Research Article

# STUDY OF OBSTACLES AND FACTORS FACILITATING MEDICAL SERVICE FROM THE VIEWPOINT OF CLIENTS REFERRING TO THE EMERGENCY OF TEHRAN CHILDREN MEDICAL CENTER HOSPITAL

# Solmaz Soltanzadeh<sup>1</sup>, Ahmad Shafaeizadeh<sup>2</sup> and \*Hamid Keshvari<sup>3</sup>

<sup>1</sup>Children's Medical Center of Tehran University of Medical Sciences, Tehran, Iran <sup>2</sup>Amirkabir University of Technology, Tehran, Iran <sup>3</sup>Department of Biomedical Engineering, Amirkabir University of Technology, Tehran, Iran \*Author for Correspondence

# **ABSTRACT**

In recent years, patient satisfaction has been considered one of the most important factors in assessing the quality of medical services in hospitals. The promotion of satisfaction level at emergency centers has had a remarkable effect on the views of clients about the entire medical service. The aim of the study is to explain views and strategies of clients concerning the improvement of quality of emergency services in order to increase the level of satisfaction with emergency services with a qualitative approach. The research is a study conducted with a qualitative approach in a content analysis fashion. In this research, a number of 20 clients of Tehran Children Medical Center were included in the study based on the purpose with a maximum rate of selection diversity. Data were analyzed according to face-to-face interviews in content analysis. Findings of the research indicated that factors contributing to providing high quality services and gaining patients' satisfaction in emergency of hospitals in Tehran Children Medical Center fall in two categories, human and non-human, and four subcategories, how clients are treated, quantity of human resource, congestion and long-running process of admission until patient discharge. Conclusion: the study shows that clients of emergency as recipients of health care service place an emphasis on the speed of service providing in a short time, how personnel treat patients, and way of offering medical services in order to raise quality of emergency services.

**Keywords:** Qualitative Research, Emergency Service Offering, Time of Service Offering, Personnel Behavior, Tehran Children Medical Center

#### INTRODUCTION

In recent years, patient satisfaction as one of the most important factors in assessing the quality of medical services in hospitals has received a lot of attention. Health care services can increase staff's morale and reduce relevant costs, if it takes on importance and offered with suitable criteria, as well as gaining patient satisfaction. In past years, the top priority of macro planning of health services was given to the quantity of medical services. However, today the major problem of policy makers in the field of health at global level is to assess and recognize the requirements and quality of achieving suitable health services by people in the society (Ebrahimnia et al., 2009), because the quality of provided services generally makes a difference to the quality of individual life. Health-sanitary institutions are required to take account of quality-centered concept at each stage of their operation in order to survive (Berger, 1991). To understand quality from customer's point of view, we need to assess his ideas using qualitative and quantitative indicators. Among different departments of a hospital, emergency department is perceived to be the heart of the center, in that 78% of patients admitted to hospital consist of patients in emergency department. It should be noted that patient satisfaction is something which has to be seriously taken into consideration in all departments of a hospital in a coherent and consistent fashion. The department has a sensitive and extraordinary place in hospital and medical health system due to the necessity of offering high quality services rapidly and effectively, and existence of various and complicated processes there (Tabibi et al., 2009). Today, with the introduction of new concepts of management to the world of medicine, more emergency units have had paid attention to patient satisfaction problem than ever (Omidvari et al., 2007). Long-running stay of patient in emergency department would reduce the possibility of offering services to

# Research Article

other patients requiring medical emergency, as it increases patient dissatisfaction and mortality caused by accidents consequently. Therefore, one of the most important indicators receiving attention in the assessment of emergency centers is the duration that patients may lose for receiving diagnosis and medical services. In addition to this, the improvement of satisfaction level at emergency centers exerts considerable effect on the view of clients about the entire medical service. Thus it is necessary to take it into account as one of the key goals of centers offering emergency services, as well as providing patients with fast and effective treatment (Ebrahimnia *et al.*, 2009). Given the importance of emergency department in providing fast high quality services for clients and victims as customers of health care service provider and the significance of this part in protecting patients, recognition and investigation of obstacles and factors facilitating health care offering can lead to their satisfaction with offered services of medical center, as well as improving relevant indicators for patient's life protection. In recent years, some studies focused on the quality of health care services and level of patient satisfaction, some of which are presented below:

