

## **THE DEGREE OF SATISFACTION PERCEIVED BY HEALTHCARE SERVICES CONSUMERS IN STATE HOSPITALS – CASE STUDY EMERGENCY COUNTY HOSPITAL FROM ALBA IULIA**

*Muntean Andreea<sup>1</sup>  
Lazea Ruxandra<sup>2</sup>*

*ABSTRACT: The paper investigates the degree of satisfaction of the patients that accessed the medical services provided by the Emergency County Hospital from Alba Iulia. The key factors considered important in establishing the degree of satisfaction were the following: the endowment with new generation of portable medical equipment (ultrasound machine, portable oxygen, resuscitation equipment); the endowment with new generation of fixed medical equipment (ray machine, CT); the hospital furniture; the endowment with non-medical equipment for physical comfort of patients (climate equipment); skills of medical staff; the waiting time until the takeover by a doctor/nurse; the effectiveness of doctors; nurses efficiency, cleaning efficiency of support staff perceived patient in the respective unit.*

*KEYWORDS: satisfaction, healthcare consumers, patients*

JEL CODES: M 31; I1

### **Introduction**

As a concept, satisfaction was defined as “the consumers’ feelings based on the experiences gained after consumption” (Oliver, 1997; Spreng et al, 1996). In the case of medical services the process of evaluating the satisfaction starts from the moment the consumer access the healthcare services, including the approached modality used by the medical staff, the medication scheme, the physical comfort experienced during treatment and ends when the medical process finishes.

Patient satisfaction can be defined as "the result of judgment made by the healthcare consumers after analyzing the medical outcome of the process in order to see if their expectations have been accomplished or not" (Palmer et al., 1991 quoted by Alhashem AM, Alquraini H. Chowdhury R. I., 2011).

In the process of analyzing the medical process, the consumer of healthcare services can appeal on assessment of the following elements, identified by Schmenner (1986) as being the most important in the evaluation process, in this case the evaluation of healthcare services:

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<sup>1</sup> “1 Decembrie 1918” University of Alba Iulia, 11-13, Nicolae Iorga Street, Alba Iulia, Postal code: 510009, munteanandreea2009@yahoo.com

<sup>2</sup> “1 Decembrie 1918” University of Alba Iulia, Telephone number: +40724308546, 11-13, Nicolae Iorga Street, Alba Iulia, Postal code: 510009, ruxandra\_rdvc@yahoo.com

- Tangible elements (eg, physical facilities, medical equipment, and the appearance of the medical personnel);
- Responsiveness (eg, willingness or availability of medical personnel to exercise its obligations);
- Recovery (the degree to which service providers actively decide corrective action when something goes wrong or something unexpected happens);
- Knowledge (knowledge and skills of healthcare providers, physicians' awareness over the new medical technologies, etc.);
- Accessibility (ease with which it one can reach the medical facility);
- Flexibility (the ability to adapt the medical systems and personnel practices in order to meet the new medical requirements).

In practice, a high quality of medical process and exemplary behavior of the medical staff does not guarantee a high degree of satisfaction or positive behavioral intentions. For example, the environment, advanced medical equipment surely satisfy the expectations of healthcare services consumers about the degree of the quality of the realized medical process, but those elements cannot make up for a long waiting period or a medical examination conducted improperly. Patients can be satisfied with basic services (eg diagnosis set by the doctors, treatment scheme), but a low quality found in the complementary services (eg the interpretation of medical outcomes, faulty organization of cash registers where are collected the co-payments, found in the cases of some of state hospitals, or lack of appropriate medication, etc.) will give patients a bad impression. These discrepancies may result from the failure of taken into account on the relationship between the service quality and satisfaction (Li, Huang Yang, 2011).

