

The Role of Demographic Features in Patients' Satisfaction from Healthcare: A Cross Sectional Study Using PSQ-18

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Abstract

Background: Patient satisfaction is an indicator of the quality of health care provided by a hospital.

Objective of the Study: The purpose of this study was to assess the level of patient satisfaction. In addition, the present study investigates whether specific demographics of the respondents, such as age, gender, level of education, marital status and occupation affect the level of satisfaction.

Methodology: A cross-sectional study was used in this work. The sample of this study was 92 patients in the outpatient clinics of a General Hospital. The questionnaires were collected through personal interviews. The statistical software SPSS 26.0 was used to perform the statistical analysis. Spearman analysis was used for the effect of age on satisfaction. The Mann-Whitney analysis was used for the effect of sex on satisfaction. Kruskal Wallis analysis was used to examine the effect of patients' level of education, marital status and occupation on satisfaction.

Results: The average age of the respondents was 49,71 years. 54.3% of the sample consisted of men, while 45.7% were women. 45.7% were high school graduates, 44.6% were university graduates and 9.8% were elementary graduates. 46.7% were married, 40.2% were single, 6.5% were divorced and 6.5% were widowed. Finally, 55.4% were private employees, 6.5% were civil servants, 12% were unemployed, 19.6% were retired, 3.3% were dealt with household chores, 2.2% were students and 1.1% said something else. The score of the patient satisfaction components ranged from 1 to 5. The average value of general patient satisfaction was 3.0109, of technical quality 3.6875, of interpersonal way 3.5598, of communication 3.6359, of financial aspects 2.5815, of time with the doctor 3.5870 and of accessibility/convenience 2.9348. A positive correlation of patients' age with most parameters of their satisfaction was observed. Marital status and occupation seem to affect patient satisfaction. There was no statistically significant difference between men and women, nor between the levels of education with satisfaction levels.

Conclusion: Evidence shows that patients, in general, show that they are satisfied with the care. Specific socio-demographic factors such as patients 'age, occupation and marital status seem to influence patients' level of satisfaction.

Keywords: Quality; Patient Satisfaction; Sociodemographic Factors; Health Care; Outpatient Clinics; PSQ-18

Introduction

Quality of care is the extent to which health services for individuals and populations increase the likelihood of desired health outcomes [1]. The provision of health services must take into account the expectations of patients, and it is an extremely complex process that is difficult to define or measure [2,3]. Health care must be safe, effective, focus on the patient, respect and respond to their values and needs, be timely, efficient and fair [4].

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Patient satisfaction surveys remain an important means of producing reliable data about the patient experience. Patient satisfaction remains one of the most reliable tools, despite the fact that some authors have questioned the reliability of this tool in the past, due to a lack of technical knowledge of the patient, his psychological state at the time of the survey, possible cultural differences and due to different perspectives between patients and health professionals [5,6].

Patient satisfaction is a quality indicator for health services provided by a hospital, as well as the main method for evaluation and feedback of the system used to measure quality [3,6]. This data can be used to provide meaningful comparisons between healthcare facilities so that service users can make well-informed decisions about where to seek care. In addition, healthcare providers are motivated to continuously improve healthcare both in terms of outcomes and patient satisfaction.

Purpose of the Study

The purpose of the work is to evaluate the levels of patient satisfaction with the health services provided in the outpatient clinics of a General Hospital and to investigate the relation between specific demographic elements of the respondents, such as gender, age, level of education, marital status and profession with their satisfaction with the services provided.

Methodology

Research design

In this work, a cross-sectional study was used, in order to examine the relationship between socio-demographic data and the level of patient satisfaction. This method is often used to draw conclusions about possible relationships or to gather preliminary data to support further research and experimentation. In this particular study, patient satisfaction was defined as the dependent variable and sociodemographic data as the independent variable.

