

#### **Original Research**

# Dental Patient Satisfaction Survey in Georgia

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#### Abstract

The study of customer satisfaction in general and especially in the medical field, including dentistry, is important nowadays. The mentioned issue is relevant in Georgia. It is true that dental services are unfortunately not available for the majority of the population in our country today, but nevertheless, it is also interesting to see how satisfied those who use the services.

71.2% of respondents are satisfied with the results of dental treatment, 3.8% have a neutral attitude, and 25.0% are dissatisfied.

80.1% of respondents are satisfied with the level of service received from the dentist, 7.4% are neutral, and 12.6% are dissatisfied.

The level of satisfaction varies significantly depending on the regions of Georgia, as well as gender and age.

According to the results of the survey, the level of satisfaction with dental services and satisfaction with treatment results is significantly higher than dissatisfaction, but nevertheless, dissatisfaction is still high (a quarter of respondents are somewhat or very dissatisfied). This indicates the not very high level of quality of dental services and the lack of qualified personnel.

The results of the study are also interesting in the sense that the majority of patients (about 50%) visit to the dentist only when they have faced some oral disease.

Keywords: Dental patient satisfaction, statistical survey.

#### Introduction

Determining the satisfaction level of dental patients is important in Georgia today. However, there are no exact statistics in this direction. There are only a few studies, some of which are limited to the hospital and ambulatory sector, and some to single clinical studies. This is what led us to conduct a comprehensive study in Georgia, which included all regions and all age groups in the country as a whole.



Georgia is one of the low-income countries. The majority of the population does not have access to dental services. Poverty and low incomes are also reflected in the inability to receive proper treatment for oral diseases. Also the quality of dental services are not high. One of the directions in the 2023-2030 strategy of the World Health Organization is the issue of highly qualified personnel [1].

A dental patient satisfaction survey will help us to understand the current level of satisfaction. Also identify and define the weaknesses that cause dissatisfaction and make future plans to eliminate it.

## Material and Methods

The aim of the survey was to study the satisfaction level of dental patients in Georgia. For this purpose, we compiled a questionnaire, which included 11 questions, in accordance with the general cleanliness of the clinic, the reception, the comfort of the waiting area, the provided dental services, and the satisfaction with the results of the treatment.

We used descriptive and inferential statistics methods in the research: statistical observation method (in particular, sample survey method), statistical grouping, frequency distributions (relative and cumulative frequency), crosstabulation, statistical graphs, non-parametric statistical criterion for testing hypotheses (chi-square criterion).

The survey was conducted in June 2024. 810 respondents were interviewed in the survey. The sample survey covered the population of all ages and sexes of all regions of Georgia. This study is a kind of continuation of the statistical observation conducted by us in May 2023. Data were processed in the statistical software package IBM SPSS Statistics 26.

## Discussion of obtained results

The reliability of the conducted survey is confirmed by Cronbach's alpha coefficient, the value of which is equal to 0.893.

As a result of the survey, it was revealed that 71.2% of the respondents are satisfied with the results of the received dental services, 3.8% have a neutral attitude, and 25.0% are dissatisfied.

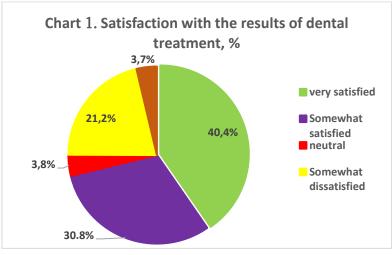
To the question, "How satisfied were you with the results of your dental treatment", 40.4% of respondents answered that they were very satisfied, 30.8% - somewhat satisfied, 21.2% - somewhat dissatisfied, and 3.7% - very dissatisfied. The corresponding frequency distribution table is given in Table 1.



