

# A Study on Patient Satisfaction at Khanh Hoa Provincial General Hospital

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## **Abstract**

Patient satisfaction has been considered an indispensable measure in the process of evaluating hospital performance. A patient satisfaction survey can help explore possible gaps in hospital service to improve its quality.

The study was conducted based on a random sample of 985 in-patients who were already discharged within three months. A 26-item patient satisfaction scale was used to evaluate respondents' satisfaction with the hospital service. Univariate and multiple analyses were used to examine the relationship between satisfaction and patients' socio demographic characteristics. T test, ANOVA, and regression model were used for analysis.

The results showed a proportion of 68 per cent satisfaction with the hospital's service. The most

dissatisfied dimension was Responsiveness that relates to waiting time for doctors' and nurses' responses and administrative procedures. There were no significant differences in satisfaction regarding patients' gender, religion and health insurance status. Older people were likely to be more satisfied than younger ones. Patients who were living in remote areas were likely to be more satisfied with the hospital service.

Further studies should be conducted to confirm the five-factor structure of the scale. More attention should be paid to the dimensions of Assurance, Reliability and Empathy to improve hospital service quality.

**Key words:** patient satisfaction; SERVQUAL; SERVPERF; Khanh Hoa province, Vietnam.

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exception. In other words, patient satisfaction conveys the quality of healthcare. Therefore, patient satisfaction has been considered an indispensable measure in the process of monitoring and managing hospitals. [6]

A study by Aharony [7] demonstrated that satisfied patients were more likely to continue using medical services, to participate in their own treatment and to cooperate with their healthcare providers by disclosing important clinical information and by adhering to treatment regimens. This results in a better health outcome for patients. Further, patient satisfaction surveys may help healthcare providers identify potential areas for improvement in service quality. Patient satisfaction surveys also provide hospital managers with feedback regarding patients' concern, needs, and perceptions of treatment. [7] These issues indicate the importance of patient satisfaction in healthcare generally and hospital service particularly.

Studies show that implementation of patient-centred care and a high level of patient satisfaction has been demonstrated to be associated with improved health

## **Background**

There have been many studies examining the relationship between service quality and customer satisfaction. Although debates relating to the causal relationship between these two concepts are yet to be resolved, [1, 2] researchers agree with the evidence that there is a significant association between customer satisfaction and the quality of service. [3-5] As a result, customer satisfaction is considered a reflection of service quality. The healthcare sector is not an

outcomes and health service efficiency. [8] A high level of patient satisfaction makes the hospital staff more content with their job (job satisfaction), enhances patients' trust and therefore results in greater compliance. [9,10] In an article entitled 'Patient satisfaction: the indispensable outcome', Bolus et al [6] argued that 'without acceptable levels of patient satisfaction, health plans may not get full accreditation and will lack the competitive edge enjoyed by fully accredited plan'. Andaleeb [11] stated that 'Hospitals that fail to understand the importance of delivering customer satisfaction may be inviting possible extinction'. These points of view again emphasise the 'indispensable' task of conducting patient satisfaction surveys in the process of evaluating hospital performance.

There are still inconsistent findings in the relationship between patient satisfaction and socio-demographic characteristics. Some studies showed a significant relationship between satisfaction and socio-demographic factors. [12,13] Males and older people are reported in many studies to be more satisfied than females and younger ones. [14-18] In contrast, Priporas et al [19] reported that males and young people tended to rate satisfaction a little higher than females and older people. However, Choi et al [20] did not find any differences across age, gender, and service type subgroups. Consistently, a cross-sectional study conducted by Yordan et al [21] at the emergency department of a tertiary university hospital in Hong Kong showed no relationship between overall patients' satisfaction with their socio-demographic characteristics. Tucker et al [22] also indicated that demographic variables such as age, gender, education, race, and marital status did not have any moderating effect on satisfaction.

This study aimed to evaluate patient satisfaction in Khanh Hoa 1,000-bed Provincial General Hospital, examine possible associations between patient satisfaction and related patients' characteristics and some implications for quality of care of the hospital.

