



# Patients Satisfaction on Services of Public Hospitals! Does Initiated Reform of Health Sector Is Giving Expected Results?

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## Abstract

**Introduction:** Patient satisfaction on health services is related to different determinants including technical and interpersonal care, physical environment, accessibility, availability, financial resources, organizational characteristics, continuity of treatment, and care result. **Methods:** The research was conducted in different units of Gjilan General Hospital/Kosovo. The respondents of this research include hospitalized and outpatient patients, all patients were interviewed, after obtaining informed consent from them. Study tools were prepared on the basis of adopted questionnaire consisted of 30 questions aiming analyzing of several patient characteristics! **Results:** Patients positively evaluate the organization and quality of health care, the average grades for doctors and nurse services were between 8.4 to 8.8. Study has revealed eight main factors that have significantly affected patient satisfaction regarding the quality of hospital services. Four factors have been correlated to doctor work with patients, doctor average length of time spent with hospital inpatients, the perceived quality of medical advices and perceived quality of work of nurses with hospital patients. While other four factors have been correlated to technical conditions of hospital units such are: patient satisfaction regarding overall technical conditions, level of hygiene inside units, level of hygiene of toilets and the easiness of access to hospital facilities. **Discussion:** The study findings revealed that the majority of patients were satisfied with the quality of healthcare services provided by the hospital workers. However, there were some areas for improvement, particularly in terms of communication, accessibility, and the physical environment.

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## Subject Areas

Public Health

## Keywords

Patient, Satisfaction, Quality, Service, Hospital

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## 1. Introduction

Intellectuals have been assessing hospital patient satisfaction for years, using a range of methodologies and conceptual frameworks. Studies showed that patients with moderate expectations reported the highest levels of satisfaction, whereas those with excessive expectations reported the lowest levels of satisfaction [1]. Across studies, provider-related variables were the strongest predictor of patient satisfaction. Nine factors determine the healthcare services: technical care, interpersonal care, physical environment, accessibility, availability, financial resources, organizational characteristics, continuity of treatment, and care result. Researches that examined the physical environment in relation to patient satisfaction ratings on social media discovered that environmental variables such as parking, cleanliness, and waiting rooms contribute to the patient satisfaction [2]. Patient characteristics such as: age, gender, education, socioeconomic status, marital status, race, religion, geographic characteristics, frequency of visits, length of stay, health status, personality, and expectations have been investigated to ascertain their associations with patient satisfaction [2]. The difficulties of communication between physicians and other healthcare team members not only lead to practice errors and disruption of patient safety, but also lead to losing the patient's trust, dissatisfaction and anger toward healthcare service providers [3]. Many criteria and measurable attributes can define healthcare performance and quality, such as safety, effectiveness, efficiency, availability, accessibility, timeliness, and equity. This is why healthcare professionals and organizations must consider patient preferences as well as social preferences in assessing and assuring quality [4]. By introducing new health law in 2012, Kosovo Ministry of Health aimed reform of entire health sector through division of three main components and roles. Based on new law, Ministry of Health would keep regulatory role, role of contractor of health services would be taken by Health Insurance Found and third component provision of health service has been foreseen to be taken by new Health Organization called Kosovo Hospital and University Clinical Service (KHUCS). But since then important part of the reform, Health Insurance Found is not yet completely functionalized. In other side Kosovo Government finance health sector with 4.1% of GDP, a level that does not cover all sector needs! [5] Through new organization, Kosovo Hospital and University Clinical Service, all hospital services have been centralized. University Clinical Center, all General Hospitals and all other secondary and tertiary health services because of centralization lost their

autonomy! Though with the new law has been promote more autonomy for health institution, in practice happened something opposite, Kosovo Hospital and University Clinical Centre become a huge institution with essential management difficulties [6]!

## 2. Methods

The present, cross-sectional study was carried out to evaluate the hospitalized patient satisfaction on provided services. The research was conducted in different units of Gjilan General Hospital/Kosovo. The respondents of this research include hospitalized patients, all patients were interviewed, after obtaining informed consent from them. The study sample consisted of 130 respondents; all patients have been recruited by selecting patients in the two of end beds in the even-numbered rooms, while in the odd-numbered rooms, have been chosen patients in the middle beds. Study tools were prepared on the basis of adopted questionnaire (The Patient Satisfaction Questionnaire Short Form (PSQ-18) 20 consisted of 30 questions aiming analyzing of several aspects including: patient demographic data, time spent with physician and availability of services, general satisfaction on medical service and medical care, technical quality, communication, general satisfaction on departments and toilets hygiene, pocket payments and the nature of these expenditure and patient perception regarding effects of new law and the effects of health sector reform! Each variable has been measured by asking respondents to rate their overall satisfaction with the quality of services rendered in the hospitals using grades from 0 - 10 and a five-point Likert scale: very satisfied (1), satisfied (2), not enough satisfied (3), dissatisfied (4), very dissatisfied (5). The collected data were analyzed by SPSS 26.