Study sample

A convenience sample was used in this particular study. The sample was selected from a section of the population that is easily accessible. In simple random sampling, every member of the population has the same chance of being selected to form the sample as every other member of the population. It is obvious that such a sample cannot be representative of the population from which it is drawn.

The entry criteria required the subject to be over 18 years old, speak the Greek language and be a patient of a Hospital's outpatient clinics. On the contrary, subjects who were younger than 18 years, did not speak the Greek language or had been diagnosed with a mental illness that did not allow them to answer the questions in a rational way, were excluded from the continuation of the research.

Study tools

The importance of patient satisfaction in assessing the quality of medical care led to the creation of a questionnaire by Ware, Snyder and Wright in 1976. This questionnaire contained 80 questions in its original form, which were later reduced to 50 [7].

The questionnaire used to collect the data is the short version of the Patient Satisfaction Questionnaire, which retains the main features of the original questionnaire despite its short form (Patient Satisfaction Questionnaire [PSQ-18]) [8] (Appendix A). This questionnaire requires a little time to complete, but at the same time it offers important information to the researcher to draw useful conclusions.

The PSQ-18 yields separate scores for each of seven different dimensions:

- General satisfaction.
- Technical quality.
- Interpersonal relationship.
- Communication.
- Financial aspects.
- Time with the doctor.
- Accessibility and convenience.

Some questions are worded so that agreement reflects satisfaction with medical care, while other questions are worded so that agreement reflects dissatisfaction with medical care. All items should be scored so that high scores reflect satisfaction with medical care. Table 1 shows the scoring method.

Question	Value	Score
1, 2, 3, 5, 6, 8, 11, 15, 18	1	5
	2	4
	3	3
	4	2
	5	1
4, 7, 9, 10, 12, 13, 14, 16, 17	1	1
	2	2
	3	3
	4	4
	5	5



After scoring the questions, the items of each dimension were averaged together to create 7 scores for each dimension, as presented in the table 2.

Any items left blank by respondents (missing items) were ignored when calculating the scores for each category. In other words, the scores for each category represent the average for all items in the category that were answered.

In this particular survey there were no blank answers to questions.

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Dimension	Questions
General satisfaction	3, 17
Technical quality	2, 4, 6, 14
Interpersonal relationship	10, 11
Communication	1, 13
Financial aspects	5, 7
Time with the doctor	12, 15
Accessibility and convenience	8, 9, 16, 18

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Table 2: Dimensions of PSQ-18.

Process

The questionnaires were collected through personal interviews with service users of the Hospital's outpatient clinics. The purpose was to collect a sufficient number of questionnaires, in order to draw safe conclusions. A total of 93 questionnaires were collected.

The questions were clearly worded so that the questionnaire could be answered easily. Also, it is structured in a logical order and no question is asked that hides an unseen fact.

The questionnaire was given to the patients after they were first informed about the purpose of the research and their rights. Completing the questionnaire by the patients took only a few minutes. Completing the questionnaire by the respondents required their consent to participate. Respondents were informed about the confidentiality of the information to be collected and the assurance of their anonymity. In addition, they were made aware that at any time they could withdraw from the research process and discontinue their participation. Finally, they were informed of the researcher's contact information in case any questions arose about the research.

Statistical analysis

The collected data were managed with the IBM software platform, SPSS Statistics Version 26.

Initially, all the data from the questionnaires were transferred to the platform, while for the variables concerning questions 1, 2, 3, 5, 6, 8, 11, 15, 18 of the PSQ-18, recoding was done into different variables so that the high scores to reflect satisfaction with medical care. In this context we created 18 variables related to the corresponding questions of the PSQ-18 and 6 variables corresponding to the demographic data.

The 18 variables were evaluated for their reliability or internal consistency. The evaluation was done through the Cronbach's alpha coefficient. Values close to unity indicate high internal consistency and reliability. Furthermore, through the results we can see if we remove any question-variable whether the specific reliability coefficient will change.