### **Methodology**

The study population is in-patients and/or their relatives who had taken care of the patients in the hospital. The patients were already discharged from the hospital within three months at the time this study was carried out. The rationale for this was to avoid possible response bias because of the patients' concerns about mistreatment while they were in hospital to answer the questionnaire. The reason for the period of three months after being discharged from the hospital is to optimise patients' recall of their experiences. [23]

Sample size  $n$  was calculated based on the following formula applied for a finite population, [24] where we assumed that  $n/N > 0.05$ :

$$n = \frac{Nz^2 p(1-p)}{d^2(N-1) + z^2 p(1-p)}$$

Where  $N$  is the population size – the number of inpatients discharged within the past three months;  $p$  is the expected proportion of patient satisfaction in the population;  $d$  is the absolute precision; and  $z_{1-\alpha/2}$  is the standard normal Z value corresponding to a cumulative probability of  $1 - \alpha/2$ . Its value for a two-sided test is 1.96 for 95% confident interval.

Because the expected proportion of patient satisfaction in the province is unknown,  $p = 0.5$  for the optimal sample size was chosen. According to the 2011 report of the provincial hospital, the average number of patients discharged in three months was 12,000. With the absolute precision of five per cent, the sample size calculated was  $n = 373$ . Assuming the response rate is around 70 per cent, by adding the percentage of not responding 30 per cent to the sample size, the computed sample size was  $n = 480$ . Because the sampling method is stratified systematic sampling, the sample size needs to be adjusted by the design effect at  $D = 2$ . As a result, the final sample size was  $n = 480 \times 2 = 960$ , rounding up to 1,000 patients.

Stratified systematic sampling was used to recruit patients into the sample. Patients were chosen based on the patient-recorded data saved in the computer server of the provincial hospital. A list of patients discharged within the last three months was created and sorted by resident location and then by gender and age. A sampling interval was calculated by  $N/n$  that was approximately ten. A random number  $r$  between one and ten was chosen by STATA package. The first patient to be chosen was the  $r^{\text{th}}$  patient in the sampling list. Every tenth patient, started at the first patient chosen as previously noted, in the list was chosen for inclusion in the sample.

Before this study was conducted in 2012, a pilot survey had been implemented to examine the reliability and validity of the patient satisfaction scale. [25] The scale was developed based on the skeleton of perception part of SERVQUAL instrument, [26] using five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5) with a neutral point (3). The final 26-item Patient Satisfaction Scale (PSS) includes five dimensions of patient satisfaction, namely Assurance (nine items), Empathy (four items), Tangibles (three items), Reliability (three items), and Responsiveness (seven items) as a result of exploratory factor analysis. The

scale also showed the convergent validity by the evidence of a significant regression model of the overall satisfaction variable against the five constituent factors of the scale. [25]

Expectation Maximisation algorithm was used to substitute missing data of the scale as suggested by some authors. [27-29] Analysis of variances (ANOVA), t student test, and regression analysis were used to analyse the possible associations between outcome variables and explanatory variables. The Bonferroni approach was used to uncover the real difference among pairs of variables in cases of using ANOVA technique. Multivariate analysis was used to examine the associations between the satisfaction and other independent variables together and to discover the possible models explaining these associations.

The SPSS version 19.0, and STATA version 12.0 were used to analyse data.

The Ethic Approvals have been obtained from Queensland University of Technology Human Research Ethics Committee (Approval number 1100000549) and Khanh Hoa Provincial Health Service.

## Results

Among 1,000 questionnaires delivered, 985 were returned to the principal researcher, accounting for 98.5 per cent response rate. However, there were four respondents less than 18 years of age and therefore excluded in analysis. As a result, the final sample was 981.

Cases with a half or more of variables composing the scale missing were excluded for analysis. Missing analysis revealed three such cases and therefore not included in the analysis. Among 26 variables of the scale, missing values range from 0.5 per cent to 2.9 per cent. This missing proportion was less than five per cent, an acceptable level for multiple analyses. [30]

The most missing variable was 'income' with 341 cases missing, accounting for 34.8 per cent. This is understandable because income is a sensitive issue in Vietnamese culture. People usually do not want to report their real income or report differently. Variable 'Age' had 53 missing values. There were missing values for the variables 'distance to the hospital', 'marital status', and 'occupations', accounting for 10.2 per cent, 5.5 per cent, and 5.7 per cent of the sample, respectively. The variable of 'overall satisfaction' had 17 missing values (1.7 per cent).