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very satisfied	327	40.4	40.4	40.4
	Somewhat satisfied	250	30.8	30.8	71.2
	neutral	31	3.8	3.8	75.1
	Somewhat dissatisfied	172	21.2	21.2	96.3
	very dissatisfied	30	3.7	3.7	100.0
	Total	810	100.0	100.0	

Table 1.Satisfaction with the results of dental treatment

The mentioned results are visible also in the first chart:



80.1% of respondents are satisfied with the level of service received from the dentist, 7.4% are neutral, and 12.6% are dissatisfied.

The frequency distribution table below confirms the abovementioned.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very satisfied	377	46.5	46.5	46.5
	Somewhat satisfied	272	33.6	33.6	80.1
	neutral	60	7.4	7.4	87.5
	Somewhat dissatisfied	91	11.2	11.2	98.8
	very dissatisfied	10	1.2	1.2	100.0
	Total	810	100.0	100.0	

Table 2. Satisfaction with the level of service received from the dentist

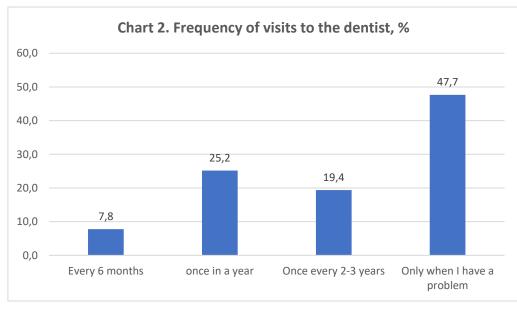
The results of the survey are problematic and thought-provoking in the sense that the majority of patients (about 50%) visit to the dentist only when they have faced some oral disease.



To the question: "How often do you go to the dentist", 47.7% of respondents visit the doctor in case of a problem, 19.4% - once in 2-3 years, about 25% - once a year and only 7.8% - every 6 months.

The following table and graph clearly show the abovementioned.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Every 6 months	63	7.8	7.8	7.8
	once in a year	204	25.2	25.2	33.0
	Once every 2-3 years	157	19.4	19.4	52.3
	Only when I have a problem	386	47.7	47.7	100.0
	Total	810	100.0	100.0	



According to the survey, satisfaction with the results of dental treatment differs by gender and is presented as follows:

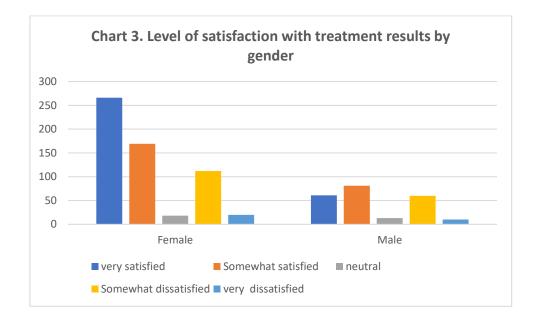
								Total	
			very satisfied	Somewhat satisfied	neutral	Somewhat dissatisfied	very dissatisfied		
	Female	Count	266	169	18	112	20	585	
		% within	45.5%	28.9%	3.1%	19.1%	3.4%	100.0%	
	Male	Count	61	81	13	60	10	225	

Table 4. Level of satisfaction with	treatment results by gender



	% within	27.1%	36.0%	5.8%	26.7%	4.4%	100.0%
Total	Count	327	250	31	172	30	810
	% within	40.4%	30.9%	3.8%	21.2%	3.7%	100.0%

The following graphical representation gives more visibility in the difference in satisfaction by gender:



To confirm whether there is a significant statistical difference in satisfaction with the results of dental treatment by gender, we used the chi-square criterion for testing hypotheses (Table 5).

Table 5. Chi-square criterion

Chi-Square Tests							
	Value	df	Asymptotic Significance (2- sided)				
Pearson Chi- Square	24.117ª	4	.000				
Likelihood Ratio	24.724	4	.000				
Linear-by- Linear Association	15.613	1	.000				
N of Valid Cases	810						

As can be seen from the table, the significance level  $\alpha$  is equal to 0.000, which is much less than the preselected significance

level of 0.05. Thus, we can conclude that there is a significant statistical difference in



satisfaction with the results of dental services according to gender.