## 3. Results

### 3.1. Demographic Characteristics

Many factors influence patient satisfaction. Patient demographics such are age, gender, income, socioeconomic and general health status impact patients' responses [7]. The main demographic characteristics of the participants are summarized in **Table 1**. From 130 patient interviewed in this study, 62.3% were females towards 37.7% males. The majority were above 31 y/o (31 - 49 y/o 34.5%), group of patients with high school education predominated with 43.1% and most of them were married (69.2%). About half of interviewed patients (46.9%) were unemployed and 43.8% of them declared zero income, if to this group we add the group of patients (28.5%) with less than 150€ per month, then result shows that 72.3% of hospitalized patients comparing to minimum life expenditure, lives in the line of poverty!

### 3.2. Patient Satisfaction on Services and Hospital Facilities Conditions

Most of the patients positively evaluate the organization and quality of health

**Table 1.** Descriptive statistics; Total number of respondents 130.

Gender		
Male		49 (37.7%)
Female		81 (62.3%)
Age		
Under 20 y/o		5 (3.8%)
20 - 30 y/o		28 (21.5%)
31 - 49 y/o		45 (34.6%)
50 - 65 y/o		26 (20%)
Above 65 y/o		26 (20%)
Employment/social status and monthly incomes		
Unemployed		61 (46.9%)
Employed		38 (29.2%)
Retired		22 (16.9%)
In social assistance		9 (6.9%)
Monthly incomes		
None incomes		57 (43.8%)
Less than 150€		37 (28.5%)
150 - 249		11 (8.5%)
250 - 400		16 (12.3%)
400 - 600		8 (6.2%)
Above 600		1 (0.8%)
Education		
Less than elementary school		2 (1.5%)
Elementary school		42 (32.3%)
High school		56 (43.1%)
College		30 (23.1%)
Civil status		
Unmarried		26 (20%)
Married		90 (69.2%)
Separated		2 (1.5%)
Widowed		12 (9.2%)

care. The average of given grades for Doctors and Nurses services were between 8.4 to 8.8. Study has revealed eight main factors that have significantly affected patient satisfaction regarding the quality of hospital services (**Table 2**). Four factors have been correlated to doctor work with patients ( $x^2 = 248.481$ ;  $df = 64$ ;  $r = 0.69$ ;  $p = 0.000$ ), doctor average length of time spent with hospital inpatients ( $x^2 = 249.597$ ;  $df = 72$ ;  $r = 0.205$   $p = 0.000$ ), the perceived quality of medical advices ( $x^2 = 66.305$ ;  $df = 32$ ;  $r = 0.303$ ;  $p = 0.002$ ) and perceived quality of work of

**Table 2.** Factors that affected the quality of hospital services.

Service assessment	Subject of assessment	Correlation		Regression				
		r=	sig.	β	R <sup>2</sup>	F	sig.	df
Factors that affects overall patient perception regarding quality of services in hospital wards!	Doctor works and average grade given by patients (8.4).	0.698	0.000					
	Nursing work and average grade given by patients (8.8).	0.554	0.000					
	The length of time spent by doctor with patients.	0.205	0.000					
	The quality of advice given by ward doctors.	0.303	0.000	0.516	0.614	10.482	0.000	17
	The quality of advice given by ward nurses.	0.367	0.000					
	Overall work conditions of hospital units.	0.39	0.000					
	Patient satisfaction regarding ward hygiene!	0.422	0.000					
Factors that affects patient satisfaction regarding ward conditions!	Patient satisfaction regarding hygiene of toilets in the hospital wards.	0.406	0.000					
	Easiness of access to all hospital facilities.	0.205	0.000					
	Level of hygiene in the wards!	0.435	0.000					
	Level of hygiene in the ward toilets!	0.621	0.000	0.434	0.641	10.605	0.002	17
	The level of privacy in the wards and toilets!	0.485	0.000					
	The level of patient satisfaction with the hospital administration!	0.446	0.000					