George *et al.*, (2013) conducted a controlled quasi-experiential study into the level of patient satisfaction referring to emergency; in this study the level of emotional relationship and caring behaviors of emergency nurses to patients was influential and level of their satisfaction with provided services in emergency was confirmed (Wright *et al.*, 2013). Buchanan *et al.*, (2014) conducted a descriptive sectional study in order to determine the level of patient satisfaction with nursing care in emergency department of an urban hospital in Jamaica; in this study the level of emotional relationship and caring behaviors of emergency nurses to patients was found to be effective in the level of their satisfaction with provided services in emergency (Buchanan *et al.*, 2015). Soleimanpour *et al.*, (2008) conducted a study with the aim of evaluating patient satisfaction with emergency department of Tabriz Imam Reza Hospital using a questionnaire with Likert scale.

The significance of the use of qualitative studies and ideas of beneficiaries have been formerly underlined in the previous research, but most of the studies were conducted at the time of incident during pre-hospital phase as there has been no focus on emergency units inside hospital. Given the significance of beneficiaries' view on the improvement of emergency services, and the feasibility of study in Tehran Children Medical Center, the present study will be conducted with the aim of recognizing obstacles and factors in gaining the satisfaction of patient referring to the emergency department of the hospital, as well as strategies for improving the quality of services based on their ideas and a qualitative approach.

#### MATERIALS AND METHODS

The present study is a qualitative study and a content analysis-type study. The analysis of qualitative content is a kind of research method used to interpret the subjective content of written data. The location of the research is the emergency department of research medical educational center, Tehran Children Medical Center. The criterion for selecting participants in the study was based on a purposeful sampling from clients received medical services in the emergency department of Children Medical Center, considering their ability to participate and their satisfaction. On a whole, a total of 20 face-to-face interviews were conducted with the clients of the emergency as per data saturation. The duration of each interview was between 20 and 60 minutes. Moreover, interviewer used observation method in the field in order to collect data. It should be note that researcher asked participants to fill out personal information and informed satisfaction forms. Prior to the interview, we were given the permission to record voice and to take notes, and we assured participants that the whole personal information will remain confidential and audio files will be deleted after use. Additionally, participants could be excluded from the project at any stage of interview upon request. In this research, for data analysis, all interviews were transcribed without missing in the first place, and then the interviews and observations were reviewed many times in order to reach a general understanding of the data under consideration. In the next phase, in order to reach a general understanding of data, data analysis was started; at this point, each interview and observations of researcher were examined using text interpretation, and explicit and implicit meaning in the accounts of participants were extracted, classified and codified initially and independently by researchers.

# Research Article

Afterward, the codified text was examined, discussed and analyzed by the members of the research team so that a common understanding of the accounts of participants was achieved in the study. In order to fix the existing conflicts in the provided interpretations by the research group, we refer back to the main text of interviews, and made contact with participant if necessary. Afterward, using analogy and text comparison, the key phrases and codes were placed in the relevant categories and subcategories, and were discussed again by the research members; finally, the ultimate project of findings were offered in the form of main category and subcategory. Afterward, the interview texts were randomly made available to some participants of the interview in order to review them so that their accuracy was confirmed and they underwent essential revisions. It is worth noting that 181 codes were obtained in the initial coding process and were reduced to 18 codes during analysis stages and discussion of research group.

In this research, in order to make sure data are accurate and valid, three revisions were required, personal revision, technical revision and thorough revision, so as to ensure the accuracy of the findings. The presence of the researcher in the field and taking notes from the observations were incorporated into this procedure in order to ensure the reliability of the data.

# RESULTS AND DISCUSSION

#### **Findings**

By analyzing data, eventually two categories, 4 subcategories, and 18 codes were obtained, which are explained briefly as follows:

#### 1. How to Treat Clients:

Clients expect hospital staff to express good and gentle behavior toward them, and be held accountable for their inquiries, as well as expressing sympathy for them cheerfully. Failure to comply with this axiom would cause dissatisfaction and sometimes skirmish in the emergency department. Regarding good manner, client 4 says "employees should not talk loudly and try to answer their queries so that one can feel comfortable. They also should be gentle and try not to raise their voice so that one will not regret coming to hospital".