In order to understand how different factors affect patient satisfaction regarding healthcare services, researchers have explored various dimensions taken into consideration by patients when assessing the quality of healthcare services, such as: the quality of the medical process exercised by the doctors and nurses, the comfort felt by the patient during the whole time he was admitted into the medical facility, the degree of interest shown by doctors, nurses and nonmedical healthcare personnel and the physical facilities that exist in the medical facility where the patient received the medical treatment (Fletcher et al, 1983; quoted by Choi, et al, 2005; Ware et al, 1978; 1977 quoted by Choi, et al, 2005).

An important factor influencing customer satisfaction of medical services is represented by the medical personnel. The influence of the medical personnel can be grouped into three categories: the first concerns the awareness of the medical personnel regarding the new treatment regimens, new appearances in the medical technologies of investigation and diagnosis, leading to an effective medical process, making it more faster and more painless for the patient in order to generate higher levels of satisfaction for the consumers of healthcare services.

The second category refers to the behavior and attitude of medical personnel, which can be considered very important in the communication process with the patients and establishing a diagnosis more quickly and more accurately.

A third category of factors that might influence the consumers' satisfaction towards healthcare services is the communication process realized by the medical personnel. Communication is the process through which the social interaction during the visit is realized, the patient is heard, psychological and non-technical information is provided to the medical personnel, and the healthcare

consumers expect to be informed in readily understandable terms about his medical condition (Tucker, 2002).

In the case of healthcare services "perception is defined as the process by which the consumer receives, selects, organizes and interprets the stimuli to which it is exposed in a manner consistent with its own frame of reference - attitudes, values, motivations, previous experiences" (Schiffman, Kanuk, 2004, p. 158 quoted by Băbuț 2013, p. 65).

Chahal and Kumari (2010) suggest that patients form their perception of quality of healthcare services based on three dimensions: the physical environment (which includes the state of the environment, the social factor and the tangible elements), qualitative interaction (including attitudes and behavior, diagnosis and quality of the medical process), and quality of the results (including waiting times, patient satisfaction and loyalty).

Perception is influenced by several factors including:

- Exposure to a stimulus: the five units of stimuli include hearing, taste, sight, touch and smell. Any of these stimuli produces a series of reactions in terms of consumer behavior of healthcare services. For example the ambiance (the decoration from the medical saloons, staff attire, the existing atmosphere, the smell etc.) in a given medical facility will certainly generate over the perception a positive/negative impact about the quality of the healthcare services offered. "Although patient perception formed after the exposure to stimuli significantly influences the choice of hospital for the medical treatment is not easy for a patient to understand the quality of services provided by a hospital, this is a complex area that is unique in all its features and involving many dimensions in order to assess the quality of executed medical service" (Arasli et al, 2008; quoted by Amin, Nasharuddin, 2013 Hariharan et al, 2004; quoted by Amin, Nasharuddin, 2013, Hoel, Saether, 2003 quoted by Amin, Nasharuddin, 2013).

- Attention: only exposure to certain stimuli and not paying attention does not guarantee satisfaction to the healthcare services consumers. The perception about the level of the heat in the medical unit, the emplacement of the hospital wards and the distance between them, day and night lighting, the space in the saloons (Mourshed., Zhao 2012) capture the attention of consumers of healthcare services. This is why healthcare consumers will choose only those medical facilities / doctors that attract their attention. For example a particular medical clinic can attract consumers attention by using different means of promotion, namely: last generation of medical equipment (designed both for diagnosis and treatment), and some famous names in medicine that offer their medical service in that medical facility or collaborate with it, while state hospitals and / or clinics by may mainly attract consumers of medical services with a well-trained medical personnel and secondly with the help of the medical facilities or with the pleasant ambiance.

- Interpretation: the meaning assigned by each individual to a certain stimulus. For example, the behavior (gestures, facial expressions, the giving time for the medical consultation, the given attention) and communication process realized by the medical personnel (the used language, the tone of voice, the explanations offered) can be misinterpreted by consumers taking them into the conclusion that they are not treated with professionalism, offended or ignored.

