP	.377	.095	.332	3.951	.000	.831	.300	.153
	SM	.354	.093	.294	3.791	.000	.818	.289	.147

Multiple regression analysis was used to test hypotheses. Patient satisfaction was used as a dependent variable and quality dimension suggested by Padma et al. as independent. Results in the Table 8 show that all five elements of service quality were significant in predicting patient satisfaction. The directions of the relationships were as hypothesized, thus, the null hypotheses of H1-H5 are rejected.

Administrative procedures had the greatest influence on patient satisfaction as specified by the standardized b values. The results show that patients care mostly about the attitude to them and the convenience in access to the service. Safety measures, which do not differ much in magnitude of results from administrative procedures, had the second greatest influence on patient satisfaction. In an environment where the patients do not feel secure, not surprisingly, patients are not satisfied with other services provided by hospital. The third largest result was revealed by process of clinical care which means that patients consider the treatment process and the outcome of it are almost as significant as administrative procedures

and safety indicators. While the magnitude of the effects of personnel quality and infrastructure was comparatively less than the impacts of process of clinical care, administrative procedures and safety measures, this does not mean that these dimensions are not important or should be rejected in hospitals' mission to enhance the service quality, since their impacts on patient satisfaction were also significant. This only shows that paying more attention to the management of PCC, AP and SM will bring greater gain in patient satisfaction in the hospital environment.

Chapter 6

CONCLUSION

6.1 Discussion

The groundwork model of service quality and customer satisfaction discussed in this thesis provides insights to both researchers and practitioners who might consider applying the results to enhance service quality and patient satisfaction in the hospital environment of TRNC.

The aim of the current investigation was to make a research on service quality of the hospitals in TRNC. The research aimed to discover the quality standards applied in hospitals. In order to analyze this, a measurement instrument for service quality that was suggested by Padma et al. (2009) was applied on patients in both private and public hospitals of TRNC. The original instrument suggested by Padma et al. (2009) consists of seven dimensions (infrastructure, personnel quality, process of clinical care, administrative procedures, safety measures, overall experience of medical care received and social responsibility). Slight modifications were made and first five dimensions were chosen to be in our questionnaire used.

An extensive number of empirical investigations discussed the impacts of several variables on customer satisfaction. However, this study is concentrated on paying broad attention to the effect of quality dimension on satisfaction of consumers.

With this realization, this research examined 6 hypotheses to investigate the significance level of relationship between each quality dimension proposed by Padma et al. (2009) and patient satisfaction. Multiple regression analysis was done to test the hypothesis and the result showed that all dimensions starting with administrative procedures were significant in predicting patient satisfaction. The least result showed infrastructure dimension. In addition, all dimensions are correlated with each other.

As a result of analyses, it was seen that each demographic aspect (age, gender, income) perceive service quality in a different way and that patients perceive the quality in private hospitals higher than in public hospitals. Reliability test reveals that instrument is highly reliable.

6.2 Recommendations

First of all, medical practitioners are expected to see the outcomes of this and similar researches as overall assessments of own performance, and it is necessary to remember that patient-driven service standards are vital for the production of excellent care and must be better analyzed. Patients should not be seen just as bodies or sicknesses; they are human and naturally they have expectations from service. In order to not undervalue the service and exchange it for a better one, expectations should be met.

Secondly, education of patients in some way is crucial. This education helps contributing to satisfaction level of patients. Patients are the part of encounter they have with a hospital and the play a big role in the service delivery process. If they do not participate in this role appropriately, they are likely to get the service below the

average level. The health care sectors should identify the basic roles which must be played by patients, transfer the necessary information to patients, and start off a patient education program. At a longer term, patients should also be provided better information on health care topics and life styles that has a direct influence on health condition of patients.

Third, Ministry of Health or any other independent organization should build up a health care satisfaction index to frequently evaluate and compare the services in different hospitals and other health care institutions. The dimensions of such and an index could be important predictors of patients' satisfaction, such as price, access, as well as quality that is discussed in this paper. Patients can benefit from the distribution of such an index, which can help informing the patients and make them have a desirable choice. This exponent will also induce hospitals with low ratings to improve their services. However, it is important to delegate the index to an independent separate organization with no links to the hospitals.