Table 1: Factor and keywords relating to treatment for clients of Tehran Children Medical Center from clients' point of view

Trom chems point of view				
Keywords	Subcategory	Category		
Forbearing and kind treatment of staff with clients				
Providing necessary explanation and guidelines on disease	Treatment of staff with clients			
Paying attention to clients' talks and appropriate accountability to		Human		
them		resource		
Understanding clients' mood and sympathy for them				
Ouick and continuous presence at patient's elbow				

#### 2. Quantity of Human Resource

The scarcity of workforce is conceivable in some periods of a years when the number of clients grow. With respect to the scarcity of nursing staff, one of patient companions says "if you draw a comparison with a standard hospital in the world, you will see there is a nurse for every two beds, but each nurse here deals with at least eight patients and has to constantly come to check on them and go for other patient".

Table 2: Human resource scarcity and key phrases relating to them from the point of view of clients referring to Tehran Children Medical Center hospital

Key phrases	Subcategory	Category
Scarcity of medical staff compared to the number of referring patients Pending stay of more non-emergency patients in order to receive services	Scarcity of	
due to staff shortage and lack of compliance with nurse-to-bed ratio	human resource	Human
The need to increase the number of clinical staff trained for emergency	1 CSUUI CE	resource

# Research Article

3. Long-Running Process of Admission until Patient Discharge from Emergency Department of Tehran Children Medical Center

One of the factors contributing to offering high quality services and the increase of patient satisfaction is duration of administrative works at emergency department, which is associated with administrative management problem. Lengthy time of admission process and treatment can jeopardize emergency patient's life, if it takes a long time.

Table 3: Factors of lengthy time of admission process until patient discharge from emergency and key phrases relating to it from the point of view of clients referring to Tehran Children Medical Center hospital

Key phrases	Subcategory	Category
Lengthy time of admission and discharge process		
The need to quickly offer services upon patient's		
arrival		
Increased waiting time of patients for receiving	Long-running	Non-human resources
services	process of	
The need to shorten the process of admission and	admission until	
treatment	patient discharge	
The need to get service tariff from clients after	from emergency	
patient's relative recuperation		
The need to implement triage in order to accelerate		
admission		

In Tehran Children Medical Center, on arrival to emergency department, person needs to pay tariff for examination. In case of physician's request for running diagnostic test such as examination and graphs, etc., admission process should be undertaken in these departments after referring to relevant parts; charge is paid, and generally administrative regulations should be applied in each department. The whole procedure is time consuming and causes repeated commute of clients. The stay and commute cause an unpleasant situation and dissatisfaction for clients.

# 4. Congestion in Emergency Department

Another influential factor in offering high quality services and increase of satisfaction which is not unrelated to physical resources and managerial aspect is congestion in emergency department.

Table 4: Congestion in emergency and key phrases relating to it from the point of view of clients referring to Tehran Children Medical hospital

Key phrases	subcategory	category
The large number of interns and students with respect to		
emergency beds	Congestion in	
Congestion due to inadequate space of emergency	C	Nonhuman
Noise pollution caused by congestion	emergency	resource
Infeasibility of offering immediate service due to congestion		

#### Discussion

- The way staff behaves and treat is one of the influential factors in offering high quality services in emergency department.

The obvious example of the factor is good conduct, gentleness, patience, empathy and sympathy, and attention to clients' words. The result of Jalili *et al.*, (2007), regarding the study of the satisfaction level of patients referring to the emergency depart ment of Tehran Imam Khomeini Hospital, show that behavior and performance of staff is one of the weaknesses in the medical center, which shows the significance of good conduct toward emergency clients; in order to achieve this, providing essential training with respect

# Research Article

to how to deal with patients and companions is felt more (Buchanan *et al.*, 2015). Ahmadi *et al.*, (2010), in his study, found that providing suitable training for nurses concerning appropriate treatment with patients make a difference to the increase of their satisfaction level.