- The intensity: it is often perceived in comparison with other stimulus. For example, several state hospitals provide the same ambience (colors, furniture), but some of them are using medical techniques that reduce pain to the patients or use the latest medical equipment. Aiken et al. (2011)

affirm that "a careless image of the hospital and a low endowment with medical equipment are often associated with a lack of professionalism of the medical personnel working in that medical unit".

- Psychological stress entails a series of psycho-behavioral influences and different manifestations that appear from anticipating the difficulties that might be encountered in dealing with a certain medical affection (Mârza-Dănilă D., 2009).

- Emotions can also influence consumers' perception about the degree of satisfaction felt after accessing a medical service. For example, in some cases, in state hospitals the patient is not entitled to an opinion over a specific medical surgery or a particular treatment scheme, he is only announced by medical staff about the decisions that were taken without being given all possible variants from which the healthcare services consumer can benefit. This can be the result of a mentality outdated medical personnel that consider the patient as being unimportant and so it isn't involved in decisions about a particular surgery or treatment scheme, or it can be the result of a lack acute medication or equipment, which limits to the maximum decisions and actions that can be taken by the medical personnel.

There are two different types of emotions that can be taken into account in the perception of a medical experience: the primary emotions that occur before the medical process and secondary emotions that occur after medical process. These emotions can be analyzed and the result is a cognitive one corresponding to the process and emotions resulting from this cognitive and attributional process (Westbrook, Oliver, 1991).

## **Results**

The conducted research presented in this paper is an exploratory one wanting to offer answers regarding the perceived consumer satisfaction towards healthcare services accessed in state hospitals, in this case the Emergency County Hospital from Alba Iulia.

The instrument that was used to conduct the present research was the questionnaire constructed in three parts. The first part of the questionnaire is a general one and investigates the accessed medical services and the number of times that the respondents accessed them. The second part investigates patients' satisfaction about Alba County Emergency Hospital and the third part is designed in order to socio-demographic data.

The investigate population was formed by the person's age between 20 and over 60 years that have accessed healthcare services from the investigated hospital. The questionnaires were administered directly to the respondents.

The objective of the present paper is the investigation of the degree of satisfaction perceived by the patients that accessed the medical services provided by the Emergency County Hospital from Alba Iulia. The questionnaires from the present research were applied on 50 respondents that were asked to respond to this questionnaire.

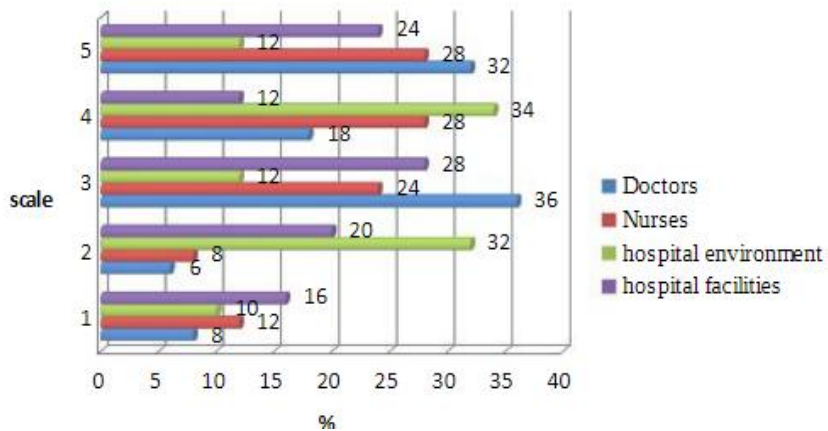
In order to find out the degree of satisfaction perceived by the healthcare services consumers we established the following secondary objectives:

- the endowment with new generation of portable medical equipment (ultrasound machine, portable oxygen, resuscitation equipment);
- the endowment with new generation of fixed medical equipment (ray machine, CT);
- the hospitals furniture;
- the endowment with non-medical equipment for physical comfort of the patients (climate equipment);

- the competences of the medical personnel;
- the waiting time until being takeover by a doctor/nurse for consultation;
- doctors efficiency;
- nurses efficiency,
- cleaning efficiency of the non-medical personnel perceived by the patient in the respective medical unit.

