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Patients Satisfaction towards Health Service at the Out-patient Department of Hospital National Guido Valadares (HNGV), Timor-Leste.

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Abstract

This study aimed to assess patient's satisfaction towards health services at the Out-Patient Department of Hospital National Guido Valadares (HNGV) Timor-Leste. The research design was a cross-sectional study. Collected data from 206 outpatient consuming the OPD services at Hospital National Guido Valadares (HNGV), Timor-Leste, using interview method with structured questionnaire. Descriptive statistics and Chi-square test were used to analyze general, enabling factors, the need factors and association between satisfaction levels. Overall patient's satisfaction was 77%. Patients had high satisfaction and low satisfaction were 55.8% and 44.2% respectively. The four components; convenience (85.4%), courtesy (64.6%), quality of care (55.8%) and only physical environment (47.6%) was low satisfaction. Regarding patients' attitude was associated with satisfaction level (p-value = 0.001), more than half of patients (50.5%) had good attitude while less than half of them (49.5%) had poor attitude. Overall expectation was associated with satisfaction level (p-value = 0.001), patients with high expectation had high satisfaction (81.9%) and only (28.7%) of patient had low expectation. The health care service is the important part which should be improved by the hospital because it is the basic of service. Good or bad of health care service can influence the level of satisfaction. The hospital should improve the physical environment including; the atmosphere of this OPD should be clean, sitting chairs should be available at the waiting area and if possible arrange the television program to give health information in the sitting area, sign and directions to indicate where to go in the service should be complete and clear.

Keywords: patients satisfaction, health services , OPD, HNGV, Timor-Leste

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Background and Significance

In general, assessment of patient satisfaction as a way to monitor quality improvement of health care institutions in many countries. Health care services were provided and delivered by medical personnel, and the improvement of this procedure must start and end with these individuals. The skills and idea become issues of the health care personnel who serve the patients in health care services. To overcome these issues services providers should be establishing the creativity of health care personnel and reach success. In addition, the absence of thoughtfulness regarding medical mistakes should be tended to be addressed with the reform of the health care system.

Nowadays, patients are conscious of their need and the right. All of the patients understand that health care services are recognized to deliver quality health care to them. If health care services unable to do so, it would be considered that the health care services did not perform their duties effectively. The level of patient satisfaction can be measured and assessed from the performance of the hospital. Hospital has potential in consideration to the patient's needs and demand relate to health care, this matter makes patients believed and truly satisfied with the services that they receive.

Timor-Leste is a new and small country situated on the eastern part of the island of Timor. The island covers an area of 14.610 sq. km with a population 1.167 242 (Census 2015). On 20th May 2002 Timor-Leste become an independent nation and divided into 13 municipalities (former districts), 65 Sub-District and 442 Villages and 2,225 hamlets. The healthcare system classifies into 6 levels as follows; National Hospital, Referral Hospital, Community Health Center, Health Post, Integrated Community Health Care Services or *Servisu Intregado da Saúde Communitária (SISCa)* and Family Health Program.

Timor-Leste has one national tertiary level hospital (Hospital National Guido Valadares or HNGV), 5 regional referral hospitals and 67 community health centers at sub-district level. At village level, there are 232 health posts, while *SISCa* is being implemented in 474 locations across the country for populations residing in areas that lack access to health services. The health services problem usually coming up in the OPD unit are the process of service that is still convoluted, waiting time is long, the attitude of officers less friendly, and many others cause patient dissatisfaction. The findings of this study would help services providers to improve healthcare services, so that patient satisfaction is achieve. HNGV has 84 doctors, 27 specialists, 242 nurses, 63 assistant nurses, 65 midwives and 4 medical recorders. In all, 340 beds are spread

throughout 14 wards and units. The total population included in the coverage of these hospital services comprises approximately 175,730 people referred from primary health care in posts in Dili and referrals from other hospitals. The Outpatient Department (OPD) operates five days a week, Monday to Friday. All outpatients must register through the center admission unit, and after that, the unit refers patients to a doctor or other health care professionals for consultation. The OPD unit has 53 doctors, 8 specialist, 42 nurses, 8 pharmacist and the average number of patients visiting the hospital daily totals 60 to 80 patients. According to the data from the Customer Services Unit of Hospital Nacional Guido Valadares (HNGV), total patient complaints concerning health services in 2015; totaled 116 patients, in 2016; 137 patients and in 2017; 125 patients. The health services complaints usually received in the OPD involve convoluted service processes, long waiting time, unfriendly attitude of officers, and many others causing patient dissatisfaction. Therefore, this study aimed to study patient satisfaction towards health services at the OPD of Hospital Nacional Guido Valadares (HNGV), Timor-Leste.