Finally, in order to deliver quality services hospitals should be concentrated on stronger managerial practices. Unfortunately, modern managerial orientation is not well introduced in majority of hospitals. In fact the management and administration of hospitals are in the hands of doctors which are trained to treat the sick and do not have any experience in management. If doctors should stop pretending for managerial positions and concentrate on curing the afflicted, then the modern managerial orientation will find its way in hospitals of TRNC. If administrative decisions are made by specially trained staff then the quality of medical service probably is going to enhance.

6.3 Limitations of the Study and Future Research

As in many other researches, there are several limitations of this study. First, this research is based on studying of public and private hospitals in TRNC only, which makes the findings not be valid in other countries. Second, since some hospital administrations were very sensitive about their sick patients they didn't permit distributing questionnaires, which made difficult to collect data and resulted in more time and efforts for further conduct of the research. In addition, in all (especially in private) hospitals, the response rate was poor which also consumed extra time. Third, language barriers caused complexity in carrying out this research, so it was required to translate the questionnaires into Turkish for respondents to answer questionnaires.

6.4 Summary

The structure of this thesis as follows: the review of previous researches was done in Chapter two. In Chapter three, overview of the past and current situation of health care industry in TRNC was made. Chapter four summarizes the major hypotheses of this paper and the models adopted for the analyses as well as why those models were used. Chapter five which was the analysis part of the thesis starts with a demographic breakdown of the sample, followed by correlation and reliability tests. In the next part of analyses ANOVA and Independent Samples t-test described how different categories of people perceive the quality of service. Lastly, regression analyses were made to test the hypotheses.

We can highlight in this study that quality is one of the main factors that leads to customer satisfaction. Customer satisfaction in turn is the main predictor of an organizational success. Similar with all other industries, satisfaction of patients is crucially important in health institutions as well. Since patients entrust hospitals the

most important treasure that they have, their health, the hospitals should be extremely careful in meeting patients' needs. If the perception of quality is higher than expectation then patients become loyal to the hospital and this fact leads to the success of hospitals in the long run. To conclude, this thesis has provided several useful guidelines to the administration of hospitals in TRNC. This study defined some limitations as well as the basis for future research in this field.

REFERENCES

Akan, P. (1995). Dimensions of service quality: a study in Istanbul. *Managing Service Quality, Vol. 5, No. 6* , 39-42.

Al-Borie, H.M. & Sheikh Damanhouri, A. M. (2011). Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis. *International Journal of Health Care Quality Assurance, Vol. 26 No. 1,* , 24-28.

Amin, M. & Nasharuddin, S. Z. (2013). Hospital service quality and its effects on patient satisfaction and behavioural intention. *Clinical Governance: An International Journal, Vol. 18, No. 3* , 239-247.

Andaleeb, S. (1998). Determinants of customer satisfaction with hospitals: a managerial model. *International Journal of Health Care Quality Assurance, Vol.11, No.6* , 182-185.

Andaleeb, S.S. (2001). Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *School of Business* , 1363-1366.

Arasli, H., Ekiz, E.H. & Katircioglu, S.T. (2008). Gearing service quality into public and private hospitals in small islands. Empirical evidence from Cyprus. *International Journal of Health Care Quality Assurance, Vol. 21 No. 1* , 12-18.

Bakan, I., Buyukbese, T. & Ersahan, B. (2013). The impact of total quality service (TQS) on healthcare and patient satisfaction: An empirical study of Turkish private and public hospitals. *The International Journal of Health Planning and Management, Vol 29 No 3* , 290-300.

Carnegie Mellon University, Department of Statistics. (2013). Retrieved December 9, 2014, from One-way ANOVA: http://www.stat.cmu.edu/~hseltman/309/Book/chapter7.pdf

Cicenaite, E. & Maciejewska, M. (2012). *The role of the perceived servicescape in a supermarket.* Jonkoping: Adele Berndt.

Comparing One or Two Means Using the t-Test. (2006, July 18). Retrieved August 14, 2014, from SAGE: http://www.sagepub.com/upm-data/11886_Chapter_3.pdf

Craig, T. J., Perlin, J. B. & Fleming, B. B. (2007). Self-Reported Performance Improvement Strategies of Highly Successful Veterans Health Administration Facilities. *American Journal of Medical Quality, Vol. 22, No. 438* , 439-440.

Direktor, E. (2007). *Perceived Service Quality and Patient Satisfaction in TRNC: Comparison of Public and Private Hospitals.* Nicosia: E. Direktor.

Duggirala, M., Rajendran, C. & Anantharaman, R.N. (2008). Patient-perceived dimensions of total quality service in healthcare. *Benchmarking: An International Journal, Vol. 15 No. 5* , 571-575.