After analyzing the responses given in the questionnaires by the patients the obtained results were the following:

In the first question the respondents were asked to give a grade from 1 to 5 (1 being the least and 5 the most) for each of the items considered to be important in determining their satisfaction.

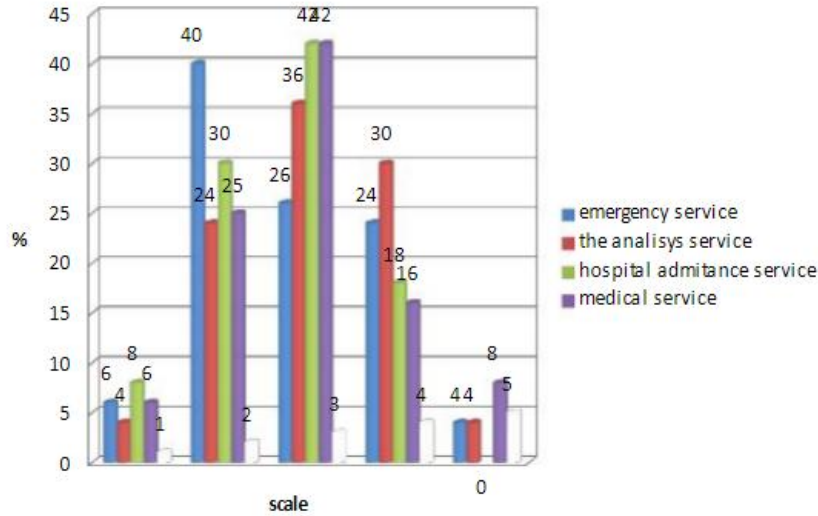


**Figure no.1 Elements considered important when establishing the satisfaction degree**  
*source: authors' computation*

From the obtained data we can observe that a large number of respondents consider doctors as being very important in establishing the degree of felt satisfaction. Hospital environment is next considered by the respondents as being important when establishing the degree of felt satisfaction. On the third place we can find the nurses and hospital environment is considered less important for the patients.

These results can be explained by the fact that the doctor is considered as having a central place in the recovery of the health status.

The second question asked the respondents to express their opinion about the satisfaction felt for each medical service they accessed. The medical services taken into consideration were the following ones: emergency service, the medical analysis service, hospital admittance service, medical service.

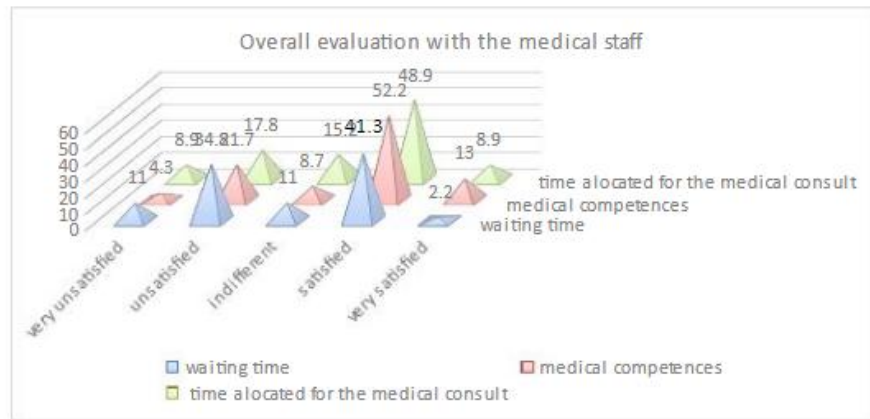


**Figure no.2 The degree of satisfaction felt by the respondents for each accessed service**  
*source: authors' computation*

From the obtained result we can see that an important number of respondents were little satisfied with the emergency services. Possible causes that let to this result can be: the waiting time was too long; patient life was not in danger so other consumers were placed first for consulting and admitting into hospital; waiting area wasn't clean.