Then, we created 7 new variables from the existing ones in order to assess the 7 dimensions of the PSQ-18. Each area is tested through different relevant questions, which is of substantial benefit when one aims to identify a specific area for improvement. These variables were then tested for normality. To check if the distribution of a variable is compatible with the normal one, the Kolmogorov-Smirnov test was applied. Normality is a key assumption for parametric statistics. This means that for classical statistical criteria to be applied, the assumption of normality must be satisfied. When the assumption of normality is not satisfied, then we necessarily have to adopt methods (non-parametric tests) that do not assume normality.

Descriptive statistics were used for the 7 variables to assess patient satisfaction per dimension. Because the variables do not follow a normal distribution, non-parametric correlation analyses were used. In order to examine the effect of patients' age on their degree of satisfaction, Spearman Correlation analysis was used. In addition, Mann Whitney tests were used to investigate the effect of gender on the degree of patient satisfaction, while Kruskal-Wallis tests were used to investigate the effect of education level, marital status and profession on the degree of patient satisfaction.

Results

For data processing purposes in the following tables, in the field "gender" men were declared with the value 1 and women with the value 2. In the field "level of education" primary school graduates were declared with the value 1, elementary school graduates were declared with the value 2, high school graduates were declared with the value 3, University/TEI graduates were declared with the value 4 and holders of a master's degree were declared with the value 5. In the field of "marital status" single people were declared with the value 1, the married were declared with the value 2, the divorced were declared with the value 3 and the widowed were declared with the value 4. Finally in the field of "occupational status" the unemployed were declared with the value 1, the private employees were declared with a value of 3, self-employed persons were declared with a value of 4, those engaged in domestic work were declared with a value of 5, pensioners were declared with a value of 6, students were declared with a value of 7 and with the value 8 those who stated something else.

The PSQ-18 questionnaire ranges from 1 to 5 on the Linkert scale. A value of one (1) corresponds to "Strongly Agree", a value of two (2) corresponds to "Agree", a value of three (3) corresponds to "Neutral", a value of four (4) corresponds to "Disagree" and a value of five (5) corresponds to "Strongly Disagree".

Demographics

According to the results of this research (Table 3), the average age of the respondents was 49,71 years, where the youngest respondent was 19 years old and the oldest was 79 years old. 54.3% of the sample consisted of men (50 people), while 45.7% were women (42 people). 45.7% (42 people) were high school graduates, 44.6% (41 people) were University/TEI graduates and 9.8% (9 people) were elementary school graduates. 46.7% (43 subjects) were married, 40.2% (37 subjects) were single, 6.5% (6 subjects) were divorced and 6.5% (6 subjects) were widowed. Finally, 55.4% (51 people) were private employees, 6.5% (6 people) were public employees, 12% (11 people) were unemployed, 19.6% (18 people) were pensioners, 3.3% (3 people) were engaged in domestic work, 2.2% (2 people) were students, and 1.1% (1 person) stated something else.

	Frequency	Percentage
Gender		
Male	50	54,3
Female	42	45,7
Education Level		
Elementary	9	9,8
High School	42	45,7
University/TEI	41	44,6
Marital Status		
Married	37	40,2
Single	43	46,7

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1	1	[
Divorced	6	6,5
Widowed	6	6,5
Profession		
Unemployed	11	12
Private employee	51	55,4
Public Servant	6	6,5
Domestic	3	3,3
Pensioner	18	19,6
Student	1	1,1
Other	2	2,2

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Table 3: Sample demographics.

Cronbach's alpha

The following tables (Table 4 and 5) show Cronbach's Alpha coefficient. The coefficient value for the specific variables (total 18) was 0.877 or 0.879, if shared variance is taken into account, suggesting that the items have relatively high internal consistency.

Case Processing Summary							
N %							
Cases	Valid	92	100,0				
	Excluded ^a	0	,0				
Total 92 100,0							
a. Listwise deletion based on all variables in the procedure.							

Table 4: Questionnaire reliability (a).