Fraering, M. & Minor, M. S. (2012). Beyond loyalty: customer satisfaction, loyalty, and fortitude. *Journal of Service Marketing, Vol. 24, No. 7* , 335-339.

Goncalves, H. M. & Sampaio, P. (2012). The customer satisfaction-customer loyalty relationship. *Management Decision, Vol. 50, No. 9* , 1515-1521.

Hasin, M.A., Seeluangsawat, R. & Shareef, M.A. (2011). Statistical measures of customer satisfaction for health care quality assurance: a case study. *International Journal of Health, Vol. 14 No. 1* , 6-10.

Hussain, B., Bhatti, W.A. & Jilani, A. (2011). An empirical analysis of after sales service and customer satisfaction. *Management & Marketing Challenges for the Knowledge Society, Vol. 6, No. 4* , 562-569.

Kaura, V. (2013). Service Convenience, Customer Satisfaction, and Customer Loyalty: Study of Indian Commercial Banks. *Journal of Global Marketing, Vol. 26, No. 18–27* , 19-21.

Kessle, D.P. & Mylod D. (2009). Does patient satisfaction affect patient loyalty? *International Journal of Health Care Quality Assurance, Vol. 24, No. 4* , 269-272.

Kim, Y., Cho, C., Ahn, S., Goh, I. & Kim, H. (2008). A study on medical services quality and its influence upon value of care and patient satisfaction – Focusing upon outpatients in a large-sized hospital. *Total Quality Management, Vol. 19, No. 11* , 1159-1168.

Multiple Regression. (2006). Retrieved November 27, 2014, from Sage Publications: http://www.sagepub.com/upm-data/58381_Chapter_13.pdf

Otani, K., Wayne, F. & Kurz, R.S. (2004). The Impact of Nursing care and other Health Care Attributes on Hospitalized Patient Satisfaction and Behavioral Intentions. *Journal of Health Care Management, Vol. 49, No.3* , 183-189.

Rahman, M.S., Khan, A.H. & Haque, M.M. (2012). A Conceptual Study on the Realtionship between Service Quality toward Customer Satisfaction . *Asian Social Science, Vol. 8, No. 13* , 201-205.

Padma, P., Rajendran, C. & Sai, L.P. (2009). A conceptual framework of service quality in healthcare. Perspectives of Indian patients and their attendants. *Benchmarking: An International Journal, Vol. 16, No. 2* , 175-179.

Padma, P., Rajendran, C. & Lokachari, P.S. (2010). Service quality and its impact on customer satisfaction in Indian hospitals. *Benchmarking: An International Journal, Vol. 17 No. 6* , 815-817.

Rohini, R. & Mahadevappa, B. (2006). Service Quality in Bangalore Hospitals – an empirical study. *Journal of Services Research, Volume 6, Number 1* , 68-81.

Ramsaran-Fowdar, R.R. (2007). The relative importance of service dimensions in a healthcare setting. *International Journal of Health Care Quality Assurance, Vol. 21, No. 1* , 113-120.

Safavi, H. P. (2012). *The Process Of Urbanization And Its Implications For Tourism Sector-A Sustainability Approach: The Case Of Famagusta/TRNC.* Famagusta.

Saini, G. K. & Matta, J. K. (2014). Service Quality and Re-visit Intention: A Comparative Study of Charitable and Corporate Hospitals. *Journal of Health Management, Vol 16, No 4* , 598-610.

Sargutan, A. (2006). Kuzey Kıbrıs Cumhuriyeti Sağlık Sistemi. *Ülkelerin Karşılaştırmalı Sağlık Sistemi* , 1700-1704.

Sureshchandar, G.S., Rajendran, C. & Anantharaman, R.N. (2002). The relationship between service quality and customer satisfaction – a factor specific approach. *Journal of Services Marketing, Vol. 16, No. 4* , 363-372.

Wang, I.M. & Shieh, C.J. (2006). The relationship between service quality and customer satisfaction: the example of CJCU Library. *International Journal of Health Care, Vol. 27, No. 1* , 194-208.

www.devplan.org. (2001). Retrieved September 18, 2014, from KKTC Devlet Planlama Örgütü.

Yavas, U., Karatepe, O. M. & Babakus, E. (2014). Exploring the Role of Organizational and Personal Resources in Explaining Nurse Performance in Public Hospitals in the Turkish Republic of Northern Cyprus. *Journal of Health Management, Vol 16 No 1-12* , 1-8.