A large number of patients couldn't create an image about the degree of satisfaction felt about the accessed services. Possible causes for this obtained result can be the following ones: patients don't have high expectations about the medical services; don't have any experience with the medical services and can think that this is the normal way that the medical processes are conducted;

Question 3 asked the respondents about the effectiveness of medical personnel that they came in contact with. The categories of medical personnel that are found in the hospital are doctors and nurses.



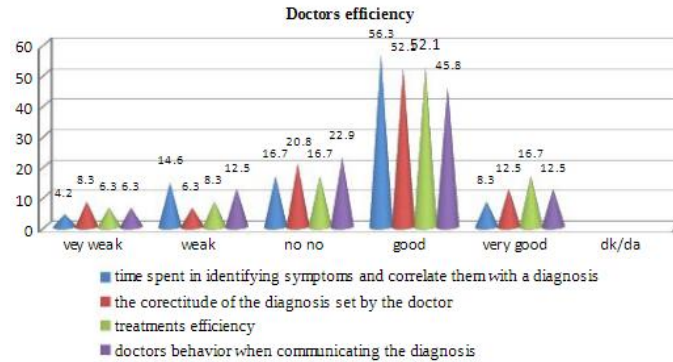
**Figure no.3 Efficiency of the medical personnel**  
*source: authors' computation*

From the total respondents a percent of 52,2% consider that are satisfied with the medical competences of the medical personnel. The satisfaction percent was formed after the evaluation of the entire medical process from the placement of the diagnosis, establishing the medical treatment scheme till the healing of the healthcare services consumer.

The allocated time for the medical consult recorded the highest percent of 48,9% from the total number of respondents. This percent is held by the healthcare services consumers that are satisfied with this medical process. The degree of satisfaction is influenced by: time spent for evaluating the symptomatology, time spent till the correlation of the symptomatology with a diagnosis and planning the treatment scheme.

The waiting time registered two closed percent in responses, 41,3 declare that are satisfied with the waiting time meanwhile 34,8 of the respondents are unsatisfied by the waiting time. The degree of dissatisfaction can be caused by the following factors: the number of patients was raised and no medical personnel were available, the symptomatology of the patient didn't cause any life threats and was left to wait until other urgent cases were solved first.

The following question asked the respondents about the perceived satisfaction regarding the doctor's efficiency.



**Figure no.4 Doctors efficiency**  
*source: authors' computation*

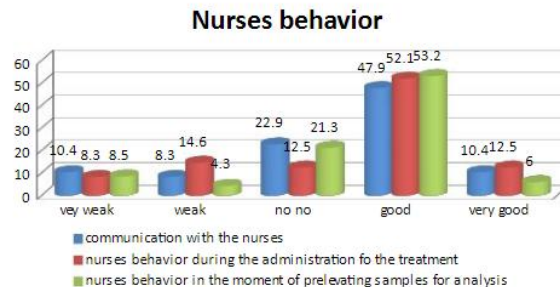
Doctor's efficiency was investigated by the following aspects: speed in identifying symptoms and correlate them with a diagnosis; the correctitude of the diagnosis set by the doctor that did the consultation; medical treatment efficiency; doctor's behavior when communicating the diagnosis.

From the results presented in the figure no. 4 we can observe that the most significant percent are present in the "good" category. This means that the respondents consider the doctors' efficiency as having a positive influence over the perceived healthcare satisfaction degree.

