

CUSTOMERS' SATISFACTION TOWARD OPD SERVICE AT SOMDEJPHRAPHUTHALERTLA HOSPITAL, MUANG DISTRICT, SAMUTSONGKRAM PROVINCE, THAILAND

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ABSTRACT: Somdejphraphuthalertla Hospital, the biggest public hospital in district level located in the center of Muang city, Sumtsongkarm Province, Thailand is using customers' complaint and suggestions to assess their healthcare services; however, the hospital has never assessed clients' satisfaction by doing a survey to discover their problems and evaluate their quality of performances. A cross-sectional study was conducted in March 2013, to evaluate level of customers' satisfaction towards out-patient department (OPD) service at Somdejphraphuthalertla Hospital. A structured self administrated questionnaire was used for data collection among 400 respondents who visited the OPD at General Medicine Department, Somdejphraphuthalertla Hospital. The study revealed that score of satisfaction to the hospital environment, service process, personality of staff and waiting time from six nodes of services ranged from 1-5 (1= very dissatisfied, 5= very satisfied). In hospital environment, the highest average score was 4.05 for safety. In service process, the highest average score was 4.04 for diagnosis and treatment plan. The highest average score in personality of staff was 4.10 for primary doctors. In waiting time, the highest average score was 3.75 for payment and universal coverage. There was a significant ($p < 0.05$) relation between personal profile and satisfaction to hospital's environment, service process, personality of staff and waiting time. In conclusion, the traveling and hospital environment were influencing factors to the level of satisfaction while the service process, personality of staff and waiting time were three aspects to answer the research questions and objectives of this study. The level of satisfaction toward OPD services in overall was high (94.2%) and 99.0% of respondents indicated that they will return to use the hospital services in future.

Keywords: Customer satisfaction, OPD Service, Service process, Personality of staff, Waiting time, Thailand

INTRODUCTION

Over the last few years, the awareness of smooth and effective operation of health systems is considered both at national and international health goals [1]. In Thailand, the health systems have developed gradually for services which include providing human resources in health care, expanding healthcare facilities, introducing new medical technology and improving health financing. Health facilities in the public sector play an important role in the health system to provide

health services with good accessibility and coverage to the people in all localities [2]. The voice of patients' opinion about the received care services has been found as important part of a commitment to public widely and participation of patient in healthcare service delivery and plan. Listening to the patients, measuring patients' satisfaction and improving the hospital services are supported to strategic plan goals [3]. Patients' satisfaction has been a valid indicator and mandated in the Joint Commission of Accreditation of Health Care Organizations (JACHO), in 1994 standards for accreditation [4]. Somdejphraphuthalertla hospital, Muang Sumsongkarm Province, Thailand currently

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has 311 beds and approximately 167,000 visited outpatient department (OPD) in 2011 [5]. Customers' complaint and suggestions is one of the methods that Somdejphraphuthalertla hospital currently using to assess their healthcare services. However, the hospital has never assessed clients' satisfaction by doing survey to discover the problems and suggestions to their performances. Since, the hospital has adopted health insurance policy including the universal coverage, the number of patients come to visit the hospital has increased gradually. However, while there is increasing number of customers, the number of health care providers is still not enough to serve in need. Once the clients expectation is not met upon visit; therefore, the complaint cases also increase continually each year. It is time for the hospital to consider and be aware of the clients' satisfaction as it is the reflection of their quality of healthcare services in overall. Therefore, a cross-sectional study was conducted to evaluate level of customers' satisfaction towards out-patient department (OPD) care service at Somdejphraphuthalertla Hospital.