APPENDIX

Please indicate your answer by circling the appropriate alternative

1. How old are you?

a) 18-27

b) 28-37

c) 38-47

d) 48-57

e) 58 and over

2. What is your gender?

a) Male

b) Female

3. What is your income level?

a) less than 1500 TL

b) 1500-3000 TL

c) 3000-5000 TL

d) above 5000 TL

Please cross the number which mostly corresponds with how you evaluate the hospital

1 2 3 4 5

Very low Low Neither low or high High Very high

	INFRASTRUCTURE	☹		😐		☺
IS1	cleanness and comfort of wardroom and lavatory	1	2	3	4	5
IS2	overall security level in the hospital	1	2	3	4	5
IS3	timely availability of necessary drugs	1	2	3	4	5
IS4	availability of doctors and nurses when they are needed	1	2	3	4	5
IS5	availability of equipments in proper working condition	1	2	3	4	5
IS6	timely and hygienic food supplied to rooms	1	2	3	4	5
IS7	availability of life-support facilities to manage any sudden deterioration in health condition (e.g. ambulance services, ventilator, etc.)	1	2	3	4	5
IS8	good house-keeping amenities (e.g. pillows, buckets, mugs, dressing material)	1	2	3	4	5
	PERSONNEL QUALITY	☹		😐		☺
PQ1	courtesy shown by the hospital administrative staff to you	1	2	3	4	5
PQ2	nurses' care and responsiveness to you	1	2	3	4	5
PQ3	punctuality of doctors while conducting ward rounds	1	2	3	4	5
PQ4	competency and skill of doctors	1	2	3	4	5
PQ5	competency and skill of paramedical and support staff	1	2	3	4	5
PQ6	teamwork demonstrated by doctors and nursing staff	1	2	3	4	5
PQ7	doctors' friendly and caring attitude with due understanding of your feelings and needs	1	2	3	4	5
PQ8	interactions among doctors of appropriate specialties with regard to your medical care	1	2	3	4	5
PQ9	politeness of the hospital management to your visitors.	1	2	3	4	5

	PROCESS OF CLINICAL CARE:	☹		😐		☺
PCC1	medical advice and instructions provided by doctors at the time of your discharge	1	2	3	4	5
PCC2	effectiveness of the medical treatment	1	2	3	4	5
PCC3	correct assessment of your health condition, medical tests and treatment procedures	1	2	3	4	5
PCC4	explanation offered by the doctor about treatment procedures and outcomes	1	2	3	4	5
PCC5	speed of handling unexpected complications by the medical team	1	2	3	4	5
	ADMINISTRATIVE PROCEDURES	☹		😐		☺
AP1	ease of consulting with doctors (within a reasonable waiting time)	1	2	3	4	5
AP2	prompt, simple and clear admission processes and procedures	1	2	3	4	5
AP3	ease of getting diagnostic tests done	1	2	3	4	5
AP4	simplified administrative procedures with respect to bill payment and discharge	1	2	3	4	5
AP5	enforcement of visiting policy (e.g. visiting hours)	1	2	3	4	5
AP6	clear information and instructions provided by the hospital administration to you about hospital rules and procedures	1	2	3	4	5
AP7	assistance provided to you by the staff in arranging for additional care or services (e.g. physiotherapy)	1	2	3	4	5
AP8	punctuality of your scheduled admission/surgery	1	2	3	4	5
	SAFETY MEASURES	☹		😐		☺
SM1	adequacy of hygienic care and procedures (e.g. wearing gloves) followed by the hospital personnel	1	2	3	4	5
SM2	infection-free environment/treatment provided by the hospital	1	2	3	4	5
SM3	presence of safety and comfort measures (e.g. handrails in aisles, ramps designed for wheelchairs) in the hospital	1	2	3	4	5
		☹		😐		☺
	Overall I am satisfied with this hospital	1	2	3	4	5

