

PATIENT SATISFACTION AT THANH HOA PROVINCIAL ONCOLOGY HOSPITAL IN 2024 AND SOME RELATED FACTORS

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ABSTRACT

Objective: To describe patient satisfaction at the Examination Department of Thanh Hoa Provincial Oncology Hospital in 2024 and identify factors associated with satisfaction.

Methods: A cross-sectional descriptive study was conducted with 126 patients visiting the Examination Department of Thanh Hoa Provincial Oncology Hospital in 2024, who voluntarily participated.

Result: Of the 126 patients, 13.5% were male and 86.5% were female. The overall satisfaction rate was 92.5%, with the highest satisfaction for facilities and equipment (94.1%) and the lowest for service delivery outcomes (90.7%). Age, gender, and health insurance use were not found to be associated with satisfaction. Education level influenced satisfaction with facilities, waiting time for registration, and staff attitude; patients with high school education have higher reported lower satisfaction (80.4%, 83.9%, and 89.3%, respectively) compared to those with less than high school education (100%, 97.1%, and 100%), with p < 0.001 and p < 0.05. Marital status was associated with satisfaction regarding waiting time for registration; married or widowed patients had lower satisfaction (33.33%) compared to single or married patients (100% and 92.50%), with p < 0.05.

Conclusion: Most patients were satisfied with the services at Thanh Hoa Provincial Oncology Hospital. However, some dissatisfaction persists, influenced by education level and marital status. Continuous improvements are needed to enhance satisfaction for all patients.

Keywords: Outpatient satisfaction, related factors, Thanh Hoa Provincial Oncology Hospital.

1. INTRODUCTION

Patient satisfaction is a critical measure of healthcare quality, serving as a key indicator for evaluating medical facilities. Satisfaction is closely linked to service quality and has a significant influence on treatment adherence and effectiveness[2, 3].

Over recent decades, patient satisfaction has emerged as a critical metric for evaluating healthcare quality, mandated by accreditation agencies to ensure high standards of care. Satisfaction has a significant influence on treatment adherence and outcomes. In Vietnam,

the healthcare sector has undergone a paradigm shift, prioritizing patients as the cornerstone of medical examination, treatment, and care at health facilities[3].

In response, the Ministry of Health issued Decision 56/QD-BYT (2024), establishing guidelines for assessing public satisfaction with healthcare services from 2024 to 2030[4]. Additionally, patient satisfaction is influenced by socio-demographic factors, including age[5], gender[6], education level[7], and marital status.

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To support Thanh Hoa Provincial Oncology Hospital in understanding patient satisfaction, optimizing resource allocation, and meeting patient needs, this study aims to:

- 1. Describe patient satisfaction at the Examination Department in 2024.
- 2. Analyze factors associated with satisfaction.

2. RESEARCH OBJECTS AND METHODS

2.1. Research subjects

2.1.1. Selection criteria:

Patients aged 18 or older who completed the medical examination process, were able to respond to study questions, and voluntarily participated.

2.1.2. Exclusion criteria:

- Inpatients,
- Emergency patients, as well as those unwilling to participate or unable to respond to interviews.

2.2. Research location

At the Examination Department, Thanh Hoa Provincial Oncology Hospital, No. 958 Quang Trung Street, Dong Ve Ward, Thanh Hoa City, Thanh Hoa Province.

- **2.3. Research time:** From June 2024 to November 30, 2024.
- 2.4. Research design: Cross-sectional study.

2.5. Sample size:

The research sample size was calculated following the formula:

$$n = Z_{1-\alpha/2}^2 \frac{p(1-p)}{d^2}$$

- + n: Number of outpatients to be surveyed.
- + Z: Confidence coefficient (with 95% confidence, the value of $Z_{1-\alpha/2}$ is 1.96).
- + p = 0.85 is the estimated proportion of outpatients satisfied with medical examination services, according to Pham Thi Cuc's study 8.
- + d: Acceptable error/desired absolute precision, in this study, we take d = 0.05.

Substitute the above values into the formula to calculate the sample size n = 196.

Adjust the sample size (n) according to the number of outpatient visits per day, using the formula:

$$n/(1 + (n-1)/N) = 196/(1 + (196-1)/350) = 126$$

2.6. Sampling method

The study employed a convenience sampling method and aimed to collect 10 patients per day who met the selection and exclusion criteria.