The following medical category that was investigated with the help of the question no. 5 was the nurses' efficiency. Nurses are the medical category that is more present that the doctors throughout the entire time that a patient benefits from the medical services. Among the duties that the nurses must comply we can notice the following:

- the nurses are responsible with the administration of the medication to the patients;
- are responsible with supervising the evolution of the patients medical condition;
- are obligated to report any changes that occur in the general evolution of the patients health status;
- are responsible with sampling of the medical analysis that are needed for the patients.

Nurses' efficiency was investigated with the usage of the following aspects: language used by the nurses; nurses' behavior during the administration of the treatment; nurses' behavior in the moment of collecting the sampling for analysis.





**Figure no.5 Nurses efficiency**

source: authors' computation

From the results obtained in the figure no 5 we can observe that the general satisfaction level perceived regarding the nurses' efficiency is being considered as having a "good" level. The highest level of satisfaction is held by the nurses' behavior in the moment of taking the samples for the medical analysis with a percentage of 53,2%. Nurses' behavior during the administration of the treatment recorded the second level of satisfaction perceived by healthcare services consumers with a percentage of 52,1%. And on the third level we can observe that the communication process realized by the nurses recorded a percent of 47,9%.

The next question investigated the efficiency of the auxiliary personnel. In the category of auxiliary personnel we included: the sisters efficiency and the cleaning personnel efficiency.

The sisters' role in the hospital is to bring the food to the patient, change the sheets, and make sure that every medical saloon is airy.

The cleaning personnel are in charge of maintaining the proper level of cleanliness in the hospital in order to reduce the number of bacteria and viruses in the hospital.

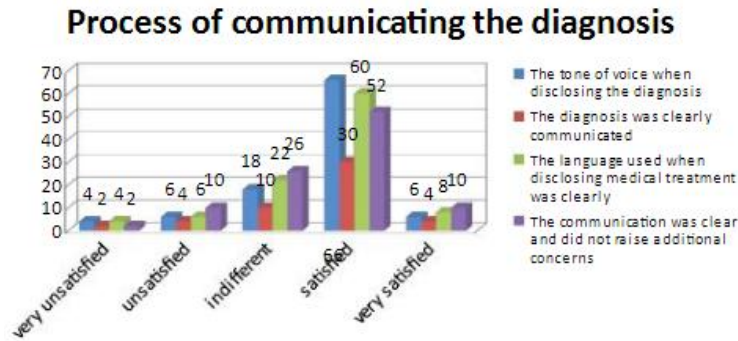


**Figure no.6 Auxiliary personnel efficiency**

source: authors' computation

From the obtained results we can observe that the satisfaction level of the auxiliary personnel efficiency attracted a good level of satisfaction. Also we can see that an important number of the respondents couldn't make an opinion regarding the degree of satisfaction felt after the interaction with the auxiliary personnel.

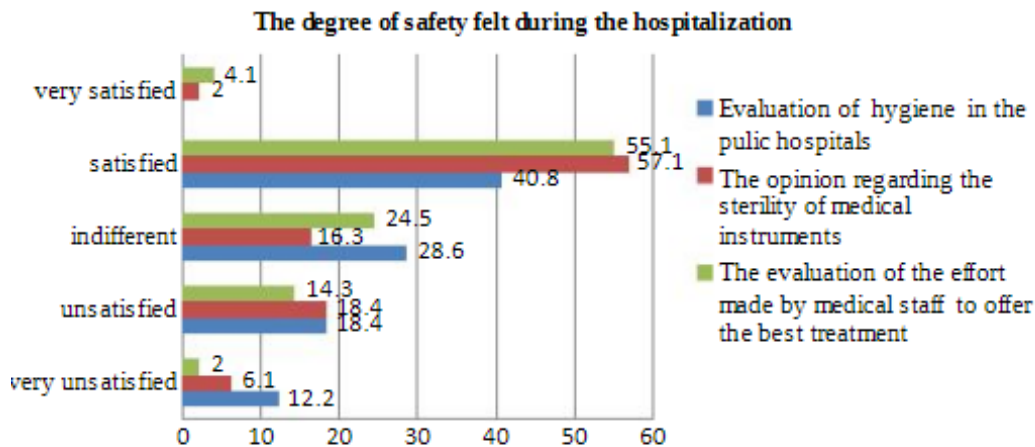
With the question number 7 the respondents were asked to indicate on a scale from 1 to 5 (where 1 means very dissatisfied and 5 very satisfied) the perceived satisfaction felt after the process of communicating the diagnosis and treatment scheme from the doctor.



