

**PATIENT SATISFACTION TOWARDS HEALTHCARE
SERVICES AT THE OUT-PATIENT DEPARTMENT OF
THUMBAY HOSPITAL, DUBAI, UAE**

**Internship Training
at
Thumbay Hospital, Dubai**

**By
Deepali Kapahi**

**Under the guidance of
Dr. Seema Mehta**

**MBA Hospital & Health Management
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Dissertation Training

At

Thumbay Hospital, Dubai

**Patient satisfaction towards healthcare services at the out-patient
department of Thumbay Hospital, Dubai, UAE**

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Post Graduate Diploma in Hospital and Health Management

Year 2013-2015



**Institute of Health Management Research
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TO WHOMSOEVER MAY CONCERN

This is to certify that **Dr. Deepali Kapahi** student of MBA Hospital and Health Management from IIHMR University, Jaipur has undergone internship training at **Thumbay Hospital, Dubai** from 16th March, 2015 to 16th May, 2015

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all his future endeavors.



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We wish her all the best.

For **Thumbay Hospital, Dubai**



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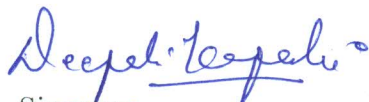
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CERTIFICATE BY SCHOLAR

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**Patient satisfaction towards healthcare services at the out-patient department of Thumbay
Hospital, Dubai, UAE**

and submitted by (Name) Dr. Deepali Kapahi with Enrollment No. 1437 under the supervision of Ms. Seema Mehta for award of MBA Hospital and Health Management/ MBA Pharmaceutical Management of the university carried out during the period from 16th march, 2015 to 16th may, 2015 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.


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ABSTRACT

Health care facility performance can be best assessed by measuring the level of patient's satisfaction. A completely satisfied patient believes that the organization has potential in understanding patient needs and demands related to health care. This study was carried out to analyze the level of satisfaction and the factors affecting satisfaction of patients visiting the outpatient department of Thumbay Hospital, Dubai, United Arab Emirates. This is a descriptive study conducted to assess patient's satisfaction with health services and also get feedback & suggestions for improvement about the services provided at the outpatient department (OPD) of Thumbay Hospital, Dubai, United Arab Emirates. The patients were randomly selected and a questionnaire was used to evaluate patient satisfaction about the outpatient department services, logistic arrangement in the outpatient departments, waiting time, facilities, perception about the performance of staff, appointment system, and behavior of staff, support service and any other suggestions of patients.

Majority of comments from patients were critical of long waiting times for seeing doctors and pharmacists, late commencement of doctor's working time, and poor interpersonal manner of doctors, nurses and administrative staff. Reinforcement of the regulation on working hours and recruitment of more doctors are recommended.

It was suggested that patient satisfaction studies should be conducted in parallel with studies on job satisfaction of healthcare providers in order to understand the correlation between them, which makes patients dissatisfied and solve these problems accordingly.

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Dr.Deepali Kapahi

Thumbay, Dubai

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LIST OF SYMBOLS AND ABBREVIATIONS

1. Independent variables

- **Age** refers to the age of the patient on the date.
- **Gender** refers to the primary sex characteristics of the patient in which only males and females are included.
- **Education level** means the highest level of education that the studied patient attained.
- **Occupation** refers to a current main job or occupation of the patient.
- **Marital status** refers to whether the respondent was single, married, divorced, separated, or a widow or widower.

1. Introduction

Living in the world of information and technology, nowadays patients are aware of their needs and rights. They know that health care facilities are established to provide satisfactory and quality health services to them. If the health care facilities fail to do so, they are considered unsuccessful in implementing their assigned tasks. Health care facility performance can be best assessed by measuring the level of patient's satisfaction. A completely satisfied patient believes that the organization has potential in understanding patient needs and demands related to health care.

The objectives of health care have changed with the requirements of society and the availability of resources and technology. The 19th century was an era which was "symptom-centred". Health was being referred to the elements of empirical perception/local understanding without any scientific examination. The early 20th century was basic science or disease-centred era. Health was being referred to scientific reasoning and experimenting on disease, including diagnosis and treatment of diseases. In the middle of the 20th century experienced clinical science or patient centred era. Health was centred mainly in hospitals and clinics and diagnosis and treatment of individuals was performed. Late of 20th century was public health science or community-centred era. Health has been focused on diagnosis and treatment of community. End of 21st century saw political health science or people centred era. Health has become people's matter and need public participation, including proper allocation of resources responding to public needs. The World Health Organization conference, supporting health for all, held in 1990 defined future development in health to be human centred. A lot of stress has been made on investment in health, patient care and patient's right to delivery of quality health care leading to patient satisfaction (1, 2).

There is a general agreement that measurement of patient satisfaction fulfils several distinct functions (3). Satisfaction can simply describe health care services from the patient's point of view and patient satisfaction may be thought of as a measure of the "process" of care. Problem areas can be isolated and ideas towards solutions may be generated (4). Evaluation of health care is regarded by many as the most important function of patient satisfaction research. The function of patient satisfaction work was wholly concerned with evaluation (5). At least four fields of evaluation need consideration in the health care context. These are evaluation of specific treatment, evaluation of patterns of care for particular patient groups, evaluation of organizations,

and evaluation of health system. Patient satisfaction studies have proved valuable in all these fields (6).