METHODOLOGY

Data collection was through a self-administered questionnaire which included 32 checklist items, 6 fill in the blanks and one open ended question and all questions were in Thai language. For clients who cannot read, data collectors had read out question to them and filled answers. All 400 respondents were taken through non-probability sampling (quota) technique from customers who visited the OPD at General Medicine Department, Somdejphraphuthalertla Hospital during February 24 to March 31, 2013. Assistant interviewers collected data at the cashier counter (exit point); thus, the respondents could evaluate all OPD service nodes starting from out-patient registration counter, vital signs check-up point, health assessment and treatment by doctors, lab and X-ray department, pharmacy counter and cashier counter. Well-trained assistant interviewers approached the respondents in every 30 minutes during 08.00-12.00 hrs. in the morning and 13.00-15.00 hrs. in the afternoon.

There was only one case of refusal to sign consent form before taking the questionnaire. However, after giving an explanation about research objective and study again, this respondent agreed to continue to participate. The reliability test at the real setting of the study was higher than the one at pre-test study. The Cronbach's Alpha Coefficient on hospital environment was 0.83, service process was 0.89, personality of staff was

0.91 and waiting time was 0.90.

RESULTS

The results of the study are presented here in four parts to provide maximum information to the readers, are as follows:

Part 1 Personal profile of respondents at General Medicine Department, Somdejphraphuthalertla hospital

According to gender, the majority of respondents were female at 70.2%. The age of the respondents ranged between 18 – 90 years and the average age of the sample was 51 years. The respondents were distributed in four age groups: 18-35 group was 23.0%, 36-55 group was 34.5% while the 56-75 made the largest group at 36.0% and the over 76 years group was 6.5%. The married status was 64.5%, single was 21% and widow was 11%. Majority of respondents 54.0% had primary education, 22.2% had high school and 15.0% had bachelor and above. Regarding the occupation, about 30.5% of respondents were employee at private section and 32.8% were unemployed (dependents, students, others). Regarding the income, the majority of respondents (69.0%) had monthly income below 10,000 Baht, 25.0% had ranged 10,000-25,000 Baht and 6.0% had ranged 26,000-50,000 Baht. The number of visits; 6.2% of respondents were at the first time visit, 8.5% at the second times and 85.2% at third times and over. The concerned problem of the visit were hypertension or heart disease (35.2%), diabetes or endocrine problem (17%) and others (26% which were not included pulmonary system and digestive disease problems). 50.2% of respondents knew the causes of diseases, but did not specify, while 38.2% did not know causes of diseases .

Part 2 Travelling distance of respondents from residence area to Somdejphraphuthalertla Hospital

The majority of respondents (44.5%) were living within 5-10 kilometers from the hospital and 28.8% within 11-20 kilometers. The distance ranged between 0.5-80 kilometers and the average was 10.7 kilometers. Almost 65 % of respondents spent time between 15-30 minutes while 23.8% spent time less than 15 minutes travel to the hospital. The average travelling time was 22 minute with minimum one minute and maximum was 90 minutes. Majority of respondents (37.2%) used public transportation to the hospital while the other used personal car (34.2%) and motorcycle (26.2%). About 76.5% of respondents had travelling

Table 1 The highest mean score of the satisfaction to hospital environment, service process, personality of staff and waiting time

List items of the highest mean score	Percentage (%)					Mean score
	Very dissatisfied	Dissatisfied	Fair	Satisfied	Very satisfied	
- Safety	2.0	2.2	17.2	46.0	32.5	4.05
- Service process for diagnosis and treatment plan	1.8	4.0	18.2	40.8	35.2	4.04
- Personality of primary doctor	1.0	4.5	14.2	43.5	36.8	4.10
- Waiting time for payment / universal coverage	2.2	5.8	24.8	49.5	17.8	3.75

Table 2 The lowest mean score of the satisfaction to hospital environment, service process, personality of staff and waiting time

List items of the lowest mean score	Percentage (%)					Mean score
	Very dissatisfied	Dissatisfied	Fair	Satisfied	Very satisfied	
- Loudness	5.0	10.8	32.2	38.2	13.8	3.45
- Ventilation	1.8	4.0	18.2	40.8	35.2	4.04
- Service process for out-patient registration	3.0	5.0	25.0	48.0	19.0	3.75
- Personality of primary nurse and physician's assistant	3.0	6.8	21.8	44.5	24.0	3.80
- Waiting time for out-patient registration counter	5.5	14.2	28.0	29.2	13.0	3.40

expense less than 50 Baht and 19.8% between 50-100 Baht. The travelling expense ranged between 0-400 Baht with an average of 38.5 Baht. The majority of respondents (93.0%) thought they were convenient to travel hospital while the rest of them (7.0%) did not agree.