Objectives

1. To assess patient's satisfaction towards Health Services at the Out-Patient Department of Hospital National Guido Valadares (HNGV) Timor-Leste.
2. To find out the relationship between predisposing characteristic, enabling factors, need factors and the level of satisfaction.

Theoretical Model

The theoretical framework used the "The Behavioral Model of Health Services" developed in 1968 by Ronald M. Andersen.

Other models that related to the Health Services:

1. Parasuraman, Zeithaml and Berry provided a model to measure consumer perceptions of service quality in health care services using SERVQUAL's five dimension as described below:

1) Tangibles: physical facilities, equipment, and appearance of personnel.
2) Reliability: ability to perform the promised service dependably and accurately.
3) Responsiveness: willingness to help customers and provide prompt service.
4) Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence.

5) Empathy; caring, individualized attention the firm provides its customers.

2. Donabedian provided a model to evaluate the quality of health care based on structure, process, and outcome.

   1) Structure refers to the attributes of organizations delivering care and the conditions under which care is provided,

   2) Process relates to the professional activities associated with providing care, and outcome denotes the effects of care.

   3) Outcome includes health status improvements in knowledge, change in behavior, and patient satisfaction with care.

Health care utilization is the point in health systems where patients' needs meet the professional system. Apart from need-related factors, health care utilization is also supply-induced; and thus, strongly dependent on the structures of the health care system.

Three factors specified within the context of their impact on the health care system include 1) characteristics of the health services delivery system, 2) drastic changes in medical technology and social norms related to treating illness, and 3) individual determinants of utilization.

The behavioral model is a multilevel model that incorporates both individual and contextual determinants of health services use. In doing so, it divides the major components of contextual characteristics in the same way as individual characteristics have traditionally been divided, i.e., predisposing, enabling or suggested need for individual use of health services.

The three characteristics of individual's to access the health services considered to be a function are described below:

1. Predisposing characteristics refers to the socio-cultural of individuals that exist before their illness including; 1) Demographic: age and sex. 2) Social structure is measured by a broad array of factors that determine the status of a person in the community. These factors are education, occupation, ethnicity, social networks, social interactions, and culture. 3) Health beliefs are attitudes, values, and knowledge that people have about health services that might influence their subsequent perceptions of the need and use of health services.

2. Enabling factors refers to logistics aspects in accessing health care services including; 1) Personal/family: the means and know how to get those services and make use of them. How they access health services, income, health insurance, a regular source of care, travel, extent and quality of social relationships. 2) Community: available health personnel and facilities, and waiting time. 3) Possible additions: psychological characteristics and genetic factors.

3. Need factors: these comprise the earliest causes of the use of health services, ranging from functional and health problems that result in the need for health care. The perceived need will help better understand the search and compliance of medical regimens, while the evaluated needs will be more closely related to the type and amount of care to be administered after the patient is presented to a medical provider including; 1) perceived: how people look their own health as a general and functional health problem. They include their experience about symptoms of illness, pain and, concern about their health and whether they appraise health problems are sufficient importance and significance to seek the help of a professional health worker. 2) Evaluated: these represent a professional decision about people's health status and their need for health care service.