According to the survey, the satisfaction with the results of dental treatment is also different regionally and can be presented as follows:

			very satisfied	Somew hat satisfied	neutral	Somew hat dissatisfied	very dissatisfied	Total
	Tbilisi	Count	215	171	29	116	30	561
		% w ithin	38.3%	30.5%	5.2%	20.7%	5.3%	100.0%
	Adjara A.R.	Count	19	0	0	1	0	20
		% w ithin	95.0%	0.0%	0.0%	5.0%	0.0%	100.0%
	Guria	Count	11	1	0	8	0	20
		% w ithin	55.0%	5.0%	0.0%	40.0%	0.0%	100.0%
	Imereti	Count	21	20	2	14	0	57
		% w ithin	36.8%	35.1%	3.5%	24.6%	0.0%	100.0%
	Kakheti	Count	16	11	0	5	0	32
		% w ithin	50.0%	34.4%	0.0%	15.6%	0.0%	100.0%
	Mtskheta-	Count	8	10	0	4	0	22
	Mtianeti	% w ithin	36.4%	45.5%	0.0%	18.2%	0.0%	100.0%
	Racha-	Count	0	19	0	1	0	20
	Lechkhumi and Kvemo	% w ithin	0.0%	95.0%	0.0%	5.0%	0.0%	100.0%
	Samegrelo-	Count	0	0	0	10	0	10
	Zemo Svaneti	% w ithin	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	Samtskhe-	Count	0	18	0	2	0	20
	Javakheti	% w ithin	0.0%	90.0%	0.0%	10.0%	0.0%	100.0%
	Kvemo	Count	16	0	0	2	0	18
	Kartli	% w ithin	88.9%	0.0%	0.0%	11.1%	0.0%	100.0%
	Shida Kartli	Count	21	0	0	9	0	30
		% w ithin	70.0%	0.0%	0.0%	30.0%	0.0%	100.0%
Total		Count	327	250	31	172	30	810
		% w ithin	40.4%	30.9%	3.8%	21.2%	3.7%	100.0%

The level of satisfaction and results are also different by age groups, which is shown by the table below:

Table 7. Level of satisfaction with treatment results by age groups									
			very satisfied	Somewhat satisfied	neutral	Somewhat dissatisfied	very dissatisfied	Total	
Age	till13	Count	11	10	1	20	0	42	
		% within ასაკი	26.2%	23.8%	2.4%	47.6%	0.0%	100.0%	
	13-19	Count	29	12	14	26	10	91	
		% within ასაკი	31.9%	13.2%	15.4%	28.6%	11.0%	100.0%	
	20-39	Count	129	130	12	71	0	342	
		% within ასაკი	37.7%	38.0%	3.5%	20.8%	0.0%	100.0%	
	40-60	Count	150	31	4	50	20	255	
		% within ასაკი	58.8%	12.2%	1.6%	19.6%	7.8%	100.0%	
	More then	Count	8	67	0	5	0	80	
	60	% within ასაკი	10.0%	83.8%	0.0%	6.3%	0.0%	100.0%	
Total		Count	327	250	31	172	30	810	
		% within ასაკი	40.4%	30.9%	3.8%	21.2%	3.7%	100.0%	

To test the statistical significance of differences in satisfaction by regions and age groups, we also used the chi-square criterion for hypothesis testing. In both cases, the significance level  $\alpha$  is much less than the preselected significance level of 0.05. Thus, we can conclude that there is a significant statistical difference in satisfaction with the results of dental services by regions and age groups.

Regarding the cleanliness of the dental clinic, the comfort of the waiting area, the friendly atmosphere at the reception desk, approximately 95% of the respondents express their satisfaction.