Part 3 The level of satisfaction to the hospital environment, service process, personality of staff and waiting time

The score of satisfaction to the hospital environment ranged from 1-5. The highest average score was 4.05 for safety while 3.84 for cleanliness, 3.75 for ventilation and 3.45 for loudness respectively. Majority of respondents satisfied with the ventilation at 46.5%, safety at 46.0%, cleanliness at 45.2% and loudness at 38.2%. There were 32.5% of the respondents were very much satisfied to safety and 5% were very much dissatisfied to loudness.

The score of satisfaction to the service process ranged from 1-5. The highest average score was 4.04 for diagnosis and treatment plan, while 3.98 for payment and universal coverage service, 3.95 for blood test and X-ray, 3.89 for basic physical examination and also receiving medicine at

pharmacy, and 3.75 for outpatient registration service respectively. Majority of respondents satisfied with basic physical examination at 54.0%, payment and universal coverage service at 51.0%, blood test and X-ray at 49.5%, outpatient registration service at 48.0%, receiving medicine at pharmacy at 47.5% and diagnosis and treatment plan at 40.8%. There were 35.2% of the respondents who had very much satisfaction to diagnosis and treatment plan and 3.0% were very dissatisfied to outpatient registration service.

The score of satisfaction to the personality of staff ranged from 1-5. The highest average score was 4.10 for primary doctor while 4.00 for pharmacists and staff at pharmacy, 3.99 for cashier or universal coverage staff, 3.96 for laboratory and x-ray staff, 3.87 for outpatient registration staff and 3.80 for nurse and physician's assistant at outpatient department respectively. Majority of respondents were satisfied with pharmacists and staff at pharmacy at 53.2%, laboratory and x-ray staff at 51.5%, cashier or universal coverage staff at 51.0%, outpatient registration staff at 49.8%, nurse and physician's assistant at outpatient department at 44.5% and primary doctor at 43.5%.

Table 3 Association between personal profile and customer's satisfaction to hospital environment

Personal profile and hospital environment	P-Value			
	Cleanness	Ventilation	Loudness	Safety
Gender	0.651 ^a	0.404 ^a	0.377 ^a	0.912 ^a
Age	0.100 ^b	0.013 ^b	0.109 ^b	0.016 ^b
Status	0.677 ^b	0.250 ^b	0.469 ^b	0.291 ^b
Education	0.004 ^b	0.000 ^b	0.001 ^b	0.000 ^b
Occupation	0.283 ^b	0.163 ^b	0.275 ^b	0.019 ^b
Income	0.193 ^b	0.001 ^b	0.767 ^b	0.004 ^b
Number of visit	0.017 ^b	0.072 ^b	0.139 ^b	0.403 ^b
Health problem	0.962 ^b	0.225 ^b	0.304 ^b	0.014 ^b

P-value by Mann-Whitney U test (^a) and Kruskal-Wallis test (^b)

Table 4 Association between personal profile and customer's satisfaction to service process