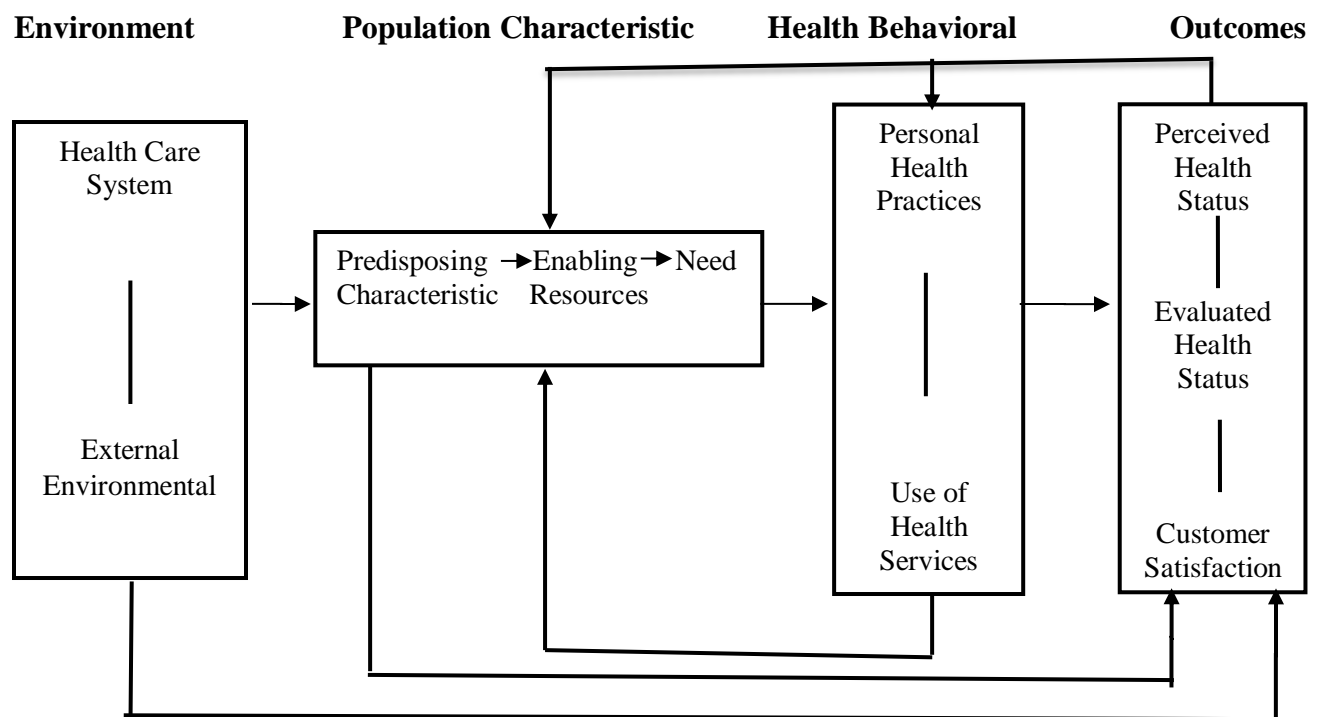## The Behavioral Model of Health Services

Environment **Population Characteristic** **Health Behavioral** **Outcomes**

Figure Emerging Model-Phase 4

Research Design

The research design was a cross-sectional study to assess the level of patients' satisfaction with the service provide by the OPD at Hospital Nacional Guido Valadares (HNGV), Timor-Leste. The target population of this study consisted of patients aged from 18-60 years old. The sample comprised patients receiving services at the OPD in Hospital Nacional Guido Valadares (HNGV), Timor-Leste.

Inclusion criteria:

1) OPD patient's males and females age from 18-60 years' old
2) Patients who come to get a service at the time of interview
3) Patients who are willing to answer questions at the time of the interview.

Exclusion criteria

1) Patients who were blind, deaf or mute does not respond or communicate.
2) Patients who need emergency clinic referring from OPD.

The target population of this study was outpatients, who come and got the services at Out-patient Department in Hospital National Guido Valadares, Timor-Leste.

The sample size of 206 was calculated using the following formula:

$$n = \frac{Z_{\alpha/2}^2 \, \sigma^2}{d^2}$$

Whereby:

n = number of sample size

$Z_{\alpha/2}$ = Value from the standard normal deviation (Z=1.96 with 95% confidence interval)

σ = Standard deviation of the mean total patient satisfaction in OPD Services[50].

d = Accepted mean error = 0.1

Therefore, minimal sample to be included in this study should be 172 out-patient. For data collection 20% added to 172 for any incomplete and rejected data sheet. So sample size will be 172+34 =206. Data were collected in April 2018. The systematic random sampling was applied to draw the patients to obtain information about the aspects of service at the OPD. Patients were selected as one within k interval. The k interval was calculated by using the formula shown below:

$$k = \frac{a}{n} x \text{ d}$$

$$k = \frac{80}{206} x \text{ 16}$$

$$k = 6$$

k = sampling interval

a = actual number of patients receiving services at the OPD daily

d = total number of days planned to collect data

n = required number of patients receiving services at the OPD.

