

## **ASSOCIATION OF PATIENT'S CHARACTERISTICS ON PATIENT'S SATISFACTION IN THE OUT-PATIENT DEPARTMENT OF A PRIVATE HOSPITAL**

***Carol Joyce C. Navidad<sup>1</sup>, Maricel Gonzales<sup>1,2</sup>, Florence C. Navidad<sup>3,4</sup>, Arlen Amon<sup>1</sup>, Raphael Louis E. Espino<sup>1</sup>, Janelle Kaye Santos<sup>1</sup>, Rose Lyn Vega<sup>1</sup>, Dara Sigrid F. Cabanias<sup>1</sup>, Kyrrie Aerielle Nadine H. Cantos<sup>1</sup>, Marie Danielle Macalino<sup>1</sup>, Monique Sibulo<sup>1</sup>, and Nathan Sese<sup>1</sup>***

**Abstract:** Patient-centered care is one of the fundamental goals for healthcare systems and an essential source of quality, having patient satisfaction and experience as the key components. There is great emphasis on patient satisfaction which is associated with improved health outcomes such as improved compliance of doctor's instructions, timely care seeking by the patient, and greater comprehension and retention of information provided by the health care provider. This study aimed to determine the correlation of patient's characteristics on overall patients' satisfaction level with regards to tangibles, responsiveness, reliability, assurance, and empathy with four out-patient departments namely, Surgery, Internal Medicine, Family, and Community Medicine, and Obstetrics and Gynecology in a private hospital. A cross-sectional design using a descriptive and correlational method was implemented. Stratified random sampling was utilized to randomly select 148 patients out of the total average population per week of the Out-Patient Department patients. Data was collected using an adapted and validated close-ended questionnaire, SERVQUAL (tangibles, reliability, responsiveness, assurance, and empathy) to determine the patient's satisfaction among four Out-Patient Department. Data were analyzed using descriptive statistics, Pearson r correlation, and linear regression. Results showed that patient satisfaction was only achieved in the Internal Medicine department which shows that the doctors and staff facilitate individualize prompt attention, needs, and care to the concerns of the patients. Additionally, the best predictor of patient satisfaction was their current living area and financial status.

**Keywords:** Patient Satisfaction, Patient's Characteristics, Private Hospital, Out-Patient Department, OPD

### **INTRODUCTION**

Patient-centered care is an essential aim for healthcare systems and a paramount source of quality (World Health Organization (WHO), 2007). It involves patient satisfaction and experience as its key component (R. Rozenblum, Miller, Pearson, & Marelli, 2015; Ronen Rozenblum & Bates, 2013). Patient satisfaction gains increasing attention because of data presenting it as a critical factor in health outcomes (Patel et al., 2011). It is not only must healthcare providers, physicians and managers, manage the health and well-being of the patients, but also to do in a manner that also enhances patient satisfaction (Ferrand et al., 2016).

<sup>1</sup>De La Salle Medical and Health Sciences Institute College of Medicine, Dasmariñas, Cavite

<sup>2</sup>Department of Family and Community Medicine De La Salle Health Sciences Institute College of Medicine, Dasmariñas, Cavite

<sup>3</sup>Department of Medical Technology Faculty of Pharmacy University of Santo Tomas, Manila

<sup>4</sup>Research Center for Social Sciences and Education University of Santo Tomas, Manila

Health care institutions have a major issue in living up to the patient's satisfaction (Garcia-Gutierrez et al., 2014). In the United States (US), seventy-seven percent (77%) of medical malpractice was a result of a breakdown in doctor-patient communication. For every patient who expresses exasperation or voice concerns, there are nine (9) out of ten (10) more who keep quiet. Additionally, there are sixty-eight percent (68%) patients who leave medical health providers because of the lack of concerns shown to them. Consequently, dissatisfied patients are vocal to presumably have told to people of their experience (Protomastro, 2016), and this discourages others from seeking health care from the system (Mukhtar et al., 2013).

The reason for laying great emphasis on patient satisfaction may be associated with improved health outcomes such as improved compliance of doctors' instructions, timely care seeking by the patient, and greater comprehension and retention of information provided by the health care provider (Charmel & Frampton, 2008). It is also associated with increased health service efficiency, and positive health-business metrics (Schoenfelder, Klewer, & Kugler, 2011). Moreover, one of the main determinants in the patient satisfaction is the health care providers' responsiveness to patient expectations (McKinley & Roberts, 2001). Poor satisfaction of patients are linked with the disfavored patient expectations (Barry, Bradley, Britten, Stevenson, & Barber, 2000) and poor overall health outcomes (Ronen Rozenblum et al., 2015). It is emphasized that physicians continuously not asking any information on patients' expectations, inclined to underrate them, resulting to lower satisfaction rate and unmet expectations (R. Rozenblum et al., 2015). Demographic characteristics, as well as socioeconomic status, are believed to influence patients' satisfaction. In a study conducted by (Afzal et al., 2014), the patients' satisfaction level was assessed and the effect of demographic characteristics on patients' satisfaction was determined. Results showed that older patients who are less educated with lower income range were more satisfied with the healthcare facility as opposed to younger who are highly educated patients with higher income range.

Out Patient Department (OPD) is contemplated to be the first point of contact of the hospital with patients that's why it has a significant impact on patient satisfaction level. Patient satisfaction has become a preferred debate for the heightening quality of OPD services however it still needs a lot of enhancement for the better delivery of health care services. The care in the OPD is assumed to signify the quality of services of the whole hospital and is exhibited by patients' satisfaction with the services being provided (Ahmed et al., 2015). There are only a few studies in the United States that have evaluated patient satisfaction across different specialties (Patel et al., 2011), but several patient satisfaction research on each specialty. In the Philippines, there are only a few published patient satisfaction studies (Asinas-Tan, Leonardo, Aldana, Reboton, & Libunao, 2016; De Guzman, Joson, Lagrisola, Lagutao, & Lascano, 2015; Villarruz-sulit, Dans, & Javelosa, 2009), and no documented patient satisfaction evaluation comparing physicians across different specialties. Therefore, a private tertiary hospital in Dasmariñas, Cavite was selected for this cross-sectional study with the objectives to determine the patient satisfaction during outpatient visits in the hospital concerning tangibles, reliability, responsiveness, assurance, and empathy using SERVQUAL questionnaire, including a stratified randomized sampling of the specific hospital out-patient departments namely OB- Gynecology, Internal Medicine, Family Medicine, and Surgery. The results of the research will be useful for the hospital administration and management of the health system to provide a better-quality assessment, to address service gaps, and to institute meaningful interventions.