nurses with hospital patients ( $x^2 = 56.149$ ;  $df = 32$ ;  $r = 0.367$ ;  $p = 0.005$ ). While other four factors have been correlated to technical conditions of hospital units such are: patient satisfaction regarding overall technical conditions ( $x^2 = 66.240$ ;  $df=32$ ;  $r = 0.39$ ;  $p = 0.000$ ), level of hygiene inside units ( $x^2 = 74.618$ ;  $df = 32$ ;  $r = 0.422$ ;  $p = 0.000$ ), level of hygiene of toilets ( $x^2 = 46.237$ ;  $df = 32$ ;  $r = 0.406$ ;  $p = 0.005$ ) and the easiness of access to hospital facilities ( $x^2 = 32.668$ ;  $df = 32$ ;  $r = 0.205$ ;  $p = 0.005$ ).

Second group of factors with significant effects on patient satisfaction regarding hospital services (**Table 2**) were correlated to basic working conditions in hospital wards. Again four factors prevailed patient perceives regarding quality of received hospital services, two factors were correlated to the level of hygiene inside the wards ( $x^2 = 88.517$ ;  $df = 16$ ;  $r = 0.435$ ;  $p = 0.000$ ) and the hygiene of ward toilets ( $x^2 = 46.237$ ;  $df = 16$ ;  $r = 0.621$ ;  $p = 0.000$ ), third factor was correlated to the level of privacy inside the hospital wards ( $x^2 = 44.725$ ;  $df = 16$ ;  $r = 0.485$ ;  $p = 0.000$ ) and the fourth factor was correlated to satisfaction with hospital administration ( $x^2 = 50.849$ ;  $df = 16$ ;  $r = 0.446$ ;  $p = 0.000$ ).

Although, majority of patients were highly satisfied with doctors and nurses work, however, situation completely changes regarding hospital supply with medicaments and other materials. Although the Ministry of Health role is regular supply of all hospitals with medication and other material foreseen in the essential drug list, the level of supply never exceeded 55% - 60% of needed items!

For this reason, during entire hospital treatment patients had to ensure medications and other materials from private pharmacies and some of lab and radiology examination from private clinics. **Table 3** shows the level of pocket payments for drugs and other materials and based on results, 44.6% of inpatients have spent in average of 75 - 130€ for drugs and 26.9% of hospital patients have spent in average 45 - 110€ for other expenditures including laboratory and radiology examinations. There was no significant difference within groups and between groups regarding pocket payments ( $p = 0.21$ ;  $df = 24$ ;  $\chi^2 = 27.54$ ). Three most vulnerable groups were unemployed, retired and patients dependent on social support, in total 70.7% of all patients!

Most of patients have not felt effects of introduced new Law of Health as base of reform of health sector. Most of patient declared lack of information if new health law has given any effect (56.9%), while only minor part of patients (2.3%) declared positive effects of new law of health! Also, most of patients considers as huge disadvantage (57.7%) delayed operationalization of Health Insurance Fund (HIF), while 4.6% considers that delay of functionalization of HIF has not affected on better operationalization of Health Sector!

## 4. Discussions

### 4.1. Findings

The present study aimed to evaluate the patient satisfaction on hospital services and to explore the effects of the initiated reform of the health sector. The study findings revealed that the majority of patients were satisfied with the quality of healthcare services provided by the hospital. However, there were some areas for improvement, particularly in terms of communication, accessibility, and the physical environment. While majority of patient are not seeing yet effects of initiated reform of health sector!

The results of this study are consistent with previous research that found provider-related variables to be the strongest predictor of patient satisfaction. The

**Table 3.** Employment status/Level of pocket payments during hospital treatment.

Level of pocket payments during hospital treatment;	Less than 50 €/%	50 - 100 €/%	100 - 200 €/%	200 - 400 €/%	Above 400 €/%	Total €/%
Unemployed	17.7	9.2	8.5	9.2	2.3	46.9
Employed	7.7	8.5	6.9	4.6	1.5	29.2
Retired	7.7	4.6	3.1	0.8	0.8	16.9
Dependent on social assistance	3.1	2.3	0.8	0.8	0.0	6.9
Total	36.2	24.6	19.2	15.4	4.6	100.0
Nature of expenditures	For drugs/%			Other, including lab and radiology examinations/%		
	44.6			26.9		

study indicates different benefits from investing in quality initiatives. One benefit is that investments directly influence employee perceptions of organizational commitment to quality and building a customer-centric culture. Second benefit is that patient satisfaction is positively influenced by the employee reaction to investments on quality. Effective communication regarding quality initiatives certainly influences patient perceptions regarding the hospital commitment to quality [8].