Research Instrument

The interview methods questionnaire comprised four parts. The first part asked about general characteristics of the outpatient including age, sex, marital status, education level and occupation. The second part asked about enabling factors including family income, distance, distance from residence to hospital ease to reach, traveling time, traveling time problem, traveling cost, and traveling cost problem. The third part asked about need of services including the need of services and patient expectation. The fourth part asked about patient satisfaction including convenience, courtesy, quality of care and physical environment.

The research instrument was a structured questionnaire that took from previous study and adjust some information by researcher and correspondent authors. The questionnaire was translated into Timor-Leste language which was used locally in the area of the study. The reliability was assessed among 30 outpatients, revealing high Cronbach's Alpha coefficients for patient attitude, patient expectation and patient satisfaction, .75, .92 and .75 respectively.

Procedures

The procedures of data collection are described below:

1. After approval from the Ethics Review Committee for Human Research, Faculty of Public Health, Mahidol University COA. No. MUPH 2018-050, and approval from the Ethics Review for Human Research of National Health Institute of Timor-Leste under the Ministry of Health Timor-Leste.

2. An official letter was sent to Director of Hospital National Guido Valadares (HNGV) to explain about the objectives of research and to ask for permission to collect data at the Outpatient Department.

3. This research was assisted by three volunteers (Bachelor of Public Health), before doing this research the researcher conducted special training to volunteer so that no errors occur when taking data.

4. The research has adequately informed the respondents about the objectives, method, anticipated benefits of the study and the discomfort that might arise.

5. The participants had the rights and freedom to withdraw at any time of the study.

6. After the questionnaire was completed, the researcher checked and entered the data into analysis statistic.

7. PASW statistics version 18 was used for data analysis. Descriptive statistics including frequency, percentage, mean and standard deviation were used as appropriate. Chi-square

test was used to analyze the association between the independent and dependent variable. Significance level was set at .05.

Research Findings

1. Predisposing characteristics and level of satisfaction

Age. This was categorized in 2 groups after regrouping. The majority of patients aged more than 30 years had high satisfaction level at 68.8% and patients aged less than 30 years had lower satisfaction level at 48.2%. The age of patients with satisfaction level showed a significant association with (p-value=0.039 and Chi-square=4.239).

Sex. Both males and females had almost the same level of satisfaction with the highest satisfaction level at 52.7 and 59.4%, respectively. The lowest level of satisfaction were 47.3 and 40.6%, respectively. No association was found between sex and satisfaction level with (p-value=0.338 and Chi-square=09.19).

Marital status. This was categorized in 3 groups after regrouping. The single and divorced / separated / widowed respondents had high satisfaction level at 70.7 and 53.8%. The married respondents had low satisfaction level at 50.4%. It was concluded that marital status was significantly associated with satisfaction level (p-value=0.026 and Chi-square=7.319).

Education level. This was divided in 6 groups after regrouping. The majority of patients were illiterate and primary school level had a higher level of satisfaction at 74.0 and 69.5% compared with junior high school, secondary high school and other level education having low satisfaction levels of 70.6, 52.8 and 70.5%. It was concluded that education was significantly associated with satisfaction level (p-value=0.001 and Chi-square=33.879).

Occupation. This was divided in 6 groups after regrouping. The majority occupations of patients were laborer/employed, unemployed and government staff with high level of satisfaction at 79.5, 62.1 and 61.0%, respectively. Compare with other groups, agriculturalist and self-employed had levels of low satisfaction at 68.7, 64.1 and 55.0%, respectively. Occupation was significantly associated with satisfaction level (p-value=0.001 and Chi-square=96.143).

Patients' attitudes. This was divided in 2 groups, i.e., good and poor attitudes. The majority of patients had good attitude at a high level of 89.%. Patients having poor attitudes were at a high level of 78.4%. Comparing patients' attitudes with satisfaction level showed a

Significant association with (p-value=0.001 and Chi-square=96.143).

Table 1. Associations between predisposing characteristics and level of satisfaction towards health service at OPD of HNGV.