### ***Objectives***

This research study aimed to determine the correlation of patient's characteristics on overall patients' satisfaction level with regards to tangibles, responsiveness, reliability, assurance, and empathy with four out-patient departments in a private hospital.

Thus, specifically, investigate to determine the:

1. Patients' demographic characteristics, socioeconomic characteristics, health-related characteristics, the internet as a source of information about the disease, living conditions, and co-morbidities.
2. Level of patient satisfaction in four Out-Patient Department's tangibles, responsiveness, reliability, assurance, and empathy,
3. Effect of dimensions (tangibles, responsiveness, reliability, assurance, and empathy) on patient's satisfaction, and
4. Effect of patient's characteristics on patient's satisfaction.

***Hypothesis :***

H1: There is a significant relationship between patient characteristics and patient's satisfaction in four Out-Patient Departments.

H0: There is no significant relationship between patient's characteristics and patient's satisfaction in four Out-Patient Departments.

***Significance of the study***

The result of this study is expected to benefit the following:

*Patients.* Through the evaluation of patient satisfaction, the physicians, other OPD staff, administrative, and patient care services will encourage greater adherence of the patients to clinical standard care and follow-up leading to a good health outcome.

*Physicians and other OPD staff.* This study will be beneficial to physicians and other OPD staff in the evaluation of their current performance, strengths, and weaknesses. By understanding the weakness or dissatisfaction of the patient, the physicians and OPD staff will be able to accomplish the improvement of the health outcomes through an increase in the productiveness and responsibility for displaying high levels of performance on the satisfaction of the patient.

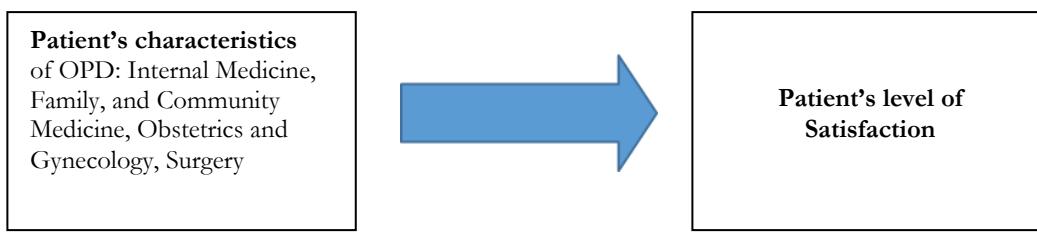
*Administrative services and Patient care services.* They may use the data acquired from this research in dealing with patients to improve the quality of medical, nursing, administrative, and other support activities. They will be able to create or restructure healthcare services oriented to the patients instead of aiming attention only to the disease of the patient. It also can be used to evaluate the impact of different changes in the policy of the health services. This can also benefit the financial stability of the hospital by the increase in the number and retention of patients. And generally, be an excellent tool for organizational development and strategic management of health departments.

*Medical students and Researchers.* This study will serve as a reference and a guide in formulating research studies about patient satisfaction. The findings of the study and its relevance and effectiveness can prove to be an invaluable source of information concerning the appropriate interventions in promoting and aiding in the betterment of quality care in the hospital.

***Conceptual framework***

Patient satisfaction is the fundamental constituent of Patient-centered care (R. Rozenblum et al., 2015). It is associated with enhanced health outcomes, increased health service performance, and positive-health organizational metrics (Charmel & Frampton, 2008). The study aims to determine the association of patient's attributes and patient satisfaction of OPD.

The independent variables are the patient's characteristics, which are hypothesized to affect the dependent variables. The patient's characteristics are divided into three categories namely, demographic characteristics: sex, age, religion, birthplace, and living area; Socio-Economic characteristics: financial status, education, and occupation, and health-related characteristics: patient status, subjective health status (fair or poor, good, very good, excellent), source of information about the disease of the patient (internet, television programs or radio, doctors, reading materials, etc.), presence of chronic illness, and living condition (alone or not alone). The dependent variable, the outcome of interest of the investigation, patient satisfaction which is affected by the independent variables. In relating the variables, the arrow suggests the patient's characteristics will act upon patient satisfaction, patient satisfaction with the different patient's characteristics will be tested. The most relevant and least relevant factor affecting patient satisfaction is established. This is to be done through the analysis of the SERVQUAL questionnaire, with five dimensions: Tangibles, Assurance, Reliability, Empathy, and Responsiveness, using statistical tests.

**Figure 1. Research Paradigm**

## METHODOLOGY

### *Research Design*

A cross-sectional design was used in this study. This study design was chosen as it is the most convenient and cost-effective method of gathering results. Furthermore, it allowed recording several variables across many subjects over a short period, while still representing the typical demographic of the hospital in question. This study also analyzed the variables using a descriptive-correlational method where the patient's characteristics (demographic, socio-economic, and health-related) had been described and correlated to patient's satisfaction (tangibles, reliability, responsiveness, assurance, and empathy) to identify the main factors in the different out-patient departments.

### *Study Site and Sample*

The target population of this study was patients visiting the Internal Medicine, Surgery, Family Medicine, and Obstetrics and Gynecology out-patient departments in a private tertiary hospital in Cavite. These patients were asked to fill an adapted validated SERVQUAL survey form to measure satisfaction, which encompasses five fields: tangibles, reliability, responsiveness, assurance, and empathy, which are all ranked on a numerical scale. The results were analyzed to determine the most relevant and least relevant factors affecting patient satisfaction in the different departments.