Reliability Statistics						
Cronbach's	Cronbach's Alpha Based on	N of Items				
Alpha	Alpha Standardized Items					
,877	,879	18				

Table 5: Questionnaire reliability (b).

Moreover, as observed from the following table (Table 6), the Cronbach's Alpha coefficient is impossible to increase if we remove any variable.

	Item-Total Statistics								
	Scale Mean ifScale VarianceCorrectedSquaredCronbackItem Deletedif Item DeletedItem-TotalMultipleAlpha if Item								
			Correlation	Correlation	Deleted				
Q_1	55,4130	132,289	,495	,354	,871				
Q_2	55,6848	130,416	,431	,474	,874				

Q_3	56,0761	128,401	,511	,373	,870
Q_5	56,6848	127,911	,534	,399	,869
Q_6	55,2283	128,881	,642	,527	,867
Q_8	55,8043	123,676	,651	,540	,865
Q_11	55,5870	130,751	,540	,512	,870
Q_15	55,6522	130,515	,481	,462	,871
Q_18	55,8261	122,783	,670	,577	,864
Q_4	55,9565	128,987	,432	,292	,874
Q_7	56,6304	130,323	,501	,455	,871
Q_9	56,7826	131,864	,421	,344	,874
Q_10	55,7717	134,288	,301	,310	,877
Q_12	55,6522	129,218	,477	,369	,872
Q_13	55,7935	129,287	,491	,423	,871
Q_14	55,3370	131,259	,494	,458	,871
Q_16	56,8043	133,060	,341	,308	,877
Q_17	56,3804	126,348	,615	,487	,866

Table 6: Questions' reliability.

Patient satisfaction

The following table (Table 7) presents the results regarding patient satisfaction with respect to each component of the PSQ-18.

	N	Min.	Max.	Mean	St. deviation
General Satisfaction	92	1,00	5,00	3,0109	1,03238
Technical Quality	92	1,50	5,00	3,6875	,76642
Interpersonal relationship	92	1,50	5,00	3,5598	,94008
Communication	92	1,50	5,00	3,6359	,88362
Financial aspects	92	1,00	5,00	2,5815	,97855
Time with the doctor	92	1,00	5,00	3,5870	,88208
Accessibility and convenience	92	1,00	4,50	2,9348	,88164
General Satisfaction	92				

Table 7: Descriptives of PSQ-18.

The patient satisfaction dimensions are rated on a scale of one (1) to (5).

The first dimension is related to the general satisfaction of the patients, which results from general assessment questions regarding care (questions 3 and 17). The mean score was 3.0109. This score corresponds to the patients' satisfaction with the level of medical care they receive.

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Then the dimension of technical quality is examined (questions 2, 4, 6 and 14). In this category, the means available to the care unit, the abilities of the medical staff and the degree of attention they show when examining and treating patients are evaluated. The mean score was 3.6875, the highest of the 7 components. This score corresponds to the satisfaction of the patients in terms of the abilities and attention of the doctors who care for them, as well as the means available to them.

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The next dimension concerns the Interpersonal relationship (questions 10 and 11), where the way the medical staff behaves towards the patients is evaluated. In particular, it is examined whether doctors treat patients in a strictly professional and impersonal manner or if they treat them in a polite and friendly manner. The mean score was 3.5598.

The next dimension concerns communication (questions 1 and 13). In this category, the ability of the doctors to explain the reason for the medical examinations and the degree to which they listen to any suggestions or interventions of the patients is evaluated. The mean score was 3.6359.

The next dimension examines the degree of satisfaction of patients regarding the costs they are required to incur in order to have appropriate medical care (questions 5 and 7). The mean score was 2.5815, the lowest of all components. This score corresponds to the patients' satisfaction with the money they have to pay each time in order to have the appropriate care.

Patients' satisfaction with the time they spend with the doctor is then assessed (questions 12 and 15). In particular, the time devoted by doctors to their patients and any haste on the part of doctors during the treatment are examined. The average score was 3.5870.