## Conclusions

We can formulate the conclusions obtained as a result of the research as follows: ➤ 71.2% of respondents are satisfied with the results of dental services in Georgia, 3.8% have a neutral attitude, and 25.0% are dissatisfied.

To the question, "How satisfied were you with the results of your dental treatment", 40.4% of respondents answered that they were very satisfied, 30.8% - somewhat satisfied, 21.2% somewhat dissatisfied, and 3.7% - very dissatisfied.

▶ 80.1% of respondents are satisfied with the level of service received from the dentist, 7.4% - neutral, and 12.6% - dissatisfied. To the question, "How satisfied were you with the level of service received from your dentist", 46.5% of respondents answered that they were very satisfied, 33.6% - somewhat satisfied, 11.2% - somewhat dissatisfied, and 1.2% - very dissatisfied.

Satisfaction with the level of dentist service and treatment results is different depending on gender, age and place of residence (regions of Georgia).

▶ About 80% of the respondents visit to the dentist the recommendation of on acquaintances, friends or family members.



About 50% of the respondents visit to the dentist only when they face some kind of oral disease problem.

Finally, recommendations can be formulated as follows:

Appropriate policy should be implemented to improve the quality of dental services (including qualification improvement), which will increase the level of dental patient satisfaction.

➢ Appropriate policy should be taken in the direction that the dentist's primary focus will be on the patient and his care instead of being focused on business and making as much profit as possible. Improve accessibility on dental services to the majority of population.

# სტომატოლოგიური პაციენტის კმაყოფილების გამოკვლევა საქართველოში

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# აბსტრაქტი

მომხმარებელთა კმაყოფილების შესწავლა ზოგადად და განსაკუთრებით სამედიცინო სფეროში, მათ შორის სტომატოლოგიაში, უმნიშვნელოვანესია. აღნიშნული საკითხი აქტუალურია საქართველოში. მართალია, სტომატოლოგიური მომსახურება მოსახლეობის უმრავლესობისთვის დღეისათვის ჩვენს ქვეყანაში სამწუხაროდ ხელმიუწვდომელია, მაგრამ მიუხედავად ამისა, საინტერესოა ასევე ისიც, ვინც სარგებლობს აღნიშნული მომსახურებით, რამდენად კმაყოფილია მისი შედეგებით.

გამოკითხულთა 71,2% კმაყოფილია მიღებული სტომატოლოგიური მკურნალობის შედეგით, 3,8%-ს ნეიტრალური დამოკიდებულება აქვს, 25,0% კი - უკმაყოფილოა.

გამოკითხულთა 80.1% კმაყოფილია სტომატოლოგისგან მიღებული მომსახურების დონით, 7.4% ნეიტრალური, ხოლო 12.6% - უკმაყოფილო.

კმაყოფილების დონე მნიშვნელოვნად განსხვავდება საქართველოს რეგიონების, ასევე სქესისა და ასაკის მიხედვით.

კვლევის შედეგებით, სტომატოლოგიური მომსახურების კმაყოფილების დონე და მკურნალობის შედეგებით კმაყოფილება მნიშვნელოვნად მაღალია უკმაყოფილებაზე, მაგრამ მიუხედავად ამისა, მაინც დიდია უკმაყოფილება (გამოკითხულთა მეოთხედი ნაწილი გარკვეულწილად ან მალიან უკმაყოფილოა). აღნიშნული მიუთითებს



სტომატოლოგიური მომსახურების ხარისხის არც თუ ისე მაღალ დონეზე და კვალიფიციური კადრების ნაკლებობაზე.

პრობლემატური და დამაფიქრებელია კვლევის შედეგები იმ კუთხითაც, რომ პაციენტთა უმრავლესობა (დაახლოებით 50%) სტომატოლოგს მხოლოდ მაშინ მიმართავს, როდესაც პირის ღრუს რომელიმე დაავადება შეაწუხებს.

საკვანმო სიტყვები: სტომატოლოგიური პაციენტის კმაყოფილება, სტატისტიკური გამოკვლევა.

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