Totally, regarding 26 constituent items of PSS scale, analysis of missing patterns found three cases with more than a half of variables missing. For the variable 'overall satisfaction', there were another two cases with more than a half of this

variable missing. These cases were excluded in the analysis, leaving the final sample size of 976.

Expectation Maximisation imputation was used to substitute missing data as suggested by some authors. [27-29] This substitution was only made for the 26 items of the scale and the variable 'overall satisfaction'. The factor scores were obtained by the means of the individual items that constitute that factor. The reason for taking means but not the sum of scores was that not all dimensions have the same number of items. However, the scale score were calculated by the sum of item scores to get more accurate examination. Therefore, the scale score will range from 26 to 130 with the mean 78.0.

## Baseline characteristics

Of 976 patients, the majority (nearly 68 per cent) came from Nha Trang City where the hospital is located. Females consisted of 63.4 per cent the sample.

Among 923 respondents who reported their ages, more than half were 40 years old or younger (54.7 per cent) with mean ages of 42.5, ranging from 18 to 90. Most of patients were from the Kinh group accounting for 98.6 per cent of the sample (this proportion in the whole province is 93.3 per cent). Eight one per cent of respondents were married and a small number widowed (7.6 per cent). Nearly 70 per cent respondents reported as having no religion. The distribution of patients' occupation was diverse, ranging from farmers to governmental officers. Three fourths of patients were covered by health insurance. Only 54 per cent of respondents reported themselves as in-patients; others were patients' relatives who looked after the patients during the time they were hospitalised for treatment. Regarding respondents' monthly incomes, as previously mentioned this sensitive variable had a large range, from 70,000 VND to 30,000,000 VND (equivalent to 3.5 and 1,500 AUD, respectively at that time). This range may demonstrate unreliable data and may not reflect the real income of respondents. Where 23.3 per cent patients were living more than 20 kilometres far from the hospital, nearly half were living five kilometres or less from the hospital (45.6 per cent).

## Descriptive statistics of the scale

Descriptive statistics of the scale and related factors (dimensions) are illustrated in Table 2. The preliminary analysis of the scale scores showed that the scale mean score is 82.6 ( $SD = 11.99$ ), slightly higher than the average score at 78.0.

The highest mean score (3.5) was at the dimension of Assurance. Assurance in the scale implies concerns, attention and professional capacity of doctors and nurses.

**Table 1: Baseline characteristics of the main patient survey**

VARIABLE (N)	N	PER CENT
<b>Location (N=976)</b>		
Nha Trang City	667	68.3
Cam Ranh City	16	1.6
Ninh Hoa District	90	9.2
Van Ninh District	48	4.9
Dien Khanh District	78	8.0
Cam Lam District	54	5.5
Khanh Vinh District	20	2.0
Khanh Son District	3	0.3
<b>Gender (N=975, missing 1)</b>		
Male	357	36.6
Female	618	63.4
<b>Age group<sup>a</sup> (N=923, missing 53)</b>	<b>42.5±16.9</b>	
Range: 18-90		
18-30	272	29.5
31-40	234	25.3
41-50	152	16.5
51-60	113	12.2
> 60	152	16.5
<b>Ethnicity (N=973, missing 3)</b>		
Kinh	959	98.6
Raglai	10	1.0
Other	4	0.4
<b>Marital status (N=922, missing 54)</b>		
Single	95	10.3
Married	747	81.0
Divorced	10	1.1
Widowed	70	7.6
<b>Religion (N=976)</b>		
Yes	294	30.1
No	682	69.9
<b>Occupation (N=920, missing 56)</b>		
Unemployed	48	5.2
Farmer	115	12.5
Fisher	31	3.4
Worker	159	17.3
Teacher	28	3.0
Government officer	95	10.3
Business	123	13.4
Retired	58	6.3
Housework	187	20.3
<b>Health Insurance (N=976)</b>		
Yes	723	74.1
No	253	25.9
<b>Patient (N=952, missing 24)</b>		
Yes	723	74.1
No (patient's relative)	253	25.9