- Scarcity of nursing staff in the emergency is perceived to be an influential factor in the quality of nurses' services and emergency services. The factor is influential in the level and quantity of essential time for each patient. Considering the need of patients for nurses' attention to worrying condition, and the need for respecting patient rights can, on the other hand, overshadow these issues. Given the fact that connection is considered the heart of clinical skills, and building a close relationship with patient under care has a considerable effect on the effectiveness of health care and desirable results, but the shortage of nurses and high volume of their duties have led nurses to be unable to take account of this issue as appropriate as it should be. The effect of nurse staff shortage in fulfilling their care functions were underscored in other research. In Lahoti (1997) "obstacles to the relationship between nurse and patient", the shortage of nurses compared with patients, and lack of time are expressed as the most important obstacles in the path of nurses in establishing relationship with patients (Buchanan *et al.*, 2015).
- Lengthy procedures of emergency are also one of the influential factors in patient satisfaction. The current processes of outpatient admission and treatment in this center is in the way that essential charge has to be paid for each service separately in the first place and the relevant service is then offered. The practice causes patients' dissatisfaction, as well as prolonging patient's waiting time. In case of the establishment of a new system based on fast patient treatment and necessary service offering and getting relevant charges in the settlement and discharge processes, a great deal of problem with waiting time and patient satisfaction will be solved. In the study conducted by Jebrieli *et al.*, (2012), it was found that the application of the systems will bring high quality and client-oriented service offering, as well as timely access to full and fast information. According to the results. The most important advantage of using HIS system is the promotion of the quality of health care service and timely access to information, which is in agreement with our findings (Buchanan *et al.*, 2015).
- Emergency department overcrowding is considered another influential factor in offering services in the study. The factor itself is influenced by factors such as hospital structure, people culture at the time of referring to emergency, as well as skill and pace of performance of staff in offering immediate services. Javadi *et al.*, (2008) conducted a study into determining the level and influential factors in the satisfaction of patients referring to Isfahan Medical Emergency Center, touched on clients' low satisfaction in medical educational centers, believing that the dissatisfaction comes from overcrowding and congestion in the center. Given the fact that Children Medical Center is an educational hospital, and the congestion and overcrowding in educational hospitals and lack of satisfaction resulting from it are consistent with our finding (Omidvari *et al.*, 2007).
- Increased waiting time is also one of the most important causes of overcrowding in emergency department. Patient's waiting time for receiving emergency services is directly related to the level of their satisfaction. According to the findings of the present study, patients invariably are dissatisfied with prolonged waiting time for receiving services. According to the existing statistics and the presence of the researcher on the sight during successive shifts in the emergency of Tehran Children Medical Center, the mean of clients referring during day and night is 397 clients, about two third of whom are outpatients. It seems that the high rate of waiting time in this center is to some extent linked with lack of the establishment of para-clinic departments inside emergency department.

#### Conclusion

The conclusion of the study suggests that patients admitted to emergency room as recipients of medical services laid emphasis on how staff behave and how they offer medical services when referring to the most important improvable factors which can give rise to high quality services in the emergency department. Moreover, from the viewpoint of clients referring to the center, the obstacle to providing high quality services in the emergency of Tehran Children Medical Center hospital is associated with overcrowding and congestion in emergency and lengthy time of waiting for receiving the medical services of the hospital. In conducting the research, a series of limitations as outlined below were imposed in the

# Research Article

study, for which the researcher attempted to reduce the problems resulting from them by selecting a suitable strategy.

#### REFERENCES

Berger S (1991). Making Total Quality Management. Healthcare Executive 6(2) 22-5.

**Buchanan J, Dawkins P and Lindo JL** (2015). Satisfaction with nursing care in the emergency department of an urban hospital in the developing world: a pilot study. *International Emergency Nursing* 23(3) 218.

Ebrahimnia M, Amerian A, Azizabadi-Farahani M, Khoddami-Vishteh HR and Heidari S (2009). Patient satisfaction from emergency healthcare delivery in Military Hospitals. *Journal of Hospital* 2(8) 15-22 (Persian).

Omidvari S, Shahidzadeh-Mahani A, Motazeri A, Azin SA, Harirchi AM and Soori H *et al.*, (2007). Evaluation of patient satisfaction in Tehran University of Medical Sciences Hospitals. *Payesh Journal* **2**(7) 141-52(Persian)

**Tabibi SJ, Maleki MR, Movahednia S and Gohari MR (2009).** Relationship between Hospitals Ownership and Performance Assessment Score of Emergency Departments in the Hospitals Affiliated to Iran University of Medical Sciences 2007. *Journal of Health Administration* **12**(36) 25-32.

Wright G, Causey S, Dienemann J, Guiton P, Coleman FS and Nussbaum M (2013). Patient satisfaction with nursing care in an urban and suburban emergency department. *Journal of Nursing Administration* 43(10) 502-508.