Personal profile and service process	P-Value					
	Registration	Physical exam	Diagnosis	Lab test	Pharmacy	Payment
Gender	0.451 ^a	0.258 ^a	0.725 ^a	0.640 ^a	0.241 ^a	0.904 ^a
Age	0.005 ^b	0.123 ^b	0.006 ^b	0.001 ^b	0.003 ^b	0.019 ^b
Status	0.381 ^b	0.845 ^b	0.324 ^b	0.084 ^b	0.071 ^b	0.068 ^b
Education	0.009 ^b	0.041 ^b	0.001 ^b	0.007 ^b	0.004 ^b	0.004 ^b
Occupation	0.055 ^b	0.236 ^b	0.139 ^b	0.292 ^b	0.069 ^b	0.046 ^b
Income	0.046 ^b	0.331 ^b	0.008 ^b	0.060 ^b	0.062 ^b	0.052 ^b
Number of visit	0.337 ^b	0.210 ^b	0.505 ^b	0.748 ^b	0.595 ^b	0.520 ^b
Health problem	0.020 ^b	0.073 ^b	0.002 ^b	0.059 ^b	0.155 ^b	0.111 ^b

P-value by Mann-Whitney U test (^a) and Kruskal-Wallis test (^b)

There were 36.8% of the respondents had very satisfied to primary doctor and 3.0% had very dissatisfied to nurse and physician's assistant at outpatient department.

The score of satisfaction to the waiting time ranged from 1-5. The highest average score was 3.75 for payment and universal coverage while 3.74 for doing blood test and x-ray, 3.63 for diagnosis and treatment, 3.52 for basic physical examination and also for receiving medicines at pharmacy and 3.40 for outpatient registration respectively. Majority of respondents satisfied with doing blood test and x-ray at 52.5%, payment and universal coverage at 49.5%, receiving medicines at pharmacy at 49.2%, diagnosis and treatment at 47.0%, basic physical examination at 46.0% and outpatient registration at 39.2%. There were 17.8% of the respondents had very satisfied to payment and universal coverage, and 5.5% had very dissatisfied to outpatient registration. The detail is shown in Table 1 and Table 2.

Part 4 Relationship between personal profile of respondents and influencing factors to the level of customers' satisfaction on service process, personality of staff and waiting time at Somdejphraphuthalertla Hospital

Personal profile variables were analyzed for association with customers' satisfaction by Mann-Whitney U test and Kruskal-Wallis test with

association of P-value less than 0.05 was considered significant.

Genders, age, marital status, education, occupation, monthly income, number of visit and health problems were analyzed for association with satisfaction to hospital environment. Education and number of visits were significantly associated with satisfaction to cleanness at *p-value* = 0.004 and 0.017 respectively. Education, income and age were significantly associated with satisfaction to ventilation at *p-value* = < 0.001, 0.001 and 0.013 respectively. While education also was significantly associated with satisfaction to loudness at *p-value* = 0.001. For safety, education still had significant association with satisfaction at *p-value* = < 0.001 while income and health problem had significant association at *p-value* = 0.004 and 0.014 respectively. The detail is shown in Table 3.

Genders, age, marital status, education, occupation, monthly income, number of visit and health problem were analyzed for association with satisfaction to service process in all concerned counters. Age, education and income were significantly associated with satisfaction to outpatient registration at *p-value* = 0.005, 0.009 and 0.046 respectively. Education, age and income were significantly associated with satisfaction to diagnosis at *p-value* = 0.001, 0.006 and 0.008 respectively. Age and education also was

Table 5 Association between personal profile and customer's satisfaction to personality of staff

Personal profile and personality of staff	P-Value					
	Registered staff	Nurses and assistants	Doctors	Lab Staff	Pharmacists and staff	Cashiers
Gender	0.931 ^a	0.299 ^a	0.200 ^a	0.667 ^a	0.799 ^a	0.833 ^a
Age	0.001 ^b	0.000 ^b	0.000 ^b	0.003 ^b	0.011 ^b	0.001 ^b
Status	0.348 ^b	0.189 ^b	0.377 ^b	0.074 ^b	0.227 ^b	0.098 ^b
Education	0.000 ^b	0.001 ^b	0.000 ^b	0.001 ^b	0.001 ^b	0.003 ^b
Occupation	0.034 ^b	0.252 ^b	0.031 ^b	0.103 ^b	0.002 ^b	0.007 ^b
Income	0.064 ^b	0.188 ^b	0.006 ^b	0.006 ^b	0.005 ^b	0.001 ^b
Number of visit	0.161 ^b	0.234 ^b	0.543 ^b	0.659 ^b	0.932 ^b	0.883 ^b
Health problem	0.249 ^b	0.007 ^b	0.000 ^b	0.092 ^b	0.023 ^b	0.101 ^b