**Table 1: Baseline characteristics of the main patient survey *continued***

VARIABLE (N)	N	PER CENT
<b>Income<sup>a,b</sup> (N=636, missing 340)</b> Range: 70 – 30,000	2,504±1,715	
<b>Distance from Hospital</b>		
≤ 5 km	400	45.0
>5 – 10 km	185	21.1
>10 – 20 km	88	10.0
>20 km	20.4	23.3

Notes: <sup>a</sup> mean±SD; SD: Standard deviation; <sup>b</sup> incomes in 1,000 VND

**Table 2: Descriptive statistics of the PSS scale and related factors**

FACTORS (N = 976)	MEAN	SD	SE
Assurance	3.48	.588	.019
Responsiveness	2.69	.560	.018
Tangibles	3.25	.646	.021
Reliability	3.39	.665	.021
Empathy	3.13	.666	.021
<b>Scale scores</b>	<b>82.62</b>	<b>11.988</b>	<b>.384</b>

Note: SD: Standard deviation; SE: Standard Error

**Table 3: Univariate analysis of patient satisfaction scores and socio demographic characteristics**

DIMENSIONS	ASSURANCE	RESPONSIVENESS	TANGIBLES	RELIABILITY	EMPATHY	SCALE SCORE
<b>Gender (n = 976)</b>						
Male	3.48	2.72	3.29	3.38	3.11	82.81
Female	3.48	2.68	3.24	3.39	3.14	82.57
p values	.875	.221	.235	.813	.423	.759
<b>Age group (n = 923)</b>						
18 – 30	3.45	2.69	3.21	3.32	3.07	81.81
31 – 40	3.47	2.65	3.18	3.38	3.08	81.87
41 – 50	3.45	2.65	3.24	3.43	3.13	82.14
51 – 60	3.58	2.84	3.39	3.47	3.25	85.73
>60	3.56	2.76	3.39	3.48	3.26	84.97
p values	.151	.016	.002	.086	.011	.003

**Table 3: Univariate analysis of patient satisfaction scores and socio demographic characteristics *continued***

DIMENSIONS	ASSURANCE	RESPONSIVENESS	TANGIBLES	RELIABILITY	EMPATHY	SCALE SCORE
<b>Marital status (n = 842)</b>						
Single	3.47	2.64	3.34	3.33	3.09	82.09
Married	3.47	2.71	3.23	3.39	3.12	82.61
p values	.936	.232	.068	.381	.679	.686
<b>Religion</b>						
No	3.48	2.70	3.28	3.41	3.14	82.89
Yes	3.48	2.67	3.18	3.33	3.11	81.98
p values	.881	.464	.025	.102	.518	.278
<b>Health insurance (n = 976)</b>						
No	3.47	2.71	3.30	3.39	3.12	82.73
Yes	3.48	2.69	3.24	3.38	3.13	82.58
p values	.691	.657	.177	.844	.804	.868
<b>Distance from the hospital (n = 877)</b>						
≤ 5km	3.38	2.73	3.14	3.32	3.08	81.17
5 – 10 km	3.40	2.60	3.15	3.27	3.03	80.18
>10-20 km	3.60	2.71	3.30	3.50	3.24	84.67
>20 km	3.75	2.82	3.55	3.61	3.35	88.40
p values	.000	.002	.000	.000	.000	.000
<b>Location (n = 976)</b>						
Nha Trang	3.38	2.67	3.15	3.29	3.05	80.63
Others	3.69	2.75	3.49	3.60	3.30	86.92
p values	.000	.050	.000	.000	.000	.000

The dimension of Responsiveness received the lowest mean score at 2.7. This dimension relates to responding aspects of doctors and nurses toward patients' needs as well as waiting time associated with administrative procedures.