Characteristic	n = 206	Satisfaction Level				Chi square	p-value
		High		Low			
		No	(%)	No	(%)		
Age						4.239	0.039*
<30 years	158	82	51.9	76	48.2		
>30 years	48	33	68.8	15	31.3		
Sex						09.19	0.338
Male	110	58	52.7	52	47.3		
Female	96	57	59.4	39	40.6		
Marital status						7.319	0.026*
Single	58	41	70.7	17	29.3		
Married	135	67	49.6	68	50.4		
Divorced/separated /widowed	13	7	53.8	6	46.2		
Educational						33.879	0.001*
Illiterate	27	20	74.1	7	25.9		
Primary School	82	57	69.5	25	30.5		
Junior High School	17	5	29.4	12	70.6		
Secondary High School	36	17	47.2	19	52.8		
Other	44	13	29.5	31	70.5		
Occupation						36.680	0.001*
Unemployed	29	18	62.1	11	37.9		
Self-employed	60	27	45.0	33	55.0		
Government staff	18	11	61.0	7	39.0		
Laborer/employee	44	35	79.5	9	20.5		
Agriculturalist	39	14	35.9	25	64.1		
Other	16	5	31.3	11	68.7		
Patient Attitude						96.143	0.001*
Good Attitude	104	93	89.4	11	10.6		
Poor Attitude	102	22	21.6	80	78.4		

*Statistically Significant Level = 0.05

2. Enabling factors and level of satisfaction

Family income (dollar). This was categorized in 2 groups after regrouping. The results showed the majority of patients with income less than 220 dollars had a high level of high satisfaction at 51.1% compared with more than 220 dollars with a lower satisfaction level at 68.0%. The income of patients with satisfaction level showed a significant association with (p-value=0.008 and Chi-square=7.089).

Distance. This was divided in 2 groups after regrouping, and patients living different distances from the hospital had different levels of satisfaction. The results showed the majority of patients with a distance less than 10 km had a high level of satisfaction at 59.8% and patients with a distance more than 10 km had a lower level of satisfaction at 47.1%. After analyzing the distance of patients with satisfaction level it had no significant association with satisfaction level (p-value=0.330 and Chi-square=0.950).

Distance ease to reach. This was categorized in 2 groups after regrouping. The results showed patients living with distance ease to reach had high satisfaction level at 40.9 % and patients living with distance did not ease to reach had low satisfaction level at 53.4 %. Distance ease to reach had no significant association with satisfaction level (p-value = 0.415 and Chi-square = 0.664).

Travel time (minutes). This was categorized in 2 groups after regrouping. The results showed the majority of patients spent time less than 30 minutes had a high satisfaction level at 61.9% and patients spent time more than 30 minutes had low satisfaction level at 47.6%. After analyzing the association of travel time showed no significant association with satisfaction level (p-value=0.226 and Chi-square=1.465).

Travel time problem. This was categorized in 2 groups after regrouping. The results showed patients who had travel time problems had low satisfaction level at 48.6% and patients who did not have travel time problem had a high satisfaction level at 33.3 %. Travel time problem was significantly associated with satisfaction level (p=0.009 and Chi-square=6.760).

Travel cost. This was categorized in 3 groups after regrouping. The results showed the majority of patients with travel cost between 1-5 dollars had a high level of satisfaction at 58.8%, compared with patients with traveling cost less than 1 dollar and more than 5 dollars had a low level of satisfaction at 52.2 and 57.3%, respectively. After analyzing the association of travel cost of patients showed no significant association with satisfaction level (p-value=0.456 and Chi-square=1.573).

Travel cost problem. This was categorized in 2 groups after regrouping. The results showed

patients who had travel cost problems had a low satisfaction level at 53.3% and patients without travel time problems had a high satisfaction level at 40.7 %. Travel cost problem had no significant association with satisfaction level (p-value=0.395 and Chi-square=0.724).

Table 2. Associations between enabling factors and level of satisfaction towards health service at OPD of HNGV.