P-value by Mann-Whitney U test (^a) and Kruskal-Wallis test (^b)

Table 6 Association between personal profile and customer's satisfaction to waiting time

Personal profile and waiting time	P-Value					
	Registration	Physical examination	Diagnosis	Lab tests	Pharmacy	Payment
Gender	0.857 ^a	0.495 ^a	0.230 ^a	0.750 ^a	0.948 ^a	0.979 ^a
Age	0.211 ^b	0.978 ^b	0.113 ^b	0.405 ^b	0.348 ^b	0.777 ^b
Status	0.646 ^b	0.009 ^b	0.304 ^b	0.197 ^b	0.147 ^b	0.918 ^b
Education	0.021 ^b	0.373 ^b	0.108 ^b	0.654 ^b	0.275 ^b	0.202 ^b
Occupation	0.544 ^b	0.510 ^b	0.055 ^b	0.323 ^b	0.488 ^b	0.203 ^b
Income	0.237 ^b	0.786 ^b	0.011 ^b	0.357 ^b	0.637 ^b	0.028 ^b
Number of visit	0.153 ^b	0.194 ^b	0.506 ^b	0.060 ^b	0.216 ^b	0.244 ^b
Health problem	0.943 ^b	0.696 ^b	0.720 ^b	0.217 ^b	0.120 ^b	0.855 ^b

P-value by Mann-Whitney U test (^a) and Kruskal-Wallis test (^b)

significantly associated with satisfaction to lab service at p -value = 0.001 and 0.007 and with satisfaction to pharmacy service at p -value = 0.003 and 0.004 respectively. For payment/universal coverage service, education, age and occupation had significant association with satisfaction at p -value = 0.004, 0.019 and 0.046 respectively. The detail is shown in Table 4.

Genders, age, marital status, education, occupation, monthly income, number of visit and health problem were analyzed for association with satisfaction to personality of staff in all concerned counters. Education and age were significantly associated with satisfaction to outpatient registration staff at p -value = 0.000, 0.001 respectively. Age, education and health problem were significantly associated with satisfaction to nurses and physician assistants at p -value = 0.000, 0.001 and 0.007 respectively. Age, education and health problem also were significantly associated with satisfaction to doctors at p -value = 0.000 in all variables. Education, age and income were significantly associated with satisfaction to lab staff at p -value = 0.001, 0.003 and 0.006 respectively. For pharmacists and staff, education, occupation and income had significant association with satisfaction at p -value = 0.001, 0.002 and 0.005 respectively.

For cashiers/universal coverage staff, age, income and education had significant association with satisfaction at p -value = 0.001, 0.001 and 0.003 respectively. The detail is shown in Table 5.

Genders, age, marital status, education, occupation, monthly income, number of visit and health problem were analyzed for association with satisfaction to waiting time in six nodes. Education was significantly associated with satisfaction to waiting time at outpatient registration at p -value = 0.021 while status was significant associated with satisfaction to waiting time for basic physical examination at p -value = 0.009. For waiting time to see doctor and payment/universal coverage service, income had significant association with satisfaction at p -value = 0.011 and 0.028 respectively. There is no significant association between personal profiles and satisfaction to waiting time for lab and pharmacy service. The detail is shown in Table 6.