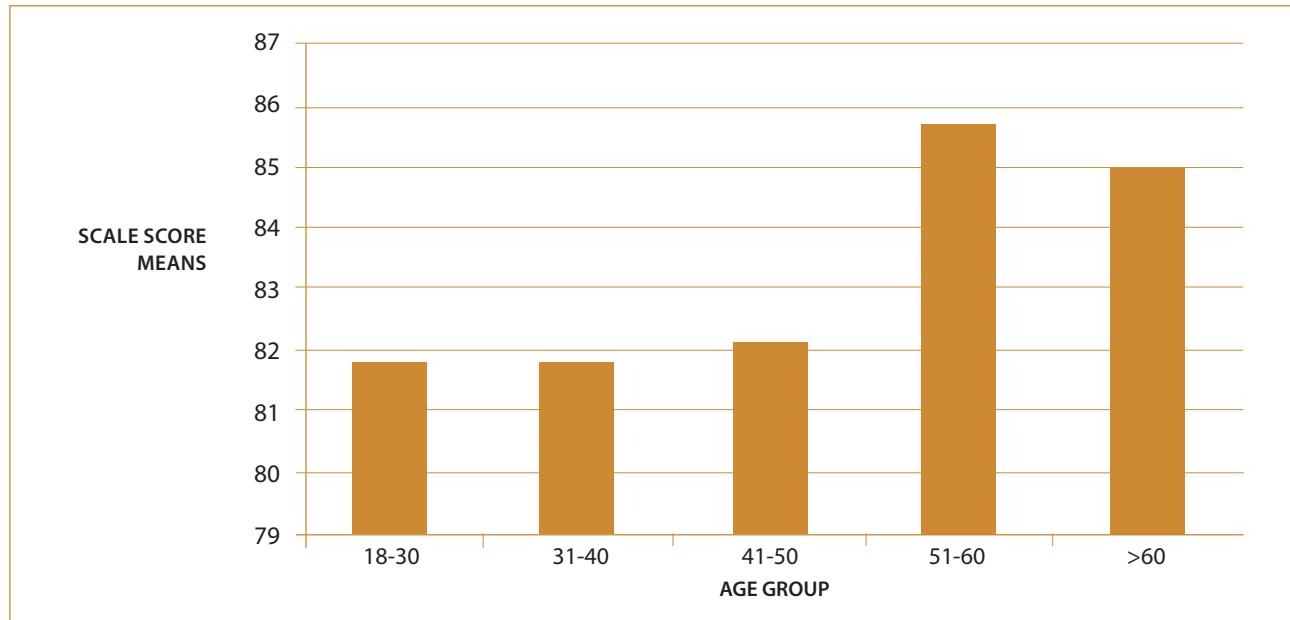
#### Univariate analysis

The univariate analysis revealed many significant statistics as showed in Table 3.

The result showed that there was no significant difference in mean scores of satisfaction and its constituent dimensions between males and females and the health insurance status of respondents. There was also no difference in satisfaction between single and married patients. The scale scores of satisfaction between believers and non-believers were not significantly different, although the dimension of tangibles received a significant higher mean score in non-believers than believers ( $p < 0.05$ ).

Significant differences in age, respondents' resident locations and distance from the hospital have been revealed in this study. Analysis by age groups showed a trend of increasing satisfaction level proportional to age groups. The older patients are, the more satisfied they appear to be (Figure 1). Bonferroni post hoc analysis showed that the significant difference of scale mean scores was between the age group of 51-60 years and two other groups: 18-30 and 31-40 years. Other differences relating to constituent dimensions also mainly lay on the group age of 51 – 60 years.

The distance from patients' homes to the hospital was found to significantly affect their satisfaction with the hospital service. The result showed that satisfaction with hospital services was higher in patients who were living far away from the hospital. Similarly, analysis based on administrative resident location of patients showed the same result. Nha Trang City, where the hospital is located, was compared with

**Figure 1: Mean Scale scores by age groups**

other districts regarding patient satisfaction scores. Table 3 shows that patients who were living outside Nha Trang City were more satisfied with the hospital service ( $p < 0.001$ ).

#### Multivariate analysis

Multivariate analysis was conducted by two different approaches: (1) Regression analysis of overall satisfaction as outcome variable against five dimensions of patient satisfaction as predictor variables. This approach aims to gauge the impact of individual dimensions on overall satisfaction; (2) Regression analysis of scale scores as outcome variable against socio-demographic characteristics of respondents as predictors. Based on the results of this regression analysis, recommendations will be made for a better quality of hospital service.