2.7. Research variables and evaluation criteria

- General Information: Age, gender, education level, occupation, marital status, payment method, and distance from residence to hospital.
- Satisfaction Variables: Facilities, staff competence, staff attitude, waiting time for registration, service delivery outcomes.
- Associated Factors: Patient characteristics and medical facility conditions.
- Satisfaction Criteria:
- + Access (5 criteria)
- + Information transparency and procedures (10 criteria).
- + Facilities and equipment (8 criteria).
- + Staff attitude and professionalism (4 criteria).
- + Service delivery outcomes (4 criteria).
- Measurement Scale: A 5-point Likert scale (1 = Very dissatisfied, 5 = Very satisfied).
- Satisfaction Definition: Patients with an average score \geq 4 were classified as satisfied; scores \leq 3 indicated dissatisfaction.

2.8. Tools and methods of information collection

The patient satisfaction survey form is designed based on the Outpatient Satisfaction form of the Ministry of Health.

2.9. Data analysis

Data were cleaned, entered, and managed using Microsoft Excel 2010, with statistical analysis performed in SPSS 22.0. Descriptive analyses included frequencies and percentages categorical variables, as well as means with standard deviations for normally distributed quantitative variables, or medians with minimum and maximum values for non-normally distributed Inferential analyses quantitative variables. employed the Chi-square test to examine associations between outpatient satisfaction and related factors, with a significance threshold of p < 0.05. Fisher's Exact test was used when over 20% of cells in contingency tables had expected frequencies below 5.

2.10. Research Ethics

The study received ethical approval from the Research Protocol Council of the Institute of

Preventive Medicine and Public Health. It was conducted with the authorization of the Thanh Hoa Provincial Oncology Hospital's Board of Directors.

3. RESEARCH RESULTS

Table 1. Characteristics of patients participating in the study (n = 126)

Characteristic		Frequency (n)	Proportion (%)
	< 40	29	23.0
	40 - 60	68	54.0
Age group	>60	29	23.0
	\overline{X} ± SD	50,16 =	± 12,16
Cov	Male	17	13.5
Sex	Female	109	86.5
	Not in school	1	0.8
	Primary	3	2.4
Education	Middle school	65	51.6
Education level	High school	31	24.6
	College/ Vocational	18	14.3
	University and Graduate	8	6.3
	Farmer	44	34.9
	Worker	8	6.3
Job	Retired	15	11.9
	Intellectual	8	6.3
	Freelance	51	40.5
	Single	3	2.4
Marital status	Married	120	95.2
	Divorced/ Widow	3	2.4
Form of hospital	Health insurance	122	96.8
payment	Direct	4	3.2
Distance	< 10	13	10.3
from home to	10 - 30	24	19.0
hospital (km)	>30	89	70.6

The study included 126 patients, predominantly female (86.5%). The 40–60 age group was the most

common (54.0%). Most patients had a middle school education (55.0%), while those with no formal education were the least represented (4.0%). Occupationally, self-employed individuals comprised the largest group (42.0%), followed by farmers (35.0%), with professionals and workers each at 6.3%. Most patients were married (95.2%) and used health insurance (92.0%). The majority (70.6%) lived more than 30 km from the hospital.

Table 2. Overall satisfaction with service quality (n = 126)

Satisfaction by Aspects	Satisfied (%)	Not satisfied (%)	Mean and standard deviation	
Accessibility	92.9	7.1	4.4 ± 0.04	
Transparency of information and procedures for medical examination and treatment	91.1	8.9	4.5 ± 0.05	
Facilities and equipment for patient care	94.1	5.9	4.5 ± 0.04	
Attitude and professional competence of medical staff	93.5	6.6	4.4 ± 0.04	
Service delivery results	90.7	9.3	4.4 ± 0.08	
Overall satisfaction	92.5	7.6	4.4 ± 0.02	

Patients were most satisfied with the facilities and means of serving patients at 94.1%, and the lowest with the results of service provision at 90.7%. The average satisfaction rate was 92.5%, with an average score of 4.4 ± 0.02 .