This study utilized the stratified random sampling in determining respondents. Stratified random sampling is the technique of sampling that involves the division of the population into smaller groups or strata which ensure all parts of the population are well represented. The Out-Patient Department service patients (population) were first divided according to their assigned departments i.e. Internal Medicine, Family and Community Medicine, Obstetrics and Gynecology, and Surgery (strata) and then simple randomization was conducted from each stratum to represent them adequately. To obtain the simple random sample, the list of patients assigned to a specific department assigned in the triage by the staff in the OPD was selected through a draw lots based on their patients' numbers. Participants were included based on the following criteria: (1) Out-Patient Department service patient of DLSUMC, (2) who was mobile, independent and mentally healthy and who has a stable health status, (3) Out-Patient Department patient must be 18 years old and above, and (4) who was willing to partake in the research. The total population visited the Out-Patient Department had an average of 250 per week among the four departments. The sample voluntary joined was 149 patients out of the total population of 250 which distributed accordingly: Surgery (34 patients or 22.8%) Obstetrics and Gynecology (40 patients or 26.9%) Family and Community Medicine (40 patients or 26.9%) Internal Medicine (34 patients or 22.8%). The confidence interval of the study is 94.3% with a reliability coefficient of 1.96.

### *Data Instrumentation*

A closed-ended questionnaire was used. Close-ended questionnaires involve the collection of data at a single point in time from a sample drawn from a specified population. This design is most often used to document particular characteristics in a population. It also assesses relations between variables and differences between subgroups in a population. The adapted validated SERVQUAL (Service Quality) tool was modified to fit the objectives of the research. After modifying the questionnaire, it was translated into a Filipino version to facilitate an easier and quicker understanding of the Out-Patient Department patients.

Patient satisfaction tool: SERVQUAL (Service Quality). The respondents answered the SERVQUAL survey forms adapted from (Parasuraman, Zeithaml, & Berry, 1985), which has five dimensions including (1) Tangibles, (2), Reliability, (3) Responsiveness, (4) Assurance, and (5) Empathy, all of which were used to determine the patient's level of satisfaction. SERVQUAL was used to identify and compare patient's perceptions and expectations making a good tool for assessing the quality of service in the patient's perspective. This assessment tool was validated by experts in terms of its content and appropriateness to the study. Its reliability was also determined through Cronbach's alpha through pilot testing since this questionnaire was used in the local setting for accuracy and a clear grasp of the contents, also, this was translated in Filipino. Tangibles, reliability, responsiveness, assurance and empathy have a Cronbach's alpha of 0.840, 0.813, 0.891, 0.906, & 0.804, respectively. This means that the internal consistency of each dimension of the SERVQUAL tool translated in Filipino is highly reliable.

*Tangibles* are associated with the visibility of physical tools, workers, and communication resources. *Reliability* is the capacity to exhibit the pledged services such as distribution, service provision, resolution of dilemma, and valuing dependably and accurately. *Responsiveness* is the ability to respond quickly and promptly. This dimension focuses on alertness and punctuality in handling favors, queries, objections, and difficulties experienced by the patient. It is defined as the amount of time they need to wait for assistance and answer problems. *Assurance* is the capacity of the service providers to master the service they're providing and communicate that expertise to patients. It is to encourage trust and confidence between the staff and the patient. *Empathy* means to provide caring, individualized attention to the patient. It is to show that the staff does best to satisfy the needs of the patient. The SERVQUAL questionnaire includes expectations and perceptions sections, each consisting of 22 statements. Also, the questionnaire contains demographic, socio-economic, and health-related questions for the patient's characteristics and an overall question on the impression of the excellence in service of the OPD.

Scoring of Patient Satisfaction using SERVQUAL. SERVQUAL examines five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibles (e.g. appearance of physical facilities, equipment, etc.) On a scale of 1 to 7, 7 being the highest and 1 the lowest, and having 22 questions in total, both the expectancy and observation of the service is measured. After this, the five dimensions are weighted based on consumer importance, then the tally for each aspect is multiplied by the weight. The Gap Score for every aspect is then computed by getting the difference between the Expectation score and the Perception score. A negative Gap score would be an indicator that the service observed (which is the perceived score) was not at par with what was predicted (expectancy score). The Gap score is the determinant of each of the five dimensions of the service quality. With the use of this questionnaire, service providers can measure the level of excellence of the service that they provide and know the aspects that need betterment.

### ***Data Gathering***

The researchers submitted letters of request to the OPD department director and Ethics Review Board. After getting their approval the researchers chose the setting and subjects in data collection.

A pilot study was determined for the reliability and validity of the research instruments. After reliability and validity were confirmed, the actual study was commenced. The subjects in the pilot study were not included in the actual study. The respondents that were selected were given a brief discussion to inform about the purposes of the study, its significance, and possible ethical considerations. Then the survey form was given to be answered by the patient. Researchers were present in the testing area during the data collection. After the patient had finished answering the survey, one of the researchers claimed the form and counterchecked if it was answered completely. If a/some question/s was/were missed, the form was returned to the patient for completion. The completed questionnaires were compiled for data analysis. The sample size data collection was achieved in one week.