Correlation analysis of the variable overall satisfaction with five dimensions of the patient satisfaction scale showed significant correlations at the level of 0.01 (Table 4). Further,

multicollinearity diagnosis revealed all variance inflation factors (VIFs) less than five, justifying the appropriateness of regression analysis.

Regression modelling of overall satisfaction against five dimensions of satisfaction showed a significant model that explains for 49.8 per cent of overall satisfaction variance (Table 5).

A purposeful selection of covariates approach was applied for a multiple regression model with the scale scores as dependent variable and other categorical variables of socio-demographic characteristics as independent variables.

The first selection based on bivariate regression only showed three variables: age group, marital status, and distance from hospital to be eligible ( $p < 0.2$ ) for the next step ( $p$  values at 0.0029, 0.009, and 0.000, respectively). These variables were then included for the initial multivariate model.

**Table 4: Correlation analysis of five dimensions with the variable of satisfaction**

	(1)	(2)	(3)	(4)	(5)	(6)
(1) Satisfied	1					
(2) Assurance	.692	1				
(3) Responsiveness	.211	.187	1			
(4) Tangibles	.461	.598	.201	1		
(5) Reliability	.583	.734	.184	.501	1	
(6) Empathy	.570	.719	.330	.573	.660	1

Note: All correlations are significant at the 0.01 level (2-tailed)

**Table 5: Regression model of overall satisfaction on five dimensions of satisfaction**

N = 976	B	B <sub>s</sub>	P	R <sup>2</sup>	ADJ-R <sup>2</sup>	F TEST, P VALUE
Assurance	.684	.506	.000	.500	.498	F = 194.49 p = .000
Responsiveness	.083	.058	.016			
Tangibles	.044	.035	.228			
Reliability	.155	.129	.000			
Empathy	.097	.082	.025			
Constant	-.305		.021			

Note: β: regression coefficient, β<sub>s</sub>: standardised coefficient, Adj-R<sup>2</sup>: adjusted R<sup>2</sup>

The initial multivariate regression model with three variables resulted in retaining three exploratory variables. The final test for one at a time inputting variables that were excluded in the bivariate regression step showed no further significant results. Consequently, the final regression model revealed three significant predictors: age group, marital status and distance from the hospital. In this model, the age group of 18-30 years, the distance of five kilometres or less, and marital status of single were considered reference groups.

The result of multivariate analysis (Table 6) showed that this significant model explains 7.7 per cent of the scale score variance. Among three significant exploratory variables, there was an increasing tendency of the scale score proportional to the distance from the hospital. A higher scale score was demonstrated significantly in patients at the ages between 51 and 60 (p < 0.05) and slightly decreased after the age of 60, although there was no significant difference between this age group (> 60) with the reference one (p >

0.05). Regarding marital status, widowed patients seemed to be more satisfied with the hospital service than single ones (p < 0.05), but with no significant difference between single and married or divorced.

Further pairwise analysis on three categorical variables showed the following results. There was only significant difference between the age group of 51-60 years with the group of 18-30 years. Except the distance groups of less than five kilometres and five to ten kilometres, all pairs of the distance groups are significantly different. Only windowed and single respondents showed significant different on the scale score of satisfaction.

## Discussion

The mean PSS score at 82.6, slightly above the average (78.0) implied that patients who were admitted to the provincial hospital for treatment were just satisfied with hospital services. Assuming that the scale scores less than 78.0 is

**Table 6: Regression model of scale score on age, resident location, and marital status of patients**

SCALE SCORES	B	SE	B <sub>s</sub>	P	ADJ-R <sup>2</sup>	F TEST, P
<b>Age group</b>						
31-40	.450	1.1188	.017	.687	.077	F = 7.93 p = .000
	41-50	.483	1.2798	.015	.706	
	51-60	3.152	1.4294	.086	.028	
	>60	2.184	1.4138	.067	.132	
<b>Distance</b>						
>5-10 km	-1.448	1.0696	-.049	.176		
>10-20 km	3.207	1.4296	.080	.025		
>20 km	6.733	1.0237	.239	.000		
<b>Marital status</b>						
Married	1.299	1.4069	.042	.356		
Divorced	3.729	4.6222	.028	.420		
Widowed	4.435	2.2493	.093	.049		
Constant	79.137	1.3579		.000		

Note: β: regression coefficient, SE: standard error, β<sub>s</sub>: standardised β, Adj-R<sup>2</sup>: Adjusted R<sup>2</sup>

considered dissatisfaction, the result showed that nearly one third (32 per cent) of patients were not satisfied with the hospital service.