Table 3. Factors related to patient satisfaction with facilities

Characteristics of the research subjects									
	Satisfied		Not satisfied						
	n	%	n	%	р				
	Age group								
< 40	27	93.1	2	6.9	0.739**				
40	- 60	64	94.1	4	5.9				
>60	26	89.7	3	10.3					

Characteristics of the research subjects							
	Satis	sfied	Not sa				
	n	%	n	%	р		
		Sex	<				
Male	16	94.1	1	5.9	1.0**		
Female	101	92.7	8	7.3	1.0		
	E	ducatio	n level				
Below high school	70	100	0	0	<		
high school or higher	45	80.4	11	19.6	0.001**		
		Job)				
Famer	41	93.2	3	6.8			
Worker/ Self-em- ployed/ Civil servant	74	90.1	8	9.9	0.746**		
	N	1arital s	status				
Single	3	100	0	0			
Married	112	93.3	8	6.7	0.365**		
Divorced/ Widow	2	66.7	1	33.3			
Form of hospital payment							
Health insurance	113	92.6	9	7.4	1.0*		
Direct	4	100	0	0			
Distance from home to hospital (km)							
< 10	13	100	0	0			
10 - 30	22	91.7	2	8.3	0.743**		
>30	82	92.1	7	7.9			

^{*} Chi-square test ** Fisher's exact test

The analysis revealed a significant association between patients' educational attainment and satisfaction with hospital facilities (p < 0.001). Patients with less than a high school education reported higher satisfaction (100%) compared to those with a high school education or higher (80.4%).

Table 4. Factors related to patient satisfaction with waiting time for medical examination registration procedures

Characteristics of the research subjects						
	Satisfied		Not satisfied		р	
	n	%	n	%		
	A	ge grou	ір			
< 40	28	96.6	1	3.4	0.407**	
40 - 60	62	91.2	6	8.8		
>60	25	86.2	4	13.8		
		Sex				
Nam	15	88.2	2	11.8	0.040**	
Nữ	100	91.7	9	8.3	0.643**	
	Educ	cation l	level			
Below high school	68	97.1	2	2.9	0.011**	
high school or higher	47	83.9	9	16.1		
		Job				
Famer	40	90.9	4	9.1		
Worker/ Self-employed/ Civil servant	75	91.5	7	8.5	1.0**	
	Mai	ital sta	itus			
Single	3	100	0	0		
Married	111	92.5	9	7.5	0.04**	
Divorced/ Widow	1	33.3	2	66.7	0.04	
Form of hospital payment						
Health insurance	111	91.0	11	9.0	1.0**	
Direct	4	100	0	0		
Distance from home to hospital (km)						
< 10	11	84.6	2	15.4		
10 - 30	22	91.7	2	8.3	0.602**	
>30	82	92.1	7	7.9		

* Chi-square test ** Fisher's exact test

The analysis revealed a significant association between waiting time for medical examination registration and patients' marital status and educational attainment (p = 0.04 and p = 0.011, respectively). Single (100%) and married (92.5%)



patients reported higher satisfaction than divorced or widowed patients (33.3%). Similarly, patients with less than a high school education (97.1%) were more satisfied than those with a high school education or higher (83.9%).

Table 5. Factors related to patient satisfaction with the service attitude of medical staff

Characteristics of the research subjects						
	Satisfied		Not satisfied		р	
	n	%	n	%	•	
Age group						
< 40	28	96.6	1	3.5		
40- 60	66	97.1	2	2.9	0.288**	
>60	26	89.7	3	10.3		
		Sex				
Male	17	100	0	0	1.0**	
Female	103	94.5	6	5.5	1.0	
	Edu	cation	level			
Below high school	70	100	0	0	0.007**	
high school or higher	50	89.3	6	10.7	0.007**	
		Job				
Farmer	42	95.5	2	4.5		
Worker/ Self-employed/ Civil servant	78	95.1	4	4.9	1.0**	
	Mai	rital sta	atus			
Single	3	100	0	0		
Married	115	95.8	5	4.2	0.258**	
Divorced/ Widow	2	66.7	1	33.3	0.200	
Form of hospital payment						
Health insurance	116	95.1	6	4.9	1.0**	
Direct	4	100	0	0		
Distance from home to hospital (km)						
< 10	12	92.3	1	7.7		
10 - 30	23	95.8	1	4.2	0.798**	
>30	85	98.8	1	1.2		

*Chi-square test **Fisher's exact test The analysis revealed a statistically significant association between medical staff's service attitude and patients' educational level (p = 0.007). Patients with less than high school education reported higher satisfaction with staff attitude (100%) compared to those with high school education or higher (89.3%), likely due to differing expectations influenced by educational background.