## RESULTS

### *Socio-Demographic Characteristics*

Table 1 Demographic characteristics of the respondents

Age	f	%	Birthplace	f	%
<b>18-27</b>	<b>34</b>	<b>23.0</b>	NCR	23	15.5
28-37	29	19.6	CAR	2	1.4
38-47	26	17.6	R1	3	2.0
48-57	23	15.5	R2	3	2.0
58-67	20	13.5	R3	3	2.0
68-77	14	9.5	<b>R4A</b>	<b>80</b>	<b>54.1</b>
78-87	2	1.4	R4B	3	2.0
Total	148	100.0	R5	8	5.4
Sex	f	%	R6	9	6.1
Male	33	22.3	R7	2	1.4
<b>Female</b>	<b>115</b>	<b>77.7</b>	R8	3	2.0
Total	148	100.0	R9	2	1.4
Current living area	f	%	R10	1	.7
<b>Urban</b>	<b>110</b>	<b>74.3</b>	R12	3	2.0
Rural	38	25.7	R13	3	2.0
Total	148	100.0	Total	148	100.0
Religion	f	%			
<b>Catholic</b>	<b>116</b>	<b>78.4</b>			
Non-Catholic	28	18.9			
Others	4	2.7			
Total	148	100.0			

Table 1 shows the demographic profile of the respondents using frequency and percentage. The majority of the respondents were aged between 18-27 (23.0%), female (77.7%), Catholics (78.4%), from Region 4A (54.1%) and currently living in an urban area (74.3%). Most of the respondents were college level (25.0%), unemployed (70.3%), and have low income (79.7%).

Table 2 Health-related characteristics

Living Condition	f	%	Out-Patient Department	f	%
Alone	8	5.4	Internal Medicine	34	23.0
<b>Not alone</b>	<b>140</b>	<b>94.6</b>	Family Medicine	40	27.0
Total	148	100.0	Surgery	34	23.0
Patient Status	f	%	Obstetrics		
New	56	37.8	Total	40	27.0
<b>Old</b>	<b>92</b>	<b>62.2</b>			
Total	148	100.0	Co-morbidities	f	%
Source Information Disease	f	%	Diabetes	16	10.8
Internet	9	6.1	Hypertension	26	17.6
Reading mat	3	2.0	Asthma	10	6.8
Tv/radio	7	4.7	Arthritis	6	4.1
<b>Doctor</b>	<b>104</b>	<b>70.3</b>	Heart	3	2.0
Allied health pro	5	3.4	Cancer	3	2.0
Others	14	9.5	Epilepsy	4	2.7
Not indicated	6	4.1	Obesity	1	.7
Total	148	100.0	<b>None</b>	<b>64</b>	<b>43.2</b>
			Not indicated	15	10.2
			Total	148	100.0
	X	SD	Interpretation		
<b>Subjective Health Status</b>	2.22	0.892	Bad		

Interpretation: 1-1.80 Very bad; 1.81-2.60 Bad; 2.61-3.40 Moderate; 3.41-4.20 good; 4.21 – 5.0 Very good

Table 2 shows the health-related characteristics of the respondents using frequency and percentage. The respondents were mainly not living alone (94.6%). Most of them were old patients (62.2%), seeking consultation at four different out-patient departments with bad health status ( $x=2.22$ ) but no existing co-morbidities (43.2%). Additionally, the doctor is the respondents' source of information about the disease (70.3%).

#### OPD Satisfaction

Table 3 OPD Satisfaction

Satisfaction	OPD							
	IM		FM		S		OB	
	Sum	Int	Sum	Int	Sum	Int	Sum	Int
Tangible	0	PS	-10.0	PNS	-3.50	PNS	-3.50	PNS
Reliability	0.60	PS	-7.60	PNS	-2.20	PNS	-6.20	PNS
Responsiveness	1.75	PS	-8.50	PNS	-5.50	PNS	-5.75	PNS
Assurance	-0.20	PNS	-7.20	PNS	-1.00	PNS	-3.40	PNS
Empathy	2.60	PS	-5.60	PNS	-3.53	PNS	-4.40	PNS
Total	4.75	PS	-38.90	PNS	-15.73	PNS	-23.25	PNS

\*IM – Internal medicine; FM – Family medicine; S – Surgery; OB – Obstetrics

Interpretation (Int): Negative value denotes the patient is not satisfied with consultation (PNS);

Positive value denotes the patient is satisfied with the service provided (PS)

Formula: Patient satisfaction = (Patient perception – Patient expectation)

Table 3 shows the Out-patient department patients' satisfaction using the formula in determining patient satisfaction. The patients in the Internal Medicine department were more satisfied in all dimensions of OPD health service except in the assurance dimension (-0.20). In contrast, the patients in Family medicine, Surgery, and Obstetrics department were not satisfied with the services provided.

### Correlation among satisfaction variables

Table 4 Correlation among satisfaction variables

	T	R	Rs	A	Cronbach's alpha
Tangible (T)	1.0				0.840
Reliability (R)		0.728**			0.813
Responsiveness (Rs)	0.704**		0.754**		0.891
Assurance (A)	0.765**	0.790**	0.776**		0.906
Empathy (E)	0.762**	0.789**	0.780**	0.913**	0.904

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Cronbach's alpha – reliability testing

Table 4 shows the correlation among dimensions of patients' satisfaction using Pearson r. It shows that all of the dimensions are positively strongly correlated with each other having a value of r greater than 0.70. This means that each of the dimensions is correlated. Moreover, the internal consistency of each dimension is highly reliable with Cronbach's alpha > 0.70.

### Correlation of Patients' Satisfaction among Demographic Characteristics

Table 5 Linear regression stepwise coefficients

	Model	b	SE b	B
Step 2	Constant	7.878	0.402	
	Current living area	-1.027	0.288	-.674**
	Financial status	-0.248	0.092	-.507*

R<sup>2</sup> = 0.326 for step 1 (current living area); ΔR<sup>2</sup> = 0.572 for step 2 (current living area and financial status) (p<0.05). \*p<0.05, p<0.01; b = unstandardized beta; SE – standard error; B = standardized beta

Table 5 shows the linear regression stepwise coefficients to determine the best predictors in patients' satisfaction of using the OPD. Out of the numerous demographic characteristics predictors, the current living area was the single best predictor that contributes to the patients' satisfaction and financial status was the next best predictor, after the current living area was included in the model. With the adjuster r squared, this means that 57.2% of the variance, both current living area and financial status were accounted for in the overall patients' satisfaction. Further, the b-coefficient determines the relationship between satisfaction and each predictor. In this case, there is a negative relationship with a statistically significant p-value <0.05 with the outcome variable. The strongest predictor is the current living area. The b-coefficients suggest that each one-unit increase in a current living area, the patients' satisfaction in using the OPD will decrease by 1.027, hence as the patients live further, it lessens their willingness in using the OPD. Additionally, each one-unit increase in financial status, the patients' satisfaction in using the OPD will decrease by 0.248, hence as the patient's financial capability improves, it lessens their willingness in using OPD. This means, that those in the poorer level tend to be more satisfied in using the OPD but the accessibility to the OPD is somewhat difficult.