Univariate analysis manifested no significant association between gender and patient satisfaction. This result was consistent with other studies. [20, 22] However, patients' ages showed significant correlation with their satisfaction with hospital service. This finding was also consistent with several studies. [14-18] Additionally, the tendency of increasing satisfaction proportional to age groups suggested that older patients are more satisfied with hospital than younger. This fact may be explained by a higher expectation among younger patients. More interestingly, the study showed more satisfaction in patients who were living far from the hospital. This significant difference was shown not only in the total scores but also across the scores of its constituent dimensions. High expectation among urban residents could be attributed to this finding.

The percentage of nearly 50 per cent of the variance of overall satisfaction of patients was accounted for by the five satisfaction dimensions of the scale again confirms the convergent validity of the scale. [25] The finding suggests that the PSS should be used for evaluating patient satisfaction in Vietnamese public hospitals. Furthermore, the dimensions of Assurance and Reliability, which manifested the most impact on patient overall satisfaction, imply that approaches to improve hospital quality should focus on these dimensions.

However, a significant but weak regression model of scale score against patient's characteristics ( $R^2 = 8\%$ ) may imply that other related factors could need to be explored in further studies in association with the patient satisfaction scale.

### Conclusions and recommendations

The study has revealed some major findings regarding the satisfaction of patients who were treated in the General Hospital of Khanh Hoa province. The satisfaction level of patients who were treated in Khanh Hoa Provincial Hospital was around 68 per cent. The patients were not satisfied with waiting times and administrative procedures that were represented in the Responsiveness dimension. A higher level of satisfaction was identified in older patients and in patients who are living in remote areas. The patient satisfaction scale manifested its validity in measuring patient satisfaction in a Vietnamese context.

More studies need to be implemented in other parts of Vietnam to further confirm the PSS's reliability and validity as well as explore other patient-related factors contributing to the scale.

To improve the level of patient satisfaction with the provincial hospital, more focus should be placed on the dimensions of Assurance, Reliability and Empathy in the patient satisfaction scale. This should result in more training to improve professional knowledge and skills for doctors and nurses/midwives; and improved communication between hospital staff and patients; improved behaviours in hospital staff, including nursing-aides in interpersonal interaction. This is important in achieving a high level of patient satisfaction.

### Competing interests

The authors declare that they have no competing interests.

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## Appendix: The 26-item scale of patient satisfaction

### Assurance

- When you have a health problem, doctor shows a sincere interest in solving it
- Nurses/midwives have good professional skills
- The doctor made an accurate diagnosis
- Nurses/midwives are consistently courteous with you
- Doctors are consistently courteous with you
- The behaviour of hospital staff instils confidence in patients
- Doctors have good professional skills
- Doctor gives you individual attention
- Nurse/midwife gives you individual attention

### Responsiveness

- Doctors are too busy to response to your request promptly
- The administration procedures of the hospital take too much time
- The waiting time for lab examination and/or imaging diagnostic procedures is too long
- It takes too much time for the discharging procedure
- Nurses/midwives are too busy to response to your request promptly
- The hospital is too much crowded
- The referral procedure is too much complicated

### Tangibles

- There are enough beds for patients
- The Hospital has up-to-date medical equipment
- The clinical departments are clean

### Reliability

- Hospital has operating hours convenient to all patients
- When you have a health problem, nurse/midwife shows a sincere interest in solving it
- Nurses/midwives are always willing to help you

### Empathy

- Nursing aides are always willing to help you
- It doesn't take too much time for you to be seen by doctor
- Nursing aides are consistently courteous with you
- The hospitalization procedures are simple