Finally, the accessibility and convenience of patients to care services is evaluated (questions 8, 9, 16 and 18). Specifically, patients were asked about their access to doctors, waiting times when visiting care units and the ease of making an appointment for an examination. The mean score was 2.9348.

Normality test

Tests of Normality									
	Kolmog	gorov-Smir	nov ^a	Sha	piro-Will	ĸ			
	Statistic	df	Sig.	Statistic	df	Sig.			
General satisfaction	,202	92	,000	,924	92	,000			
Technical quality	,158	92	,000	,935	92	,000			
Interpersonal relationship	,115	92	,004	,949	92	,001			
Communication	,160	92	,000	,945	92	,001			
Financial aspects	,133	92	,000	,954	92	,003			
Time with the doctor	,178	92	,000	,938	92	,000			
Accessibility and convenience	,129	92	,001	,948	92	,001			
	a. Lilliefors Sigr	nificance Co	rrection	*					

A normality test was performed on the sample using the Kolmogorov-Smirnov statistical test (Table 8).

Table 8: Normality test of PSQ-18 dimensions.

As observed, the significance level for the 7 variables was less than 0.05. The distribution of the population from which our sample is drawn is not from a normally distributed population. In other words, the normality criterion is not met in our sample.

Correlation/effect of patient satisfaction and demographics

In this section, some tests were conducted for the existence of a correlation between patient satisfaction variables and their demographics. Specifically, any correlation/effect of the satisfaction variables with the patients' age, their gender, their level of education, their marital status and their profession was examined.

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For the correlation between age and satisfaction, a non-parametric test was used, specifically the Spearman correlation analysis. The reason for choosing this particular method is the lack of normality from the sample. The values of the index range from -1 (perfect negative correlation) to 1 (perfect positive correlation). As we can see in the following table (Table 9), at a statistical significance level of 0.01 a positive correlation of the age of patients with the satisfaction they have with technical quality (0.381), interpersonal relationship (0.270) and access and convenience (0.298) is observed. Furthermore, at a statistical significance level of 0.05 a positive correlation is observed with general satisfaction (0.232) and financial aspects (0.209). The above correlations suggest that as the age of patients increases, their level of satisfaction in the respective categories increases.

	Correlations									
			Age	Gen.Sat.	Tech.Q.	Int.Rel.	Com.	Fin. Asp.	Time.doc.	Acc. / Co
Spearman's rho	Age	Correlation Coefficient	1,000	,232	,381	,270	,191	,209	,193	,298
		Sig. (2-tailed)		,026	,000,	,009	,069	,045	,065	,004
		N	92	92	92	92	92	92	92	90
	Gen.Sat.	Correlation Coefficient	,232	1,000	,535	,232	,262	,458	,367	,483
		Sig. (2-tailed)	,026		,000,	,026	,012	,000	,000	,00
		N	92	92	92	92	92	92	92	90
	Tech.Q;	Correlation Coefficient	,381	,535	1,000	,348	,360	,421	,366	,501
		Sig. (2-tailed)	,000	,000		,001	,000	,000	,000	,00
		N	92	92	92	92	92	92	92	9
	Int.Rel	Correlation Coefficient	,270	,232	,348	1,000	,350	,270	,497	,250
		Sig. (2-tailed)	,009	,026	,001		,001	,009	,000	,01
		N	92	92	92	92	92	92	92	9
	Com.	Correlation Coefficient	,191	,262	,360	,350	1,000	,324	,302	,532
		Sig. (2-tailed)	,069	,012	,000,	,001		,002	,003	,00
		N	92	92	92	92	92	92	92	9
	Fin. Asp.	Correlation Coefficient	,209	,458	,421	,270	,324	1,000	,370	,428
		Sig. (2-tailed)	,045	.000	,000,	,009	,002		,000	,00
		N	92	92	92	92	92	92	92	9
	Time.doc.	Correlation Coefficient	,193	,367	,366	,497	,302	,370	1,000	,337
		Sig. (2-tailed)	,065	.000	,000,	,000,	,003	,000		,00
		N	92	92	92	92	92	92	92	9
	Acc. / Con.	Correlation Coefficient	,298	.483	,501	,250	,532	.428	,337	1,00
		Sig. (2-tailed)	,004	.000	,000,	,016	,000,	,000	,001	
		N	92	92	92	92	92	92	92	9

Table 9: Age and patients' satisfaction.