### DISCUSSION

For many years there had been a continuing decline in the number of beds rendered for inpatient services and as these beds are reduced, there is a corresponding growing trend of outpatient health care. In general, outpatient clinics are less expensive to establish and run compared to a hospital. All facilities providing outpatient care have

no “overnight” patients (Marcozzi, Carr, Liferidge, Bachr, & Browne, 2018). Outpatient hospital services could be any type of medical or surgical service given at a hospital outpatient department or a separate outpatient clinic where the doctor does not expect an overnight stay. Many procedures and tests including counseling, diagnosis (lab tests and scans), treatment (minor surgeries, chemotherapy), and rehabilitation (drug, alcohol, physiotherapy) can be done and over for a few hours. These services usually cost less and are more accessible for patients (Padma, Rajendran, & Lokachari, 2010).

In evaluating the quality of health care, one of the chief elements used is measuring patient satisfaction, which is believed to affect not only clinical outcomes but as well as patient retention and claims on medical malpractice. It influences the proper delivery of quality health care in terms of time, effectiveness, and patient-centeredness. Though an alternative, patient satisfaction is considered as a highly sufficient index used in determining the success of doctors and hospitals (Padma et al., 2010). It helps improve hospital image resulting in an increased market share as well as the use of service (Marcozzi et al., 2018). In a study by (Kravitz, 1998), patient satisfaction is said to be not a single concept, but instead an important aspect of values and perception. The latter referring to the weight the patient applies in their beliefs (perception) of occurrences which showcases a certain degree to which patients acknowledge specific circumstances to be acceptable, unavoidable, or expected. Several factors might have affected patient satisfaction however simple acts such as waiting for time reduction, efficient and effective patient-physician communication, and including patients in the process of decision making may help physicians achieve optimal results (Patel et al., 2011; Royse, Chung, Newman, Stygall, & Wilkinson, 2013)

The patients in the Internal Medicine Department were generally satisfied with the OPD's services. They were most satisfied with the empathy they have received in the department, followed by responsiveness, reliability, and tangible but were not satisfied with the assurance given. According to (Al-Neyadi, Abdallah, & Malik, 2018) empathy such as “interpersonal communication skills of physicians in terms of their attitude, explanation of conditions, level of care, emotional support, respect for patient preferences and involving patients in decision making were more influential factors than clinical competence (Reliability) and hospital tangibles on patient satisfaction”. A study by (Al-Abri & Al-Balushi, 2014), also reports that empathy is a more important determinant than hospital personnel reliability and hospital tangibles on patient satisfaction. With the study of Qamar in 2011 in asthma patients, patients were more satisfied with services provided by doctors who are knowledgeable and responsive but are least satisfied with the limited time of interaction they had in the consultation. Waiting time (Responsiveness) has been noted by many types of research as an effective element of overall patient satisfaction (Anderson, Camacho, & Balkrishnan, 2007; Bleustein et al., 2014; Kreitz, Winters, & Pedowitz, 2016; McMullen & Netland, 2013). Prolonged time of waiting as well as a shortened time of visiting is not a good combination for satisfying patients thus, health professionals should prevent this if patient-centered measures are their concern (Anderson et al., 2007). It has emphasized the waiting time before the consultation than the period spent waiting in an area (Bleustein et al., 2014). Decreasing average waiting time by 15 minutes shows more patient satisfaction (Kreitz et al., 2016). It also indicated that an organizational change should happen at the national level in which to allow family physicians adequate time with their patients. It also revealed areas of improvement like doctor-patient communication skills (Assurance) should be part of the core curricula for undergrad and postgrad education. A need for more time during consultations and better practice management including the appointment system is needed for effective communication to happen (Howard, Goertzen, Hutchison, Kaczorowski, & Morris, 2007).

The results showed that the patients in the *Family Medicine Department, Surgery Department, Obstetrics, and Gynecology Department* were not satisfied with their consultation in the OPD. The results correspond to the study of (Khamis & Njau, 2014), that patient satisfaction exhibited was relatively low. In the five dimensions used, the respondents showed the least satisfaction on the assurance, followed by reliability, tangibles, empathy, and responsiveness. There is a compelling association between the three domains of structure, process, and outcome according to the Donabedian model that shows lower satisfaction. And it is also associated with the respondents to seek medical care in a different hospital institution. It is important to strengthen the dedication of the OPD staff on respecting the confidentiality of the patient. Another study conducted by (Rasheed, Arya, Acharya, & Khandekar, 2012), patients included in the study rated most of the services to be of good quality and gave them enough satisfaction, however, most patients showed dissatisfaction with drug availability & unavailability of radiologic examinations (Tangibles), (Responsiveness) long waiting time, and lack of 24-hour services and deliveries not being conducted (Assurance).

More so, the *Family Medicine Department* got the lowest-rated scores among these three out-patient departments. This is in contrast with the study conducted by (Tušek-Bunc, Klemenc-Ketiš, Šter, Matela, & Kersnik, 2014) in Slovenia which showed a relatively high level of patient's satisfaction in Family Practice. It also showed that the free choice of a personal family doctor and an opportunity to replace their doctor when unsatisfied give them patient empowerment to improve health care delivery. Expectations also influenced patient satisfaction to a large extent, duration of care, well-timed care provision, and anticipations was met by the family doctor was connected

to the contentment of the patients, gives them patient empowerment to improve health care delivery (El Aour, Teima, & Jomah, 2017).