**Figure no.7 process of communicating the diagnosis and treatment**  
*source: authors' computation*

From the obtained responses we can observe that a large number of respondents are satisfied with the tone of voice used by the doctors when disclosing the diagnosis, the language used when disclosing medical treatment was clearly communicated, the communication was clear and did not raise additional concerns. Thus we can conclude that the process of communicating the diagnosis had an important influence in establishing the degree of satisfaction perceived by the healthcare services consumers.

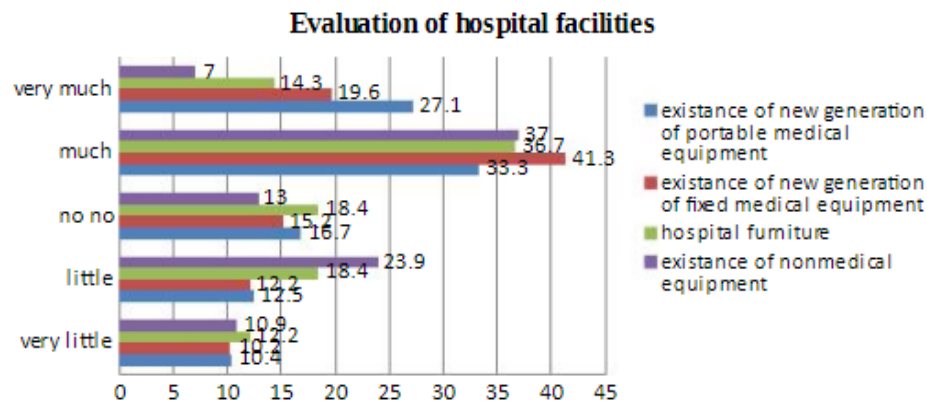
Question 8 investigated the degree of safety felt by the healthcare services consumers during the hospitalization. The degree of safety was investigated by the following elements: the medical personnel made every effort possible in order for the patient to benefit from the best treatment; the perceived sterility of the medical instruments; the overall level of cleanliness of the hospital. The obtained results are presented in the figure no 8.



**Figure no.8 The degree of safety felt during the hospitalization**  
*source: authors' computation*

From the results presented in the figure no. 8 we can conclude that a large number of respondents, 57,1% consider that are satisfied with the level of the sterility of medical instruments in the medical facility. The efforts made by the medical staff to improve the patients' health condition recorded a percentage of 55,1% influencing in a good level the degree of satisfaction perceived by the healthcare services consumers. A medium number of respondents, 40,8% were satisfied with the level of cleanliness from the hospital.

Next question investigated the degree of satisfaction perceived after analyzing the hospitals facilities. In the hospitals facility were included the following: the existence of new generation of portable and fixed medical equipment; hospitals furniture; the existence of nonmedical equipment. The obtained results are presented in the figure no.9.



**Figure no.9 hospital facilities**

source: authors' computation

From the results obtained in the figure no. 9 we can conclude that a significant number of respondents consider that the existence of new generation of fixed medical equipment had a major influence in establishing the satisfaction felt during the entire hospitalization period. The next obtained response, 37%, is also important in establishing the level of satisfaction perceived by the healthcare services consumers is the existence of nonmedical equipment. In the category of nonmedical equipment we can include the AC unit and TV.

The hospitals furniture registered also an important significance in the level of perceived satisfaction of the healthcare services consumers.