The table below (Table 10) shows any effect of patient gender on satisfaction. A non-parametric test was used for the control, namely the Mann-Whitney analysis.

	Gender	N	Average	Sig. level
General satisfaction	Male	50	49,76	0,193
	Female	42	42,62	
	Total	92		
Technical quality	Male	50	49,11	0,302
	Female	42	43,39	
	Total	92		
Interpersonal relationship	Male	50	49,93	0,174
	Female	42	42,42	
	Total	92		
Communication	Male	50	49,79	0,191
	Female	42	42,58	
	Total	92		
Financial aspects	Male	50	48,77	0,367
	Female	42	43,80	
	Total	92		
Time with the doctor	Male	50	46,24	0,917
	Female	42	46,81	
	Total	92		
Accessibility and conve-	Male	50	44,60	0,454
nience	Female	42	48,76	
	Total	92		

Table 10: Gender and patients' satisfaction.

As we observe for all variables, the significance value is greater than 0.05. This means that there is no significant statistical difference between men and women in terms of satisfaction levels.

Next, any effect of patients' level of education on satisfaction was examined (Table 11). A non-parametric test was used, namely the Kruskal Wallis analysis. Likewise, the significance levels for all variables are greater than the 0.05 value so we conclude that there is no statistically significant difference between the level of education and the level of patient satisfaction.

	Ranks			
	Level of education	N	Average	Sig. level
General satisfaction	Elementary	9	52,33	0,762
	High	42	45,23	
	University/TEI	41	46,52	
	Total	92		
Technical quality	Elementary	9	55,94	0,515
	High	42	46,15	
	University/TEI	41	44,78	
	Total	92		

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Interpersonal relationship	Elementary	9	58,17	0,207
	High	42	42,11	
	University/TEI	41	48,44	
	Total	92		
Communication	Elementary	9	48,00	0,789
	High	42	44,44	
	University/TEI	41	48,28	
	Total	92		
Financial aspects	Elementary	9	51,67	0,689
	High	42	47,65	
	University/TEI	41	44,18	
	Total	92		
Time with the doctor	Elementary	9	50,00	0,808
	High	42	44,70	
	University/TEI	41	47,57	
	Total	92		
Accessibility and conve-	Elementary	9	55,78	0,358
nience	High	42	48,13	
	University/TEI	41	42,79	
_	Total	92		

 Table 11: Education and patients' satisfaction.

Then, any effect of the patients' marital status on the degree of satisfaction was examined (Table 12). A non-parametric test was used, namely the Kruskal Wallis analysis. We observe that in all dimensions of satisfaction, except for the financial aspects and the time the patient spends with the doctor, there is an effect of the family situation. Specifically in the dimensions of general satisfaction, technical quality, communication and access and convenience it is observed that people who are widowed and divorced tend to be more satisfied than the rest. According to the Interpersonal relationship dimension, divorced and married people tend to be more satisfied.