UAE has been developing health care services in order to improve the quality in every aspect according to the patient needs. Many key performance indicators are used to monitor and evaluate the results of working organizations and their staffs. Patient satisfaction is the essential indicator that indicates the quality of health service at all level of health care facilities. Understanding the different influences on variation in patient satisfaction is important. To improve health care provision, managers need to be able to differentiate between a factor they control that is a part of a wider social and political context (7).

Thumbay Hospital is a seventy five bedded private hospital which is located Dubai, UAE. The out-patient department (OPD) Thumbay Hospital has ten specialities with twenty five doctors, fifteen nurses, two medical orderlies and twenty administrative staff together providing medical care services to patients. The average number of patients visiting the OPD clinic is around sixty per day.

2. Literature Review

2.1. Satisfaction

2.1.1. Concept of patient satisfaction

Linder-Pelz (1982) approached a definition of patient satisfaction through content analysis of satisfaction studies. Five social- psychological variables were proposed as probable determinants of satisfaction with health care. These are **occurrences** which actually takes place and perhaps more importantly, the individual's **perception** of what occurred; **value** that is an evaluation in terms of good or bad of an attribute or an aspect of a health care encounter; **expectation** which is belief about the probability of certain attributes being associated with an event or object, and the perceived probable outcome of that association; **interpersonal comparisons** in which an individual rates the health care encounter by comparing with all such encounters known to or experienced by him or her; **entitlement** that is an individual's belief that she/he has proper, accepted grounds for seeking or claiming a particular outcome (8).

Risser (1991) defined patient satisfaction as the degree of congruency between a patient's expectation of ideal nursing care and his perception of the real nursing care that he receives (9). Swan (1985) suggested that patient satisfaction is a positive emotional response that is desired from a cognitive process in which patients compare their individual experience to a set of subjective standards (10). Linder-Pelz (1982) defined patient satisfaction as an expression of an attitude, an effective response, which is related to both the belief that the care possesses certain attributes components/ dimension and the patient's evaluation of those attributes; and as the individual's positive evaluations of distinct dimensions of health care (8).

2.2. Determinants of satisfaction

2.2.1. Expectation

Expectations emerge repeatedly as having a fundamental role in expressions of satisfaction. Stimson and Webb (1975) were among the first to suggest that satisfaction is related to the perception of the benefits of care and the extent to which these meet the patient's expectations (11). Risser (1975) and Fitzpatrick (1984) mentioned that the elemental bearing of expectations is reflected in several definitions of patient satisfaction, and it is supported by research evidence. For example, Abramowitz et al (1987) found that not only

can patients hold different expectations and satisfaction with specific aspects of care, but that expectations and satisfaction with specific of care play independent roles in predicting patient satisfaction (12, 13, 14).

Expectations make more complex the concept of satisfaction as an evaluative tool. As patient satisfaction is a recognized component of Quality Assurance, it is therefore tempting to equate “high” levels of reported satisfaction with “high” levels of quality of care (15). However, in considering patient satisfaction study results, it is necessary that “expressions of satisfaction should always be interpreted in the context of some understanding of the rationale that underlies those expressions rather than being taken at face value” (4). In the nursing context, for example, several theories have disputed that satisfaction can simply be equated with quality of nursing care. In addition to nursing treatment, a patient’s quality of life is affected by environmental, informational, personal or social variables, and that a mediating variable-perception is necessary (16), (17). Bond and Thomas (1992) summarized the problem succinctly: different levels of satisfaction may indicate different perspectives on nursing care quality rather than different levels of satisfaction with the same experience (5).

Larsen and Rootman (1976) hypothesised that the more a doctor’s performance meets a patient’s expectations, the more satisfied the patient will be with the physician’s services (18). The hypothesis was strongly supported. The few later studies in which the relationship between patient expectations and overall satisfaction has been explored consistently suggest that patients with “lower expectations” tend to be more satisfied (14).

There may, however, be confounding variables which need to be considered; for example, there exist relationships between level of patient expectations, socioeconomic status and associated values and attitudes among different patient groups. Stimson and Webb (1975) identified three categories of satisfaction: “background”, “interaction” and “action”. “Background” expectations are explicit expectations resulting from accumulated learning of the consultation/treatment process. Although background expectations vary with the illness and particular circumstances, certain patterns of activity or routines are expected, and much criticism centres on behavior which is at odds with these expectations. “Interaction” expectations refer to patient’s expectations regarding the exchange which will take place with their doctor, for example, the manner and technique of questioning and the level of

information released by the doctor. Expectations about the action the doctor will take such as prescribing, referral or advice are “action” expectations. Of the three, Stimson and Webb (1975) regarded interaction expectations as the most important (11).

This framework has been taken up in later work. For instance, Fitton and Acheson (1979) studied patients’ expectations with regard to five common management actions taken by GPs. They further divided “action” expectations into “ideal” and “actual” expectations, “ideal” being the action the patient would like the doctor to take and “actual” being the action the patient thinks will be taken (19).