Characteristic	n = 206	Satisfaction Level				Chi square	p-value
		High		Low			
		No	(%)	No	(%)		
Income (Dollar)						7.089	0.008*
< 220 dollars	131	67	51.1	64	48.9		
≥ 220 dollars	75	24	32.0	51	68.0		
Distance						0.950	0.330
<10 km	87	24	59.8	35	40.2		
≥10 km	119	63	52.9	56	47.1		
Distance Ease to Reach						0.664	0.415
Yes	88	52	59.1	36	40.9		
No	118	63	53.4	55	46.6		
Travel Time						1.465	0.226
<30 minutes	82	50	61.9	32	39.0		
≥30 minutes	124	65	52.4	59	47.6		
Travel Time Problem						6.760	0.009*
Yes	122	59	48.6	63	51.6		
No	84	56	66.7	28	33.3		
Travel Cost						1.573	0.456
< 1 dollar	46	22	47.8	24	52.2		
1-5 dollars	85	50	58.8	35	41.2		
≥ 5 dollars	75	32	42.7	43	57.3		
Travel Cost Problem						0.724	0.395
Yes	120	64	53.3	56	46.7		
No	86	51	59.3	35	40.7		

*Statistically Significant Level = 0.05

3. The need for services and level of satisfaction

The need for services. This was categorized in 3 groups after regrouping. The results showed the highest satisfaction level involved patients having acute problems at 65.0% and patients having chronic problem (46.8%) and healthy group (36.1%) had low satisfaction levels. The

need for services had no significant association with satisfaction level (p=0.003 and Chi-square=11.459).

Patients' expectation. This was divided in 2 groups, i.e., high expectation and low expectation after regrouping. The results showed patients had high expectation at 81.9% and

patient with low expectation at 28.7%. It could also be concluded that patient's expectation had a significant association with high satisfaction level (p=0.001 and Chi-square=59.065).

Table 3. Associations between the need for services and level of satisfaction towards health service at OPD of HNGV.

| Characteristic | n = 206 | Satisfaction Level | | | | Chi square | p-value |
| | | High | | Low | | | |
		No	(%)	No	(%)		
The Need for Services						11.459	0.003*
Having Acute Problem	123	80	65.0	43	35.0		
Having Chronic Problem	47	22	46.8	25	53.2		
Healthy Group	46	13	36.1	23	63.9		
Patient Expectation						59.065	0.001*
High Expectation	105	86	81.9	19	18.1		
Low Expectation	101	29	28.7	72	71.3		

*Statistically Significant Level = 0.05

Discussion

1. Predisposing characteristics and level of satisfaction

The association between age group and level of satisfaction was significant with a p-value = 0.039. The result was opposite that of study by Anjum J., as his results concluded that older aged patients had a higher level of satisfaction compared with younger. No association was observed between sex and satisfaction level with a p-value=0.338. This finding was opposite that of study by Mandokhail A.K. Most studies including this one found that satisfaction was

unrelated to sex. However, some research has identified females were more satisfied than males with medical care received.

The marital status was significantly association with satisfaction level at p-value=0.026. The result was the same as the study carried out by Mandokhail A.K, which concluded that an association existed between marital status and satisfaction. This could be explained in that the higher satisfaction was

reported by single and divorced / separated /widowed because they had more experience about medical matter, regulation and hospital facilities compared with married respondents.

The level of education was significantly associated with satisfaction level at p-value=0.001. This finding was also supported by the evidence from the US study by Anderson and Zimmerman reporting that patients with lowers levels of education were more satisfied. From this results, it can be explained that education was one of the factors that influenced the level of satisfaction because different levels of education are associated with different satisfaction levels towards health services received.

The occupation was significantly association with a p-value=0.001. The results were inconsistent with the findings in the study by Partha Pratim R. reporting that the unemployed group was more satisfied.

The patients' attitudes was significantly associated with satisfaction level at a p-value=0.001. This finding was likely to be supported by the definition by Linder-Pelz, who described patient satisfaction as an expression of an attitude, an effective response, which is related to both the belief that the care possesses certain attributes and the patient's evaluation of those attributes; and as an individual's positive evaluation of distinct dimensions of health care. Other related research by Tangmankongworakoon T. also found that attitude was the associating factor and the predictor of satisfaction level.

2. Enabling factors towards health services

The association between income and level of satisfaction was significant at a p-value = 0.008. This results were opposite those of the study conducted by Partha Pratim R, who found that clients with lower income had higher levels of satisfaction with the medical care services.