Patients who had positive experiences with their healthcare providers were more likely to report higher levels of satisfaction. Additionally, patients who had lower expectations were more likely to report higher levels of satisfaction. This highlights the importance of managing patient expectations and ensuring that healthcare providers are providing the highest quality of care possible. The study also found that the physical environment, including parking, cleanliness, and waiting rooms, contributed to patient satisfaction. These findings are consistent with previous research that identified the physical environment as an important factor in patient satisfaction<sup>2</sup>. Hospitals should strive to maintain clean, comfortable, and welcoming environments to ensure patient satisfaction. The quality of healthcare services directly affects the life of individuals and society. COVID-19 pandemic influenced quality of services, constituting a significant barrier that prevents effective patient care. Undoubtedly, the key strategy for the survival of national public health systems is to satisfy the needs and expectations of patients regardless of the changes taking place and the conditions of their functioning [9].

One area where there is room for improvement is communication between healthcare providers and patients. The study found that patients were dissatisfied with the amount of time they spent with their physicians and the availability of services. This highlights the need for healthcare providers to communicate effectively with their patients and ensure that they are providing timely and efficient care. Interactive communication between nurses and physicians is defined as the mutual engagement between them for the provision of care to patients and achievement of the common goal of healing [10]. This study once more emphasizes the importance of proper financing of health institutions, lack of funds for proper maintenance and sufficient supply affects directly patient satisfaction regarding quality of provided services, improvement of working and technical conditions of hospital would improve patients' expectations for the quality of services ( $\beta = 0.516$ ;  $R^2 = 0.614$ ;  $F = 10.482$ ;  $p = 0.000$ ). Study shows that 61.4% of patients would be more satisfied with hospital services if hospital invests more in technical and working conditions, all these factors were related to hospital insufficient budgeting, lack of funds for proper maintenance and sufficient supply of medicines and other needed materials! Currently, 4.1% GDP foreseen by Kosovo government for health seems insufficient to cover all health sector needs. Many studies have analyzed the relationship between GDP per capita and the health spending. These studies led to the extremely robust conclusion that even after

statistical control for many other factors, the effect of GDP per capita (income) on expenditure is clearly positive and significant [11]. The World Health Organization (WHO) stresses that substandard care wastes significant resources and jeopardizes public health by degrading human capital and decreasing productivity. Thus, in addition to providing effective coverage of essential health services and financial security in each country, delivering high-quality care or service is important in achieving the Universal Health Coverage goal [12].

The study also explored the effects of the initiated reform of the health sector on patient satisfaction. The results showed that the reform had a negative impact on patient satisfaction, particularly in terms of accessibility and continuity of treatment. This highlights the need for policymakers to ensure that reforms are implemented in a way that prioritizes patient needs and improves the quality of care provided. The public spending on health has a large impact on patient satisfaction simply because health services are perceived to be provided free of charge by the state. The latter is more important for countries which are less wealthy. The important role of public health spending is also documented in numerous studies [13] [14] [15].

Overall, the findings of this study suggest that while patients are generally satisfied with the quality of healthcare services provided by Hospital, there is room for improvement in areas such as communication, accessibility, and the physical environment. Additionally, policymakers should take patient needs into account when implementing healthcare reforms to ensure that they are effective and improve patient satisfaction.

## 4.2. Study Limitations

This study was conducted in only one public hospital; therefore, the results cannot be generalized to all hospitals. Future studies should include more than one hospital in both the private and public sectors and provided care should be compared.

## 5. Conclusions

Hospitals, as the most important element of the healthcare system, are aimed to provide a high-quality care to patients and to meet their needs and expectations [12] [16] [17]. According to the quality association, quality is defined as the ability for the manufacture of a product or provision of services so that customers' needs are satisfactorily met [18]. In addition, the quality of services is defined as the difference between customers' needs and what they really receive [19]. Therefore, the institutionalization of quality in hospitals seems to be obligatory [20].

The present study provides insights into the satisfaction level of hospitalized patients at Gjilan General Hospital and the effects of the initiated reform of the health sector on patient satisfaction. The study findings suggest that patients are generally satisfied with the quality of healthcare services provided by the hospital although there are areas for improvement, but generally, patients are still not

feeling the effects of the initiated reform of health sector!

## Conflicts of Interest

The authors declare no conflicts of interest.

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