2.2.2. Patient characteristics

It is commonly believed that satisfaction with health care may be dependent on variables such as social class, marital status, gender and age. A meta-analysis of work reported before 1989, however, concluded that socio-demographic are at best a minor predictor of satisfaction. Fitzpatrick (1990) and Fox and Storms (1981) are among the many reviewers who highlight the lack of consistency of the effects of these variables in satisfaction studies (20, 14, 21, 22).

Perhaps the most consistent determinant characteristic is patient age, with a body of evidence from various countries to suggest that older people tend to be more satisfied with health care than do younger people (23), (24), (25). Cartwright and Aderson (1981) found that older respondents expected less information from their doctor (26). Hopton et al (1993) and Khayat and Salter (1994) found that younger patients were less satisfied with issues surrounding the consultation in the primary care setting (27), (28). Younger patients were also less likely to comply with prescriptions or medical advice. Older people have also been found to be far more satisfied with most aspects of their hospital care than younger or middle aged people (29).

Educational attainment has been identified as having a significant bearing on satisfaction, the trend being that greater satisfaction is associated with lower level of education (20). Much of this evidence is from the U.S. Anderson and Zimmerman (1993) found that level of education to be the only variable significantly related to patient satisfaction with consultations in two Michagan clinics, patients with lower levels of education being most

satisfied (30). Similarly, Schutz et al (1994) found that higher educational attainment was strongly associated with dissatisfaction in patients undergoing colonoscopy (31).

The relationship between satisfaction and social “class” is less consistent, a problem being that socioeconomic variables are often simply not assessed. Hall and Dornan (1990) viewed social status as having “nearly significant relations” with satisfaction, but as greater satisfaction were associated with higher social status. The authors added that it was “perplexing, to say the least, “that results for social status and education went in opposite directions (20).

It has generally been found that patient gender does not affect satisfaction values, a conclusion reached also in the meta-analysis done by Hall and Dornan (1990) (32, 33, 27, 20). One or two dissenting reports have appeared. Khayat and Salter (1994) reported that significantly more men than women were satisfied overall with their general practitioners. Another British study found that female inpatients were far more likely to complain of rigid timetables and lack of privacy than men (28).

A number of “social-psychological artifacts” may affect expressions of patient satisfaction (34). “Social desirability response bias” argues that patients may report greater satisfaction than they actually feel because they believe positive comments are more acceptable to survey administrators. Similarly, “ingratiating response bias” occurs when patients use the satisfaction survey to ingratiate themselves with researchers or medical staff, especially if there are any reservations over the anonymity of respondents. A number of observers have suggested that patients may be reluctant to complain for fear of unfavorable treatment in the future (35), (36). Related to ingratiating response bias is “self-interest bias”. This propose that as most social programs-which includes health care services- act as providers, clients are likely to perceive that expressions of satisfaction will contribute to the continuation of the service which in turn will be in their own self-interest. LeVois et al (1981) noted that this theory is supported by both the “economic view” that individuals seek to maximize their own self-interest, and the “social exchange perspective”, that behaviour is governed by an exchange of activities (34). Two further phenomena are particularly interesting when considering Williams’ (Williams, 1994) theory that dissatisfaction is only expressed when an extreme negative event occurs. Firstly, “gratitude” as a phenomenon is well recognized as confusing satisfaction results. In U.K. gratitude has often been associated with more

elderly population. (37). An early study of hospital inpatient satisfaction reported that 68% of the sample felt unable to express desires, fears, or criticisms to the medical staff. The emphasis for these patients was on self-control, on a minimum of dependency, on being “cooperative”, “undemanding”, “considerate”, and “grateful” (38). Ley (1972) noted an additional phenomenon influencing response: simple indifference. Patients may feel problems will not be remedied and so there would be no point in commenting on them, either because the problem is too trivial or perhaps too large (36).

2.3. Components of satisfaction

Several classification of components have been proposed, some appropriate only for specific health care contexts, others aiming at broad applicability. Abdellah and Levine (1965) attempted an early identification of key components, proposing adequacy of the facilities, effectiveness of the organizational structure, professional qualifications and competency of personnel and the effect of care on the consumers (39). Reviewing U.S. patient satisfaction research conducted from 1957 to 1974, Risser (1975) reported that four components emerged: cost, convenience, the provider’s personal qualities and nature of the interpersonal relationship, and the provider’s professional competence and perceived quality of care received (12).