Ranks				
	Marital Status	N	Average	Sig. level
General satisfaction	Single	37	36,47	0,014
	Married	43	50,99	
	Divorced	6	59,17	
	Widowed	6	63,50	
	Total	92		
Technical quality	Single	37	34,16	0,002
	Married	43	53,12	
	Divorced	6	63,67	
	Widowed	6	58,00	
	Total	92		

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Interpersonal relationship	Single	37	38,20	0,044
	Married	43	52,26	
	Divorced	6	62,08	
	Widowed	6	40,83	
	Total	92		
Communication	Single	37	36,34	0,019
	Married	43	51,80	
	Divorced	6	58,83	
	Widowed	6	58,83	
	Total	92		
Financial aspects	Single	37	38,32	0,071
	Married	43	52,92	
	Divorced	6	55,67	
	Widowed	6	41,75	
	Total	92		
Time with the doctor	Single	37	38,73	0,123
	Married	43	51,23	
	Divorced	6	57,33	
	Widowed	6	49,67	
	Total	92		
Accessibility and conve-	Single	37	33,38	0,02
nience	Married	43	54,71	
	Divorced	6	56,83	
	Widowed	6	58,25	
	Total	92		

Table 12: Marital status and patients' satisfaction.

Finally, any effect of the patients' occupation on satisfaction was examined (Table 13). A non-parametric test was used, namely the Kruskal Wallis analysis. It is observed that in all dimensions of satisfaction except interpersonal relationships, financial aspects and time the patient spends with the doctor there is an effect of the patient's profession. Specifically, in the dimension of general satisfaction, increased satisfaction is observed in retirees, in private and public employees and in people who deal with household chores. In the dimension, increased satisfaction is observed in people who deal with household chores, in students and in private employees. Finally, in the dimension of access and convenience, increased satisfaction is observed in people who deal with household chores, in retirees and in private and public employees.

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	Ranks		1	
	Profession	Ν	Average	Sig. leve
General satisfaction	Unemployed	11	22,68	0,020
	Private Empl.	51	48,71	
	Public Serv.	6	40,58	
	Household	3	59,17	
	Retired	18	56,97	
	Student	1	12,00	
	Other	2	43,00	
	Total	92		
Technical quality	Unemployed	11	23,09	0,021
	Private Empl.	51	48,56	
	Public Serv.	6	50,17	
	Household	3	43,00	
	Retired	18	58,11	
	Student	1	31,00	
	Other	2	20,25	
-	Total	92		
nterpersonal relationship	Unemployed	11	34,05	0,074
	Private Empl.	51	49,87	
-	Public Serv.	6	55,08	
	Household	3	23,83	
-	Retired	18	51,00	
	Student	1	7,00	
	Other	2	16,50	
	Total	92		
Communication	Unemployed	11	24,23	0,036
	Private Empl.	51	50,58	
	Public Serv.	6	48,00	
	Household	3	67,17	
	Retired	18	47,25	
	Student	1	56,50	
	Other	2	17,75	
	Total	92		
Financial aspects	Unemployed	11	30,36	0,063
	Private Empl.	51	49,47	
-	Public Serv.	6	48,00	
	Household	3	79,00	
	Retired	18	45,19	
	Student	1	6,00	
	Other	2	38,25	
	Total	92		

Time with the doctor	Unemployed	11	30,64	0,273
	Private Empl.	51	48,30	
	Public Serv.	6	45,67	
	Household	3	53,67	
	Retired	18	53,33	
	Student	1	38,00	
	Other	2	22,25	
	Total	92		
Accessibility and conve-	Unemployed	11	23,68	0,031
nience	Private Empl.	51	50,30	
	Public Serv.	6	55,75	
	Household	3	57,33	
	Retired	18	49,36	
	Student	1	12,00	
	Other	2	22,50	
	Total	92		

Table 13: Profession and patients' satisfaction.

Discussion and Conclusion

Patient satisfaction surveys are vital measures of healthcare quality and delivery, as they provide information on the extent to which healthcare providers meet patient expectations.

Evidence from this work shows that patients are satisfied with care. It appears from the findings of the research that there is greater satisfaction in terms of the dimensions of general patient satisfaction, technical quality, interpersonal way, communication and time with the doctor, while in the dimensions of financial aspects and access/convenience satisfaction is lower. Specific socio-demographic factors appear to influence the level of patient satisfaction. A positive correlation was observed between the age of the patients and most parameters of their satisfaction. Marital status and profession seem to influence patient satisfaction. No significant statistical difference was observed between the gender of the patients, nor between the level of education in terms of satisfaction levels.