The OPD patient's satisfaction in the field of Surgery noted that responsiveness got the least satisfactory score. Several studies revealed that responsiveness is a significant element of patient satisfaction where the patients are mostly satisfied and considers responsiveness as the most important area among the parameters in SERVQUAL questionnaire (Al-Abri & Al-Balushi, 2014; Khamis & Njau, 2014; Rasheed et al., 2012) while it is contradicted by the study of (Al-Neyadi et al., 2018) that they consider responsiveness as the least important, which corresponded with the result of the study, and their most important factor is assurance. How the staff handled the patients, gives information, preoperative expectation, inpatient preference rather than ambulatory care, and surgical outcome, independent of the actual anesthesia delivery are the multiple factors that influenced the satisfaction assessment in the surgery department. In these studies (M. Rahmqvist, 2001; Zvara et al., 1996), patient satisfaction is associated with the visitations of anesthesiologists after an operation which showed a varying effect on patient's satisfaction. One study (M. Rahmqvist, 2001) reports that getting more than two visits from an anesthesiologist after surgery notably affected the patient's satisfaction while another study (Zvara et al., 1996) reports that anesthesiologist visit did not have an impression in patients who have received several post-operative visits.

In Obstetrics and Gynecology (OBGYN), the dimension that got the least satisfactory score is Reliability. Contrary to the study by (Patel et al., 2011) which stated that the Obstetrician and Gynecology patients, implies a patient's trust to the physician and the physician's reliability. The result also showed higher ratings for OBYGN compared to other specialties with regards to the variable caring and friendly attitude. OBGYN also ranks higher in terms of empathy compared to other specialists in distinct medical fields (radiology, neurosurgery, orthopedic surgery, and anesthesiology).

Results confirm that each dimension has relatively high internal consistency, which means each dimension is closely related to each other and has a role in assessing a patient's satisfaction. It presents highly significantly correlated elements, showing a directly proportional trend, that when one value increase, others will increase too. Since it can assess and affect the patient's perceptions and expectations, this can serve as a way to improve the level of service quality from a patient's perspective. The patients' satisfaction was best correlated by their current living area and financial status, respectively. The results showed that those who lived in the same area (Urban) with the OPD and financially unstable, the higher is their satisfaction. In contrast to the study conducted by (Ibraheem, Ibraheem, & Bekibele, 2013), states that patients who reside far from the residence of the health care facility, the more that they become satisfied with OPD services but patients who belong to the lower economic bracket were more satisfied, which corresponded to the result of the study. The same results were also obtained from the study of (Afzal et al., 2014) which revealed that those patients who belong to a lower economic bracket were more satisfied with the service provided by the health care facility. Some studies associated patient's characteristics to the patient's satisfaction. Patient's characteristics such as gender, age, education, economic or financial status, and religion showed an effect on patient satisfaction (Afzal et al., 2014; Ibraheem et al., 2013; Mikael Rahmqvist & Bara, 2010; Villejo, Enriquez, Melendres, Tan, & Cayton, 2014).

## **CONCLUSION**

Based on the findings, patients in the Family and Community Medicine, Obstetrics and Gynecology, and Surgery department in the Out-Patient Department (OPD) facility were not satisfied with the overall service provided in terms of tangible, reliability, responsiveness, assurance and empathy. However, patient satisfaction was achieved in the Internal Medicine department which shows that the doctors and staff facilitate individualize prompt attention, needs, and care to the concerns of the patients. Additionally, the best predictor of patient satisfaction was their current living area and financial status. Patients who lived in the same area (Urban) with the Out-Patient Department facility and were financially unstable had a higher satisfaction level.

The study was conducted in a private hospital therefore, as a recommendation, a study regarding patients' satisfaction can also be done for a public hospital. Also, upon conducting the same study for a public hospital, a comparative study between public hospital and private hospital patients' satisfaction can be conducted to know how well each dimension of the SERVQUAL is being addressed and to what extent they differ. Also, for future studies of the same category, the extended time of data collection must be allotted to increase the sample size. Moreover, since the Out-Patient Department (OPD) is consist of different departments, all of the departments may be included for future studies to know what aspect needs to improve. Lastly, some of the patients are of old-age and have problems in reading, writing, and answering the survey. This should be included in the exclusion criteria since they might tend to guess the answer or incorrectly answer the survey.