Ware et al (1983), in a review, presented a more definitive taxonomy with eight dimensions (40). They are as follows:

- **Interpersonal manner**-features of the way in which providers interact personally with patients (e.g. respect, concern, friendliness, courtesy);
- **Technical quality of care**-competence of providers and adherence to high standards of diagnosis and treatment (e.g. thoroughness, accuracy, unnecessary risks, making mistakes);
- **Accessibility/convenience**-factors involved in arranging to receive medical care (e.g. waiting times, ease of reaching providers);
- **Finances**-factors involved in paying for medical services;
- **Efficacy/outcomes of care**-the results of services provided (e.g. improvements in or maintenance of health);
- **Continuity of care**-constancy in provider or location of care;

- **Physical environment**-features of setting in which care is delivered (e.g. clarity of signs and directions, orderly facilities and equipment, pleasantness of atmosphere); and
- **Availability**-presence of medical care resources (e.g. enough medical facilities and providers)

Ware's classification has been the basis for much later work, as statistical techniques such as factor analysis have been promoted as providing "evidence" that satisfaction is a multidimensional construct (14), (41). Fitzpatrick (1990) proposed almost an identical dimension to Ware's, bar "finances", for the UK setting (21). However, as many satisfaction studies are conducted in very specific contexts it is understandable that any standard classification never seems entirely appropriate (3).

2.4. Accessibility

In the standard Ware/Fitzpatrick framework, a broad definition of "accessibility" includes issues such as physical access to hospitals, GP surgery hours, appointment systems, receptionists, changing doctors, home visits, and appointment waiting lists. Poor parking (42), public transport (14) and waiting times at health centres (43) have all been found to relate to patient dissatisfaction. UK, outpatient departments seem particularly prone to long waiting times (44).

2.5. Interpersonal aspects of care

The interpersonal aspects of care are regarded as the principal component of satisfaction (24). Two aspects regarded as particularly important are communication and empathy (45, 46).

Sociological models based on both psychoanalytical and Parsons' analyses of the health professional/patient relationship propose a spectrum of high to low control in medical encounters (19, 47). Central to these models is the balance of power. Power is primarily related to status and competence: the doctor's power is carried in a generally higher social status, more medical knowledge and perceived competence. Hypotheses that this balance of power may influence satisfaction with physicians have, however, not been confirmed by research (30, 48, 49). Furthermore, there is evidence that nurse's - who has a lower social

status than doctors - also rate badly in terms satisfaction with communication (23, 50, 51, 52, 53, 54).

Successful interactions depend also on the social skills of the participants. Nonverbal communication is often the primary mode of transmitting emotions and attitudes which would be rarely spoken out loud. Body positioning-location, distance, and posture-can transmit important perceptions of relative power. LaCrosse (1975) found that non verbal behaviour such as leaning slightly forwards and nods of the head make patients see doctors as warmer and more attractive, while Larsen and Smith (1981) found doctors' forward lean and body posture to be associated with higher patient satisfaction (55, 56). Eye contact is particularly important in establishing a rapport, in monitoring reactions and in requesting feedback, and if eye contact is broken the nature of the conversation is likely to become more formal, impersonal and brief (57).

2.6. Technical aspect of care

Fitzpatrick (1984) noted that many patients appear to have more confidence in commenting on convenience, cost, and doctors' and nurses' personal quality than in expressing dissatisfaction with medical skill (13). There is, however, some evidence that patients are generally fairly good at assessing technical aspects of care or have a reasonable level of medical knowledge. Fitton and Acheson (1979) found a positive correlation between doctors' and patients' rating of the seriousness of their medical condition, only a handful of patients misjudged the seriousness of their problem (19). Stimson and Webb (1975) proposed several reasons why the competence gap should not be seen as absolute. Firstly, the health professional's knowledge is never complete: the degree of knowledge about medicine in general, or a particular medical problem, will vary from practitioner to practitioner. Secondly, physicians can never be certain of the outcomes of their actions as medicine operates at the level of probable course of an illness and the probable effect of treatment. Thirdly, the doctor never has a complete monopoly over relevant medical knowledge: patient can- and many do – acquire knowledge from other sources, and some may well have as much knowledge about their condition as does a junior doctor. Fourthly, the doctor may not always be in possession of all the information that may be relevant to a particular illness, especially information held by the individual patient (11). The main reason of satisfaction studies fail to emphasize the importance of the technical quality of the

care delivered is that patients assume a basic level of competence in medical procedures undertaken upon them. If the medical procedures are found to be deficient, this is associated with patient complaints- a clear indicator of dissatisfaction with a service (3).

2.7. Patient education/information

The patient's right to be informed constitutes one of the most important rationales for patient's education. Beyond patient's right, issues of patient education are relevant to legal mandates, particularly regarding processes such as "informed consent" (58). Patient education has further been shown to have cost-benefit to society in terms of reduced number and/or length of hospital stays, more appropriate use of hospital services, less absenteeism from school and work, reduction in accidents, and acquisition of health awareness behaviour (59, 60). Patient education has been linked with positive clinical outcomes such as improved adherence to a therapeutic regime, reduced anxiety, enhanced ability to cope with symptoms, enhanced recovery after surgery, and enhanced recovery after outpatient procedures (61, 62, 60, and 63). In addition, enhanced information has been found to improve satisfaction. An early study of GP patients found that satisfaction related significantly to comprehension of information, and that greater comprehension of information related to higher compliance with doctor's advice (64). Similarly, patients dissatisfied with the information received at neurological outpatient clinics were found to be far less likely to take medication as advised (65).

2.8. Theoretical model used for construction of a conceptual framework

The Behavioural Model of Health Services Use by Ronald M. Andersen (67) It suggested that people's use of health services is a function of their predisposition to use services, factors which enable or impede use, and their need for use (68), (69).