Lütfen size uygun alternatifi çizerek cevabınızı belirtiniz

1. Yaşınız:

a) 18-27
b) 28-37
c) 38-47
d) 48-57
e) 58 üzeri

2. Cinsiyetiniz

a) Erkek
b) Kadın

3. Aylık geliriniz

a) 1500 tl'nin altında
b) 1500-3000 TL
c) 3000-5000 TL
d) 5000 TL üzeri

Lütfen hastanenizi en iyi anlatan sayıyı belirtin

1	2	3	4	5
Çok düşük	Düşük	Ne düşük ne yüksek	Yüksek	Çok yüksek

	ALTYAPI	☹		😐		☺
IS1	Odanızın ve lavabonuzun temizliği ve konforu	1	2	3	4	5
IS2	Hastanedeki genel güvenlik düzeyi	1	2	3	4	5
IS3	Gerekli ilaçların zamanında verilmesi	1	2	3	4	5
IS4	Doktor ve hemşirelerin ihtiyaç duyulduğunda ulaşılabilmesi	1	2	3	4	5
IS5	Gerekli olduğunda tıbbi cihazların uygun durumda olmaları	1	2	3	4	5
IS6	Odalara verilen gıdanın hijyenik olması ve zamanında verilmesi	1	2	3	4	5
IS7	Herhangi bir ani durumları yönetmek için yaşam destek tesislerinin mevcudiyeti (örneğin ambulans hizmetleri, vantilatör, vb)	1	2	3	4	5
IS8	İyi temizlik olanakları (örneğin yastıklar, kovalar, kupalar, pansuman malzemesi)	1	2	3	4	5
	PERSONEL KALİTESİ	☹		😐		☺
PQ1	Hastane idari personeli tarafından gösterilen nezaket	1	2	3	4	5
PQ2	Hemşirelerin size gösterilen bakımı ve hızlı yanıt vermeleri	1	2	3	4	5
PQ3	Doktorlarin dakikliği	1	2	3	4	5
PQ4	Doktorların beceri ve yetkinlikleri	1	2	3	4	5
PQ5	Destek personelinin beceri ve yetkinlikleri	1	2	3	4	5
PQ6	Doktorlar ve hemşirelerin ekip olarak çalışması	1	2	3	4	5
PQ7	Doktorların sizing duygu ve ihtiyaçlarınızı anlamaları nedeniyle size gösterilen güleryüzlü ve sevecen tavırları	1	2	3	4	5
PQ8	Doktorların birbiriyle sizin tıbbi bakımınız hakkında sürdürdüğü etkileşimler	1	2	3	4	5
PQ9	Hastane yönetiminin sizin ziyaretçilerinize gösterilen nezaketi	1	2	3	4	5
	KLİNİK BAKIM SÜRECİ:	☹		😐		☺
PCC1	Hastaneden taburcu olma sırasında doktorlar tarafından verilen sağlık danışma ve talimatlar	1	2	3	4	5
PCC2	Tıbbi tedavinin etkililiği	1	2	3	4	5
PCC3	Sağlık durumunuz, tıbbi testler ve tedavi yöntemlerin doğru değerlendirilmesi	1	2	3	4	5
PCC4	Tedavi prosedürleri ve sonuçları hakkında doktor tarafından sunulan açıklama	1	2	3	4	5
PCC5	Tıbbi ekip tarafından beklenmeyen komplikasyonlara cevap verme hızı	1	2	3	4	5

	İDARİ İŞLEMLER	☹		😐		☺
AP1	Doktorlar ile danışmanlık kolaylığı (makul bir bekleme süresi içinde)	1	2	3	4	5
AP2	Hızlı, basit ve net başvuru süreci ve prosedürler	1	2	3	4	5
AP3	Teşhis testleri alma kolaylığı	1	2	3	4	5
AP4	Ödeme ve tahliye ile ilgili basitleştirilmiş idari işlemler	1	2	3	4	5
AP5	Ziyaret kurallarının uygulanması (örneğin ziyaret saatleri)	1	2	3	4	5
AP6	Hastane tarafından sunulan kural ve prosedürlerle ilgili açık bilgiler ve talimatlar	1	2	3	4	5
AP7	Hastane personeli tarafından sağlanan ek bakım veya hizmetler (örneğin fizik tedavi)	1	2	3	4	5
AP8	Planlanmış başvurunuz veya ameliyatınızın dakikliği	1	2	3	4	5
	GÜVENLİK ÖNLEMLERİ	☹		😐		☺
SM1	Hastane personeli tarafından sunulan hijyenik bakım ve prosedürlerin yeterliliği (örneğin eldiven giymeleri)	1	2	3	4	5
SM2	Hastane tarafından sunulan enfeksiyonsuz ortam	1	2	3	4	5
SM3	Hastanedeki güvenlik ve konfor önlemleri (tekerlekli sandalyeler için tasarlanmış ramplar)	1	2	3	4	5
		☹		😐		☺
	Genel olarak bu hastaneden memnunum	1	2	3	4	5