## REFERENCES

- Afzal, M., Rizvi, F., Azad, A. H., Rajput, A. M., Khan, A., & Tariq, N. (2014). Effect of demographic characteristics on patient satisfaction with the health care facility. *Journal of Postgraduate Medical Institute*, 28(2), 154–160. Retrieved from <https://pdfs.semanticscholar.org/bb87/ce78fc7b17f3af9edfd2a17254cf741562e.pdf>
- Ahmed, F., Yasir, I., Hameed, K., Ahmed, S., Ahmed, W., Maroof, ... Amanullah. (2015). Assessment Of Opd Patient's Satisfaction With Health Care Services At Al-Nafees Medical Hospital. *Gisra Medical Journal*, 7(3), 154–159. Retrieved from <https://www.bibliomed.org/mnsfulltext/139/139-1452230599.pdf?1588432736>
- Al-Abri, R., & Al-Balushi, A. (2014). Patient satisfaction survey as a tool towards quality improvement. *Oman Medical Journal*, 29(1), 3–7. <https://doi.org/10.5001/omj.2014.02>
- Al-Neyadi, H. S., Abdallah, S., & Malik, M. (2018). Measuring patient satisfaction with healthcare services in the UAE hospitals: Using SERVQUAL. *International Journal of Healthcare Management*, 11(2), 96–105. <https://doi.org/10.1080/20479700.2016.1266804>
- Anderson, R. T., Camacho, F. T., & Balkrishnan, R. (2007). Willing to wait? The influence of patient wait time on satisfaction with primary care. *BMC Health Services Research*, 7, 1–5. <https://doi.org/10.1186/1472-6963-7-31>
- Asinas-Tan, M., Leonardo, J., Aldana, E., Reboton, W. C., & Libunao, J. A. (2016). Implementation of quality improvement strategies for better patient care. *International Journal of Integrated Care*, 16(6), 20. <https://doi.org/10.5334/ijic.2963>
- Barry, C. A., Bradley, C. P., Britten, N., Stevenson, F. A., & Barber, N. (2000). Patients' unvoiced agendas in general practice consultations: Qualitative study. *British Medical Journal*, 320(7244), 1246–1250. <https://doi.org/10.1136/bmj.320.7244.1246>
- Bleustein, C., Rothschild, D. B., Valen, A., Valaitis, E., Schweitzer, L., & Jones, R. (2014). Wait times, patient satisfaction scores, and the perception of care. *American Journal of Managed Care*, 20(5), 393–400. Retrieved from <https://europepmc.org/article/med/25181568>
- Charmel, P. A., & Frampton, S. B. (2008). Building the business case for patient-centered care: patient-centered care has the potential to reduce adverse events, malpractice claims, and operating costs while improving market share. *Healthcare Financial Management*, 62(3), 80. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/19097611>
- De Guzman, A. B., Joson, G. C. D., Lagrisola, M. C. C., Lagutao, B. J. P., & Lascano, J. A. H. (2015). Nursing Care Preferences among Filipino Elderly: A Conjoint Analysis. *Educational Gerontology*, 41(1), 14–26. <https://doi.org/10.1080/03601277.2014.882115>
- El Aour, I., Teima, A. A., & Jomah, I. (2017). Assessment of diabetic care and patients' satisfaction: an exploratory study. *The Lancet*, 390(17), S6. [https://doi.org/10.1016/s0140-6736\(17\)32007-x](https://doi.org/10.1016/s0140-6736(17)32007-x)
- Ferrand, Y. B., Siemens, J., Weathers, D., Fredendall, L. D., Choi, Y., Pirrallo, R. G., & Bitner, M. (2016). Patient satisfaction with healthcare services: A critical review. *Quality Management Journal*, 23(4), 6–22. <https://doi.org/10.1080/10686967.2016.11918486>
- Garcia-Gutierrez, S., Quintana, J. M., Aguirre, U., Barrio, I., Hayas, C. Las, Gonzalez, N., ... Lafuente, I. (2014). Impact of clinical and patient-reported outcomes on patient satisfaction with cataract extraction. *Health Expectations*, 17(6), 765–775. <https://doi.org/10.1111/j.1369-7625.2012.00801.x>
- Howard, M., Goertzen, J., Hutchison, B., Kaczorowski, J., & Morris, K. (2007). Patient satisfaction with care for urgent health problems: A survey of family practice patients. *Annals of Family Medicine*, 5(5), 419–424. <https://doi.org/10.1370/afm.704>
- Ibraheem, W. A., Ibraheem, A. B., & Bekibele, C. O. (2013). Socio-demographic predictors of patients' satisfaction. *African Journal of Medical and Health Sciences*, 12(2), 87–90. Retrieved from [http://www.ajmhs.org/temp/AfrJMedHealthSci12287-5773275\\_160212.pdf](http://www.ajmhs.org/temp/AfrJMedHealthSci12287-5773275_160212.pdf)

- Khamis, K., & Njau, B. (2014). Patients' level of satisfaction on the quality of health care at Mwananyamala hospital in Dar es Salaam, Tanzania. *BMC Health Services Research*, 14(1), 1–8. <https://doi.org/10.1186/1472-6963-14-400>
- Kravitz, R. (1998). Patient satisfaction with health care: critical outcome or trivial pursuit? *Journal of General Internal Medicine : Official Journal of the Society for Research and Education in Primary Care Internal Medicine*, 13(4), 280–282. <https://doi.org/10.1046/j.1525-1497.1998.00084.x>
- Kreitz, T. M., Winters, B. S., & Pedowitz, D. I. (2016). The Influence of Wait Time on Patient Satisfaction in the Orthopedic Clinic. *Journal of Patient Experience*, 3(2), 39–42. <https://doi.org/10.1177/2374373516652253>
- Marcozzi, D., Carr, B., Liferidge, A., Baehr, N., & Browne, B. (2018). Trends in the Contribution of Emergency Departments to the Provision of hospital-associated Health Care in the USA. *International Journal of Health Services*, 48(2), 267–288. <https://doi.org/10.1177/0020731417734498>
- McKinley, R. K., & Roberts, C. (2001). Patient satisfaction with out of hours primary medical care. *Quality in Health Care*, 10(1), 23–28. <https://doi.org/10.1136/qhc.10.1.23>
- McMullen, M., & Netland, P. A. (2013). Wait time as a driver of overall patient satisfaction in an ophthalmology clinic. *Clinical Ophthalmology*, 7, 1655–1660. <https://doi.org/10.2147/OPTH.S49382>
- Mukhtar, F., Anjum, A., Bajwa, M., Shahzad, S., Hamid, S., Masood, Z., & Mustafa, R. (2013). Patient satisfaction; OPD services in a Tertiary Care Hospital of Lahore. *Professional Med J*, 20(6), 973–980. Retrieved from [http://applications.emro.who.int/imemrf/Professional\\_Med\\_J\\_Q/](http://applications.emro.who.int/imemrf/Professional_Med_J_Q/)
- Professional\_Med\_J\_Q\_2013\_20\_6\_973\_980.pdf
- Padma, P., Rajendran, C., & Lokachari, P. S. (2010). Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants. *Benchmarking*, 17(6), 807–841. <https://doi.org/10.1108/14635771011089746>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41. <https://doi.org/10.2307/1251430>
- Patel, I., Chang, J., Srivastava, J., Feldman, S., Levender, & Balkrishnan, R. (2011). Patient satisfaction with obstetricians and gynecologists compared with other specialties: analysis of US self-reported survey data. *Patient-Related Outcome Measures*, 21. <https://doi.org/10.2147/prom.s15747>
- Protomastro, L. (2016). Harnessing the power of patient satisfaction. *Contemporaryobgyn.Net*, 10(January), 12–16. Retrieved from <https://www.contemporaryobgyn.net/modern-medicine-feature-articles/harnessing-power-patient-satisfaction>
- Rahmqvist, M. (2001). Patient satisfaction concerning age, health status, and other background factors: A model for comparisons of care units. *International Journal for Quality in Health Care*, 13(5), 385–390. <https://doi.org/10.1093/intqhc/13.5.385>
- Rahmqvist, Mikael, & Bara, A. C. (2010). Patient characteristics and quality dimensions related to patient satisfaction. *International Journal for Quality in Health Care*, 22(2), 86–92. <https://doi.org/10.1093/intqhc/mzq009>
- Rasheed, N., Arya, S., Acharya, A., & Khandekar, J. (2012). Client satisfaction and perceptions about the quality of health care at a primary health center of Delhi, India. *Indian Journal of Community Health*. Retrieved from [https://www.researchgate.net/profile/Nazish\\_Rasheed/publication/256447044\\_Client\\_Satisfaction\\_and\\_perceptions\\_of\\_quality\\_of\\_health\\_care\\_at\\_a\\_primary\\_health\\_centre\\_of\\_Delhi\\_India\\_India\\_Rasheed\\_N\\_Arya\\_S\\_Acharya\\_A\\_Khandekar\\_J\\_Ind\\_J\\_of\\_Community\\_health\\_201224](https://www.researchgate.net/profile/Nazish_Rasheed/publication/256447044_Client_Satisfaction_and_perceptions_of_quality_of_health_care_at_a_primary_health_centre_of_Delhi_India_India_Rasheed_N_Arya_S_Acharya_A_Khandekar_J_Ind_J_of_Community_health_201224)
- Royse, C. F., Chung, F., Newman, S., Stygall, J., & Wilkinson, D. J. (2013). Predictors of patient satisfaction with anesthesia and surgery care: A cohort study using the postoperative quality of recovery scale. *European Journal of Anaesthesiology*, 30(3), 106–110. <https://doi.org/10.1097/EJA.0b013e328357e584>