Predisposing characteristics consist of demographic factors, social structure and health beliefs, genetic factors and psychological characteristics. Demographic factors such as age and gender represent biological imperatives suggesting the likelihood that people will need health services (70).

Social structure is measured by a broad array of factors that determine the status of a person in the community, his or her ability to cope with presenting problems and commanding resources to deal with these problems, and how healthy or unhealthy the physical

environment is likely to be. Measures used to assess social structure include education, occupation, ethnicity, social networks, social interactions, and culture.

Measures of these concepts rightly fit into the social structure component (71). Health beliefs are attitudes, values, and knowledge that people have about health and health services that might influence their subsequent perception of need and use of health services. Health beliefs provide one means of explaining how social structure might influence enabling resources, perceived need, and subsequent use (67).

With the explosive development of gene mapping, genetic counselling, and the possibilities of gene therapy, genetic measures represent a potentially viable, important, and definable predisposing component (72). Psychological characteristics considered as predisposing variables have included mental dysfunction, cognitive impairment (73), and autonomy (74).

Both community and personal enabling resources must be present for use to take place. First health personnel and facilities must be available where people live and work. Then, people must have the means and know-how to get those services and make use of them. Income, health insurance, a regular source of care, and travel and waiting times are some of the measures that can be important. Besides, organizational factors such as various kinds of medical care providers and types of health services organization; and social relationship which serves as resource to facilitate or impede health services' use are the measures that can be included as additional enabling resources (75). The importance of need is the prime determinant of use at the expense of health beliefs and social structure (76, 77). Any comprehensive effort to model health services' use must consider how people view their own general health and functional state, as well as how they experience systems of illness, pain, and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help (76). The biological imperative is better represented by the evaluated component of need (77). Evaluated need represents professional judgment about people's health status and their need for medical care (76). Health status outcomes allow extending the measures of access to include dimension which are particularly important for health policy and health reform. They provide some answers to the question of whether or not it matters to revisit utilization studies and access concepts. "Effective access" is established when utilization studies show that use improves health status or consumer satisfaction with services. "Efficient access" is

shown when the level of health status or satisfaction increase relative to the amount of health care services consumed. (77).

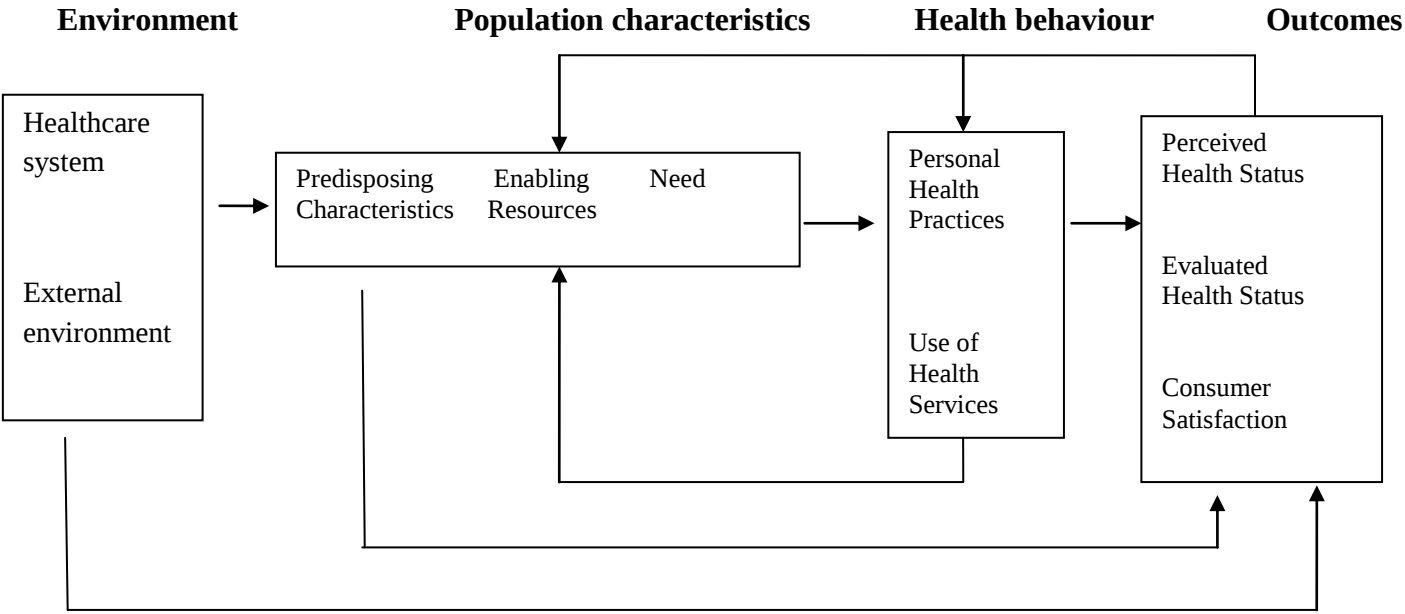


Figure 2: Behavioral Model of Health Services Use by Ronald M. Andersen

3. Methodology

3.1. Study design

The study design was a descriptive study. The data was collected by from patients who had utilized health services at the out-patient department (OPD) clinic Thumbay Hospital by means of a patient feedback questionnaire

3.2. Study population

The target population of this study included all patients who had utilized health services at the OPD of Thumbay Hospital in Dubai. Study population was patients who utilized OPD clinic services of the hospital and were available at the time of data collection. Parents or grandparents were the respondents of patients whom their age less than 14 years old.