Part 5 Other recommendations from the customers

The questionnaire include with one open-ended question that are summarized in the table. Majority of respondents (73%) did not have any further comments or suggestions. 7.5% of respondents commented that the waiting time for physical examination and receiving medicine was too long. There were 6.8% of respondents

suggested that the outpatient registration and pharmacy counter service process should be improved.

DISCUSSION AND CONCLUSION

The majority of the respondents who participated in this study were females were in the age groups of 56 – 75. The highest percentage of personal profile were married status, with primary school education, employee in private section, with a monthly income below 10,000 Baht.. The majority of respondents visited the hospital for the third times or more. The main health problems as to be expected for old age on the visit were hypertension or heart disease and most of respondents know the cause of disease, but did not specify or indicate.

In this study, it found that different gender did not have different level of satisfaction to the hospital environment, service process, personality of staff and waiting time. Regarding the study from Crow et al. in 2003 [6], they also found that the effects of gender and socio-economic status are equivocal due to the small amount of literature available on each. Among the different age groups, it was found that the elder age of respondents tended to have more satisfaction to the hospital environment than the younger one which is similar to the study of Owens and Batchelor in 1996 [7] who indicated that older respondents have higher satisfaction in general which can be explain as lower expectation of health care. The respondents who had lower level of education had more satisfaction than who had higher which was agreed with the study of Thahanthai in 2003 [8] as she found that the different educational level had different satisfaction to the services. The respondents who were farmers had highest satisfaction mean score of safety while those who were self-employed had least score of this item. As dept interviewed with some respondents who were agriculture, it found that this job had to face to unexpected accident daily such as cutting themselves by sharp instrument and falling during walking through slippery place in their farms or gardens. Thus, they feel very safe and comfortable while changing place from the work field to safer place as the hospital. The respondents who had income lower than 10,000 Bath per month had the highest mean score of satisfaction to hospital's safety and waiting time at all concerned counters while the respondents who had within 10,000 - 25,000 Baht per month had least mean score of both items. In the study of Mandokhail et al. in 2007 [9], it found that patients were having high

level of satisfaction to the quality of service and cost management from the strong political support and financial reforms of a hospital. The respondents who were married had the highest mean score of satisfaction to waiting time while the respondents who were widow had least mean score of this item. The respondents who had hypertension/ heart disease showed the highest mean score of satisfaction to both safety and personality of staff while respondents who had diabetes/hormone problem showed the least score of safety. In the study of Hall and Milburn in 1998 [10], it found that sicker and experienced psychological stress customers are less satisfied. It is difficult to prove that the experience of sickness or experience of health service treatment or other factors caused the dissatisfaction.

In this study, the score of satisfaction ranged from 1-5. For satisfaction to the hospital environment, the highest average score was 4.05 for safety while the lowest average score was 3.45 for loudness. For satisfaction to the service process, the highest average score was 4.04 for diagnosis and treatment plan with primary doctor while the lowest average score was 3.75 for outpatient registration service. For satisfaction to the personality of staff, the highest average score was 4.10 for primary doctor while the lowest average score was 3.80 for nurse and physician's assistant at outpatient department. For satisfaction to the waiting time, the highest average score was 3.75 for payment and universal coverage counter while the lowest average score was 3.40 for outpatient registration counter. In overall, the results of the study showed that the customer satisfaction toward service was very high level. Therefore, the hospital should maintain the good level of service which had high score of satisfaction while improve on low score parts to achieve the hospital accreditation. While received the high score of overall satisfaction; however, the hospital should find out the weak part that should be improve in order to balance to this high score.

In the future studies, the quality of services should be evaluated from all concerned aspects such as perspectives from the healthcare providers and staff, the hospital board committee and the customers. It will be advantage for services improvement to collect data from all concerned parts as mentioned above. In addition, other outpatient department sections besides the general medicine and also inpatient department should be considered to evaluate for the level of satisfaction to healthcare services probably, it should be assessed at least once a year for completion and comparison.

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