Rozenblum, R., Miller, P., Pearson, D., & Marelli, A. (2015). Patient-centered healthcare, patient engagement, and health information technology: the perfect storm. *Information Technology for Patient Empowerment in Healthcare* 1st ed. Berlin: Walter de Gruyter Inc. Retrieved from [https://www.researchgate.net/publication/275097851\\_Rozenblum\\_R\\_Miller\\_P\\_Pearson\\_D\\_Marelli\\_A\\_In\\_Grando\\_MA\\_Rozenblum\\_R\\_Bates\\_DW\\_editors\\_Information\\_Technology\\_for\\_Patient\\_Empowerment\\_in\\_Healthcare\\_Patient-centered\\_healthcare\\_patient\\_engagement\\_and\\_healt](https://www.researchgate.net/publication/275097851_Rozenblum_R_Miller_P_Pearson_D_Marelli_A_In_Grando_MA_Rozenblum_R_Bates_DW_editors_Information_Technology_for_Patient_Empowerment_in_Healthcare_Patient-centered_healthcare_patient_engagement_and_healt)

Rozenblum, Ronen, & Bates, D. W. (2013). Patient-centered healthcare, social media, and the internet: The perfect storm? *BMJ Quality and Safety*, 22(3), 183–186. <https://doi.org/10.1136/bmjqqs-2012-001744>

Rozenblum, Ronen, Gianola, A., Ionescu-Ittu, R., Verstappen, A., Landzberg, M., Gurvitz, M., ... Marelli, A. J. (2015). Clinicians' perspectives on patient satisfaction in adult congenital heart disease clinics-A dimension of health care quality whose time has come. *Congenital Heart Disease*, 10(2), 128–136. <https://doi.org/10.1111/chd.12190>

Schoenfelder, T., Klewer, J., & Kugler, J. (2011). Determinants of patient satisfaction: A study among 39 hospitals in an in-patient setting in Germany. *International Journal for Quality in Health Care*, 23(5), 503–509. <https://doi.org/10.1093/intqhc/mzr038>

Tušek-Bunc, K., Klemenc-Ketiš, Z., Šter, M. P., Matela, J., & Kersnik, J. (2014). Predictors of high prescribing rates in family practice during actual consultation: A cross-sectional study from Slovenia. *Collegium Antropologicum*, 38(3), 841–845. Retrieved from <https://hrcak.srce.hr/128181>

Villarruz-sulit, M. V. C., Dans, A. L., & Javelosa, M. A. U. (2009). Measuring Satisfaction with Nursing Care of Patients Admitted in the Medical Wards of the Philippine General Hospital. *ACTA Medica Philippina*, 43(4), 52–56. Retrieved from <https://pdfs.semanticscholar.org/7b4f/c8c77b1d28776b5c34e330f400fc0b1962c6.pdf?ga=2.72975765.748470577.1588428606-2001422400.1550451289>

Villejo, S. J., Enriquez, M. T., Melendres, M. J., Tan, D. E., & Cayton, P. J. (2014). Determinants of Income Class in Philippine Households : Evidence from the Family Income and Expenditure Survey 2009. *The Philippine Statistician*, 63(2), 87–104. Retrieved from [http://www.psai.ph/docs/publications/tps/tps\\_2014\\_63\\_2\\_7.pdf](http://www.psai.ph/docs/publications/tps/tps_2014_63_2_7.pdf)

World Health Organization (WHO). (2007). People-Centred Health Care. *World Health Organization*, (November). Retrieved from [https://apps.who.int/iris/bitstream/handle/10665/207004/9789290613930\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/207004/9789290613930_eng.pdf?sequence=1&isAllowed=y)

Zvara, D. A., Nelson, J. M., Brooker, R. F., Mathes, D. D., Petrozza, P. H., Anderson, M. T., ... Royster, R. L. (1996). The importance of the postoperative anesthetic visit: Do repeated visits improve patient satisfaction or physician recognition? *Anesthesia and Analgesia*, 83(4), 793–797. <https://doi.org/10.1097/00000539-199610000-00024>