3.3. Location of study

Thumbay Hospital, Dubai, United Arab Emirates

3.4. Study area

The study was conducted in the Outpatient Department of Thumbay Hospital, Dubai

3.5. Study time period:

The study was started on 1st April 2015 and completed on 5th May 2015 (excluded weekend).

3.6. Sample size

Sample size was determined at 95% Confidence Level, 5 % confidence interval & the estimated population size 1800 (estimated 60 patients per day for 30 day period study) the sample size was 317.

3.7. Sampling method

Systematic random sampling was applied to draw the patients in order to get information about the aspects of those health services. Patient was selected one within a k interval. The k interval is calculated by using this formula:

$$k = (a/n) * d$$

- k = sampling interval k
- a = actual number of patients consumed services at the OPD clinic per day (60)
- d = total number of days planned for data collection (35)
- n = required number of patients consumed services at the OPD clinic (150)

Random sampling has been accomplished by choosing every 14th patient as a sample.

3.8. Research Questions

- What is the level of patient satisfaction towards the health services at the OPD clinic of Thumbay Hospital?
- What are the factors related to the patient satisfaction with the health services at the OPD clinic of Thumbay Hospital?

3.9. Research Instrument

The research instrument was a structured questionnaire which was designed by the management of Thumbay Hospital. The questionnaire was translated into Arabic language which is used locally in the study area. The questionnaire was divided into nine sections focusing on the followings:

- Customer care
- Doctors Consultation
- Laboratory
- Radiology
- Pharmacy
- General Comments
- Physiotherapy
- Nursing
- Security

3.10. Methods for data collection

Before data collection, with the assistance from the nurses & patient coordinators the researcher had sought permission for study from the Director of healthcare services Thumbay Group.

Data was collected from all patients who visited the OPD clinic of Thumbay Hospital (both first and repeated visitors) by handing them the patient feedback questionnaire.

In the existing procedure of the hospital, when patient arrived at the OPD for medical care, patients were registered by the patient's general history collection unit. Patients then were sent to the nursing station for vitals checking & history collection (blood pressure, pulse, temperature, information about underlying diseases and allergic to medicines); based on which they are classified for order number to see physicians. After being examined by the physicians, patients went for laboratory testing based on their physician demand. Finally, patients received medications from the pharmacy. In this study, patients were identified for data collection during the time they were waiting to receive

medications. They were requested to provide their general and specific information according to the questionnaire.

3.11. Objectives

- To analyse the demographic data of the patients visiting the OPD of Thumbay Hospital, Dubai
- To analyse the enabling & need factors affecting patient satisfaction
- To analyse the components of satisfaction affecting patient satisfaction

3.12. Data collection tools

A structured Questionnaire will be used as a data collection tool. Questionnaire will be framed to extract the following information from the patients'/respondents':

- Socio-demographic factors
- Patient satisfaction towards health services provided by the hospital.
- Suggestions and comments from the respondent regarding the services of Thumbay Hospital.

3.13. Data Analysis

- The frequencies were multiplied with the scoring index for the type of response to obtain a numerical value for the same. The scoring of the same to obtain the percentage satisfaction score was calculated by this formula:

$$\text{Percentage Score} = \frac{\text{Total score}}{\text{Total number of responses} * \text{Maximum Score}} * 100$$

3.14. Conceptual framework

In this study, the conceptual framework was derived from the Behavioral Model of Health Services Use developed by Ronald M. Adersen. Consumer satisfaction is the health outcome affected by three key factors, including **predisposing characteristics, enabling resources and need factors of the consumer**. In the formulation of the studied conceptual framework ..

The factors which were not included in the study which were a part of the behavioural model were: income level of the patients, transportation cost, cultural background of the patient satisfaction. These factors were excluded keeping in mind the cultural conditions,

ethical considerations and patient's behaviour (patients are not comfortable sharing income levels) in the location where the study was carried out.

Conceptual Framework

Independent variables (factors)	Dependent variable (factors)
Predisposing characteristics Demographic factors • Age • Gender • Educational level • Occupation • Marital status Enabling resources • Health insurance • Travelling time Need factors • Health problem • Expectation	Patients' satisfaction towards health services at the out-patient department of Thumbay Hospital, Dubai, UAE Components of satisfaction • Staff Ability to handle queries • Experience of the patient in the facility • Physical environment • Courtesy of the staff • Availability of medical care resources • Quality of care • Medical expenses • Waiting time for receiving healthcare

4. Results

4.1. Data analysis

Microsoft excel was used for data analysis. Frequency and percentage were calculated for predisposing characteristics (age, gender, education level, occupation, marital status), enabling resources (health insurance and travel time), need factor (expectation and health problem) and for the level of patient satisfaction in each category of age, education, occupation, marital status, health insurance, traveling time and health problem groups. Minimum, maximum, and mean were also calculated for quantitative data.