No association was observed between distance and satisfaction level at p-value=0.330. And no association was observed between distance ease to reach and satisfaction level at p-value =0.415. These results were inconsistent with the findings in the study by Arjun J., as his results concluded that distance was associated with satisfaction. This finding was also supported by Buzza *et. al* reporting that distance may impact different patients in different ways and distance was the most important barrier to accessing healthcare. It could be explained in that those residing near the hospital could reach the hospital and avail themselves to the facilities whenever they needed and this conveniently and so had higher levels of satisfaction.

The association between travel time and level of satisfaction was no significant with a p-value=0.226. The results were similar to the findings in the study by Net N., as her results

concluded that travel time was not associated with satisfaction level. It could be explained that distance was related to travel time because those who lived near the hospital could reach the hospital in less than 30 minutes compared with those residing far from the hospital and spent time more than 30 minutes.

The association travel cost of patients with satisfaction it was concluded that travel cost was not significantly associated with satisfaction

3. The need for services towards health services

The association between need for services and level of satisfaction was significant at p-value = 0.003. The results were inconsistent with the findings in the study by Tsukamoto, who reported that patients with acute illness 32.4% was who used health services at the health center more than those who with chronic illness was 23.8%. This result contradicted with the findings of Tangmangkongworakoon T., who reported regarding unhealthy clients was 54%. However, no significant association was observed between health problem and satisfaction level proved by statistical test in these studies.

. The association between expectation was significantly associated with satisfaction level p=0.001. This indicated that the patients with high expectations were more satisfied with health

Conclusion

Patient satisfaction is an important indicator used to evaluate the quality of health services in

level at p-value=0.456. The results were similar with the findings in the study by Net N., as her results concluded that travel cost was not associated with satisfaction level. It could be explained that, travel cost is related to distance. Patients who lived a distance less than 10 km spent less than 1dollar to travel to the hospital, and patients who lived a distance more than 10 km was spent between 1-5 dollars or more than 5 dollars.

services than those with low expectations. It could also be implied that patients received better health care services than what they expected. One related study also mentioned about expectation as the determinant for satisfaction. The patients with lower expectation tend to be more satisfied and for the physician care evidence was found to support the hypothesis that the more the doctors' performance met the patient's expectation the more satisfied the patient would be with the physician's services. The finding of this study might be related to the hypothesis by Larsen Roadman, who found that patients exposed to the more the services of the doctor's performance meets the patient's expectation, the more satisfied the patients will be with the physician's services.

health institutions. Therefore, every health institution is required to responsible providing

quality health services and monitoring satisfaction according to the expectation of the patients.

HNGV is a national hospital owned by the government of Timor-Leste. This hospital had conducted the several efforts and methods especially to improv the quality of health services to the patients. Therefore, the hospital has provided a range of tertiary health care for emergency care, outpatient care, inpatient care, and clinical support services. This study was conducted in the OPD with the objective to assess patients satisfaction towards health services. The information obtained from this study may help to improve hospital administration, especially OPD units and eliminate differences that distort patients satisfaction.

The instrument used in the study to collect data was a structured questionnaire with face to face indepth interview method. This questionnaire had four parts including predisposing characteristics, enabling factors, the need for services and patients' satisfaction towards health services at the OPD of HNGV. Cronbrach's alpha coefficients for the reliability test of the questionnaires comprised expectations 0.928, attitude 0.756 and satisfaction 0.756.

The sample selection used in this study was a systematic random sample and was used to select patients from the OPD in HNGV. The data was collected from 9 to 30 April 2018. In all, 206 patients participated in this study and the results were presented using frequency, percentage, minimum, maximum, mean and standard deviation. Chi-square test was performed to determine any associations between dependent and independent variables.

Recommendations

The recommendations to improve the quality of OPD services are described below:

a) Health care services are an important part to be improved by the hospital because they are basic services. Good or bad health care services can influence the level of satisfaction.

b) The hospital should improve the physical environment because this component was a one measure of the level of satisfaction in this study, and the results showed that the majority of patients reported low satisfaction. The hospital should improve the physical environment including sitting chairs should be available in the waiting area and whenever possible, television program to give health information in the setting area should be arranged. In addition, signs and direction must be posted to show proper direction for different services available in the OPD of the hospital.

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