On the last level we find the existence of the new generation of portable medical equipment. From its results we can conclude that this item recorded also an important significance in establishing the satisfaction of the healthcare services consumers.

After analyzing the demographic data we can conclude that from the total number of respondents 29 were male and 21 female. 25 had the age 20-30; 12 had the age 31-40; 7 had the age 41-50; 5 had the age 51-60 and one respondent was over 61years. Regarding their studies one respondent finished gymnasium; one respondent finished vocational school; 11 respondents graduated highschool; 27 graduated university studies; 10 had postgraduated studies.

## **Conclusion**

Studying the satisfaction level of the healthcare services consumers is an important factor of the medical process. Knowing the level of the satisfaction perceived by the healthcare services consumers can help in the future by creating more appropriate services or changing the way that the medical personnel communicates with the patients.

The main factors that influence the satisfaction level are: doctors, nurses, medical equipment influence mostly the satisfaction perceived by the healthcare services consumers, followed by the level of cleanliness, the furniture and the equipment designed for the patients comfort.

## **References**

1. Aiken L. H., Sloan D. M. e, Clarke S., Poghosyan L., Cho E., You L., Finlayson M., Kanai-Pak M., Aunguroch Y. (2011), Importance of work environments on hospital outcomes in nine countries, *International Journal for Quality in Health Care*, nr. 23 pp. 357–364;
2. Alhashem A. M., Alquraini H., Chowdhury R. I.(2011), Factors influencing patient satisfaction in primary healthcare clinics in Kuwait, *International Journal of Health Care Quality Assurance*, Vol. 24 No. 3, pp. 249-262, Emerald Group Publishing Limited 0952-6862, DOI 10.1108/09526861111116688
3. 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 Iss: 3, pp.238 – 254
4. Băbuț R. (2013), *Consumatorul și publicitatea*, Editura Risoprint, Cluj Napoca;
5. Chahal H., Kumari N. (2010), "Development of multidimensional scale for health care service quality (HCSQ) in Indian context". *Journal of Indian Business Research*, Vol. 2 No. 4, pp. 230-255.
6. Choi K.-S., Lee H., Kim C., Lee S. (2005), The service quality dimensions and patient satisfaction relationships in South Korea: comparisons across gender, age and types of service, *Journal of Services Marketing*, 19/3 (2005) 140–149, Emerald Group Publishing Limited [ISSN 0887-6045], [DOI 10.1108/08876040510596812]
7. Li S.-J., Huang Y.-Y, Yang M. M., (2011),"How satisfaction modifies the strength of the influence of perceived service quality on behavioral intentions", *Leadership in Health Services*, Vol. 24 Iss: 2 pp. 91 – 105
8. Oliver R.L. (1997), *Satisfaction: A Behavioral Perspective on The Consumer*, Irwin-McGraw-Hill, Boston, MA
9. Mârza-Dănilă D., (2009), *Relația terapeut-pacient(terapia centrată pe client) curs studii de licență în terapie ocupațională*, Editura Alma Mater, Bacău;
10. Mourshed M., Zhao Y.(2012), Healthcare providers' perception of design factors related to physical environments in hospitals, *Journal of Environmental Psychology*, Vol. 32, nr. 4, pp. 362–370;
11. Spreng, R.A., MacKenzie, S.B., Olshavsky, R.W. (1996), „A reexamination of the determinants of consumer satisfaction”, *Journal of Marketing*, Vol. 60, July, pp. 15-32
12. Schmenner R.W. (1986), “How can service business survive and prosper?”, *Sloan Management Review*, Vol. 27 No. 3, pp. 21-32.

13. Tucker J. (2002), "The moderators of patient satisfaction", *Journal of Management in Medicine*, Vol. 16 No. 1, pp. 48-66.
14. Westbrook R.A., Oliver R.L. (1991), "The dimensionality of consumption emotion patterns and consumer satisfaction", *Journal of Consumer Research*, Vol. 18 No. 1, pp. 84-92.