4.2. Measurement of variables

- Age (years) was classified according to a five year aged groups. To simplify the presentation of tubular form, age was presented in 5 groups
- Sex was classified into male and female groups.

- Education attainment level was categorized into five groups:
 - No education
 - Primary school
 - Secondary school
 - High school or diploma
 - Bachelor degree or higher
- Occupation of patients was categorized into five types:
 - Government employee
 - Private employee
 - Self-employed
 - Unemployed
 - Others
- Marital status of patients was classified into two groups:
 - Single
 - Married
- Health insurance was classified into two types
 - Yes
 - No
- Traveling time was measured in minutes. It was classified into 3 groups:
 - < 30 minutes
 - 30 – 60 minutes
 - > 60 minutes
- Health problems were classified into three groups:
 - Recurring health issue,
 - Facing this issue for the first time
 - Not sure
- Expectation was measured by asking patients about the degree of their expectation towards health services. Three degrees were applied:
 - Might be excellent
 - Might be good/ok/acceptable/affordable
 - Might not be good

- Patient satisfaction was measured by using a set of questions. Patients were asked to rate their contentment level towards health services. Likert's four points rating scale was applied as follows:
 - 4 = Outstanding
 - 3 = Good
 - 2 = Satisfactory
 - 1 = Poor

Patient's satisfaction was classified into 4 levels by using the overall percentage scores as cut off point:

- Very High satisfaction (OUTSTANDING 90%-100 %)
- High satisfaction (EXCELLENT 80%-89%)
- Medium satisfaction (GOOD 70 %-79%)
- Low satisfaction (POOR 60%-69%)

This descriptive study was conducted to ascertain the patient satisfaction with health services at the out-patient department (OPD) of Thumbay Hospital in Dubai. Three hundred seventeen patients were asked complete the patient satisfaction survey at the OPD clinic. Data collection period was from April 1st to May 5th, 2015 (excluded weekend). Results are hereby presented in descriptive and tubular forms. They are presented in the followings sections:

- Patient's satisfaction towards health services
- Patient's predisposing characteristics, enabling resources, and need factors (except expectation)
- Patient's expectation towards health services at the OPD of Thumbay Hospital.
- Patient's comments and suggestions for improving the quality of health services at the OPD of Thumbay Hospital.

4.3. Patient's demographic characteristics

In this study, the predisposing characteristics, enabling resources and need factors included age, gender, marital status, education level, occupation, health insurance status, traveling time and the health problem of the patients. The results below indicate that youngest patient was 12 and oldest patient was 70 years old. The mean and the standard deviation of age were 35.69 and 12.61 years respectively. Patients were distributed in a five year aged group. Five year aged groups with age range between 14 and 96 years were tabulated.

Characteristics	Frequency (317)	Percent
Age (years)		
≤29	122	38.49
30-39	77	24.29
40-49	63	19.87
50-59	51	16.09
≥60	3	0.95
Gender		
Males	160	51.10
Females	157	48.58
Marital Status		
Married	184	56.47
Unmarried	133	43.22
Education		
Above Bachelor	88	27.44
Bachelor	27	8.83
High school	79	24.61
Secondary	88	28.08
No education	35	10.73
Occupation		
Govt. Employee	65	19.56
Private Employee	102	40.38
Self-Employee	136	33.75
Unemployed	14	5.99
Health Insurance		
Yes	221	69.72
No	96	30.28

Travelling Time		
≤30	60	18.93
≤60	88	27.76
30-60	169	53.31
Health Problem		
Recurring health problems	163	51.42
Facing this issue for the first time	91	28.71
Not sure	63	19.87

Male and female patients were more or less equally distributed, with females consisting 51.10% and males 48.58%. More than half of the patients were married 56.47 % while the unmarried population stood at 43.22%.

Most (52.62%) of the patients attained high school and secondary school education 20.3%, 36.27% of patients had education up till bachelor and above and only 10.73% of patients had no education. Related to occupation, patients were divided into four groups, including governmental and private employee, self-employed and unemployed. Private employee was the larger group (40.38%), second largest was self-employed group (33.75%). Only 5.99% of patients were unemployed.

4.4. Patient enabling resources

Regarding the status of health insurance of patients who came to visit the OPD of Thumbay Hospital, 69.72% of the patients were insured and 30.28% were self-payment. Based on the discussions with the patients and recent trends as part of the UAE's health for all plan, the healthcare division has started making health insurance mandatory for all residents of UAE.

More than half (53.31%) of the patients spent time between 30 to 60 minutes for traveling to get medical care at the OPD of Thumbay Hospital. Only (18.93%) of patients spent less than 30 minutes for traveling which can attributed due to the traffic condition in Dubai.

4.5. Patient's expectation & need factors towards health services

With connection to the question asking about having previous health problems, 51.42% of the patients answered that they had underlying diseases such as hypertension, diabetes

mellitus, heart diseases, lung diseases, thyroid disease, thalassemia; and health problem such as baby delivery, accident, diarrhoea, common cold, anxiety, musculo-skeletal diseases, teeth problem, abdomen surgery, peptic ulcer, and fever and headache. Only 28.71% of the patients had neither previous health problem/experiences nor underlying diseases.