4. DISCUSSION

This study evaluated 126 outpatients at Thanh Hoa Provincial Oncology Hospital, with a mean age of 50.2 ± 12.1 years. The majority (54%) were aged 40–60 years, a higher proportion than reported by Bui Tuan Khoa (44.3%) at 108 Military Central Hospital. This difference likely reflects the oncology focus of Thanh Hoa Hospital, where cancer-related visits predominate, compared to the broader disease spectrum at 108 Military Central Hospital[5].

Accessibility of medical services scored a mean of 4.4 ± 0.04 , closely aligning with Bui Thi Mai's findings $(4.5 \pm 0.67)[9]$. This high satisfaction is attributable to the hospital's modern infrastructure, which has been operational since 2019, supported by provincial investment. Its strategic location on a main road, within a planned medical hub, and interconnected departments - from examination to diagnostics and billing - enhance patient convenience and streamline clinical services.

Patients reported high satisfaction with information transparency and administrative procedures, with a mean score of 4.5 ± 0.05 , though slightly lower than Bui Thi Mai's 4.6 ± 0.62 .

Satisfaction with facilities was notably high (94.2%, mean 4.5 ± 0.04), surpassing Tran Van Thien's findings (75.3%)[10]. Well-organized amenities, including area-specific restrooms separated from clinical zones and maintained by dedicated staff, contributed to this outcome.

Satisfaction with medical staff's attitude and professionalism reached 93.5% (mean 4.4 ± 0.04), while service delivery outcomes scored 90.7%, comparable to Nguyen Van Han's 89.9%[11].

Educational level significantly influenced satisfaction with facilities (p < 0.001), staff attitude (p = 0.007), and waiting time for registration (p = 0.011), with patients educated below high school reporting higher satisfaction (100%, 100%, and 97.1%, respectively) than those with high school or higher education (80.4%, 89.3%, and 83.9%).

Marital status also affected satisfaction with waiting time (p = 0.04), with single patients (100%)

and married patients (92.5%) being more satisfied than divorced or widowed patients (33.3%). These trends may stem from higher expectations among more educated patients and greater emotional sensitivity among divorced or widowed individuals.

5. CONCLUSION

Most patients were satisfied with the services provided by Thanh Hoa Provincial Oncology Hospital. However, dissatisfaction persists, influenced by factors such as education and marital status. Continuous improvements are essential to meet all patients' needs.

REFERENCES

- [1] Institute of Health Strategy and Policy. Method of assessing patient satisfaction by the World Health Organization, 2015.
- [2] GC Pascoe, Patient satisfaction in primary health care: a literature review and analysis. Evaluation and program planning. 1983; 6(3-4): 185 210.
- [3] Ministry of Health. Decision 6858/QD-BYT on promulgating the set of criteria for assessing the quality of Vietnamese hospitals, 2016.
- [4] Ministry of Health, Decision 56/QD-BYT Promulgating guidelines on methods for measuring people's satisfaction with public health services for the period 2024 2030, 2024.

- [5] Bui Tuan Khoa et al. Study on outpatient satisfaction at 108 Military Central Hospital in 2017. Journal of Clinical Medicine and Pharmacy 108. 2018. Volume 13 - Number 3.
- [6] Abolfotouh MA, et al. Predictors of patient satisfaction in an emergency care centre in central Saudi Arabia: a prospective study. J.Emerg.Med. 2017; 34:27-33.
- [7] Pham Thi Xuyen, Luu Minh Chau. Patient satisfaction and some factors related to care and rehabilitation at Hanoi Rehabilitation Hospital in 2017. Vietnam Medical Journal. 2024. Vol. 541-August, No. 1.
- [8] Pham Thi Cuc et al. Satisfaction of outpatients and some related factors at Ca Mau Provincial Eye and Dermatology Hospital. Can Tho Medical and Pharmaceutical Journal. No. 81/2024.
- [9] Bui Thi Mai et al. Outpatient satisfaction when using services at the Center for Diagnostic Imaging and Interventional Radiology, Hanoi Medical University Hospital. Journal of Medical Research. 2024; 178 (5).
- [10] Tran Quang Thien et al. Satisfaction of outpatients visiting Hanoi National University Hospital in 2021. Vietnam Medical Journal. 2023; Vol. 526, May, No. 1 B.
- [11] Nguyen Van Han et al. Assessment of patient satisfaction with outpatient examination and treatment at Tam Anh General Hospital, Hanoi in 2024. Journal of Community Medicine. 2024; 65 (7), 297 304.