The results of the study are consistent with previous research on patient satisfaction. Several surveys cite information and communication, safety, waiting times, access, service attitude of medical staff, service technology and equipment, patient expectations and cost as key factors that determine their satisfaction levels [3,9-12]. Additionally, it has been suggested that age, gender, education level, marital status, and occupation have an effect on patient satisfaction [9,13-15].

Evidence from this study can be leveraged for targeted policies focused on improving patient access and convenience, enhancing communication, reducing factors that increase patient costs, and ultimately increasing patient satisfaction levels.

This study has several limitations. The data were collected from a specific population (outpatients of one General Hospital). Although the patients were selected by random sampling, they were selected only of their own free will. Therefore, this might create some sort of self-selection bias. In addition, in order to draw stronger conclusions, a larger sample is needed on the one hand, and on the other a more representative one, with patients from outpatient clinics of other large hospitals in the country. Also, there may be a possibility of response bias, as the qualitative questionnaire used some questions with a negative tone and some questions with a positive tone [3].

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Finally, the economic status of the participants was not captured and this may have slightly influenced the results as studies have shown that socioeconomic status influences patient trust and satisfaction.

Bibliography

- 1. WHO. Quality of care (2022).
- Murray CJL and Frenk J. "Ranking 37th--measuring the performance of the U.S. health care system". *The New England Journal of Medi*cine 362.2 (2010): 98-99.
- 3. Saldivar B Kαισυν. "Patient Satisfaction Surveys in the Outpatient Clinic Setting: The Variability of Response With Positively or Negatively Toned Questions". *The Journal of Health Care Organization, Provision, and Financing* (2019): 1-7.
- 4. Institute of Medicine (US)- Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington: National Academies Press (2001).
- 5. Greeneich DS., et al. "Patient satisfaction update: research applied to practice". Applied Nursing Research 5.1 (1992):43-48.
- 6. Georgoudi E., *et al.* "Measurement of Patient Satisfaction as a Quality Indicator of Hospital Health Services: The Case of Outpatient Clinics in General Hospital". *Science Journal of Public Health* (2017): 128-135.
- 7. Ware JE. "Development and validation of scales to measure patient satisfaction with health care services: Volume III [of a] final report: conceptualization and measurement of health as a value Unknown Binding". s.l.: National Technical Information Service (1976).
- 8. Marshall GN and Hays RD. "Patient Satisfaction Questionnaire Short Form (PSQ-18)". Santa Monica: RAND (1994).
- 9. Jenkinson C., *et al.* "Patients' experiences and satisfaction with health care: results of a questionnaire study of specific aspects of care". *Quality and Safety in Health Care* (2002): 335-339.
- 10. Bleustein C Kαισυν. "Wait times, patient satisfaction scores, and the perception of care". *The American Journal of Managed Care* (2014): 393-400.
- 11. Ferentinou E Kαισυν. "Measuring beliefs and satisfaction regarding nursing care among Greek patients on hemodialysis". *Journal of Behavioral Health* (2016).
- 12. Chandra S., *et al.* "Factors Associated with Patient Satisfaction in Outpatient Department of Suva Sub-divisional Health Center, Fiji, 2018: A Mixed Method Study". *Frontiers in Public Health* 7 (2019): 183.
- 13. Woods SE and Heidari Z. "The influence of gender on patient satisfaction". Journal of Gender-Specific Medicine (2003): 30-35.
- 14. Afzal M Καισυν. "Effect of demographic characteristics on patient's satisfaction with health care facility". *Journal of Postgraduate Medical Institute* 28.2 (2014): 154-160.
- 15. Ayranci E and Atalay N. "Demographic Determinants of Patient Satisfaction: A Study in a Turkish Context". *International Journal of Academic Research in Business and Social Sciences* (2019): 829-839.

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