The patients were asked about their expectation towards health services provided by the OPD of Thumbay Hospital before they experienced with the health services. There were six questions in the expectation section, including interpersonal manner of service providers, comfort of the OPD, features of the OPD clinic surrounding, availability of medical resources at the OPD, quality of care and total cost paid out of pocket for medical expense; Patients were asked to rate their answers based on the following areas:

- Might be excellent
- Might be good/ok/acceptable/affordable
- Might not be good
- 100% of patients expressed their expectation to all questions. The results obtained for the following were as follows, 85.80 % of the patients said that health services provided Might be good/ok/acceptable/affordable, only 3.47% patients thought that the services Might not be good.

4.6. Patient's satisfaction towards health services at the OPD of Thumbay Hospital

In order to measure the level of patient satisfaction the following areas were used as indicators:

Customer care	Staff ability to handle your queries
	Courtesy and help offered
	Speed of service delivery
Doctors Consultation	Doctors treatment and care
	Doctors courtesy
	Waiting time
Laboratory	Staff ability to handle your queries
	Staff Behavior
	Sample collection procedure/technical skills
	waiting time for report
Radiology	Staff ability to handle your queries
	Courtesy and help offered
	waiting time for report
Pharmacy	Staff ability to handle your queries
	Courtesy and help offered
	Availability of medicine
General Comments	Cleanliness and hygiene within the hospital
	Experience and facilities
	Price
	Time and quality of service delivery
Physiotherapy	Skills of physiotherapist
	waiting time
Nursing	Quality of Care
	Nurses Explanation
	Response time
Security	Helpful ness of security staff

Table 1: Parameters of Patient Satisfaction

The satisfaction section consisted of 26 questions. The level of patient's satisfaction towards health services at the OPD of Thumbay Hospital was measured by Likert's scale having four grades as 1 = Poor, 2 = satisfactory, 3 = Good, 4 = Outstanding.

Table 2 below shows the distribution of average patient satisfaction scores with patient satisfaction parameters corresponding to health services at the OPD of Thumbay Hospital.

Parameter	% Average Satisfaction
Customer care	76
Doctors Consultation	72
Laboratory	73
Radiology	76
Pharmacy	76
General Comments	75
Physiotherapy	70
Nursing	76
Security	80

Table 2: Summary of Patient Satisfaction Scores

The detailed distribution of patient's satisfaction towards health services at the OPD clinic of Thumbay Hospital are as follows:

4.6.1 Regarding customer care services, three questions were asked to patients, Staff ability to handle your queries, Courtesy and help offered and Speed of service delivery. Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
Customer care	Staff ability to handle your queries	104	169	17	16	306	11
	Courtesy and help offered	100	146	16	16	278	39
	Speed of service delivery	94	141	22	21	278	39

Table 3: Frequency Distribution of patient responses for customer care

The following results were derived

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Customer care	Staff ability to handle your queries	416.00	507.00	34.00	16.00	941.00	77
	Courtesy and help offered	400.00	438.00	32.00	16.00	854.00	77
	Speed of service delivery	376.00	423.00	44.00	21.00	822.00	74

Table 4: Scoring Table for customer care

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
Customer care	Staff ability to handle your queries	77	Medium	76
	Courtesy and help offered	77	Medium	
	Speed of service delivery	74	Medium	

Table 5: Customer care satisfaction Level

4.6.2 Regarding Doctors Consultation, three questions were asked to patients, Doctors treatment and care, Doctors courtesy, waiting time to see physician Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
Doctors Consultation	Doctors treatment and care	116	140	37	14	307	10
	Doctors courtesy	110	119	38	13	280	37
	Waiting time	66	42	65	26	199	118

Table 6: Frequency Distribution of patient response for Doctors consultation

The following results were derived

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Doctors Consultation	Doctors treatment and care	464.00	420.00	74.00	14.00	944.00	77
	Doctors courtesy	440.00	357.00	76.00	13.00	860.00	77
	Waiting time	264.00	126.00	130.00	26.00	494.00	62

Table 7: Scoring Table for Doctors consultation

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
Doctors Consultation	Doctors treatment and care	77	Medium	72
	Doctors courtesy	77	Medium	
	Waiting time	62	Low	

Table 8: Doctors consultation satisfaction Level

4.6.3 Regarding laboratory services four questions were asked to patients, Staff ability to handle your queries, Staff Behaviour, Sample collection procedure/technical skills and waiting time for report, Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
laboratory	Staff ability to handle your queries	63	63	86	5	217	100
	Staff Behavior	66	56	91	4	217	100
	Sample collection procedure/technical skills	58	94	54	0	206	111
	waiting time for report	61	74	21	11	167	150

Table 9: Frequency Distribution of patient response for Laboratory

The following results were derived

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Laboratory	Staff ability to handle your queries	252.00	189.00	172.00	5.00	608.00	70
	Staff Behaviour	264.00	165.00	182.00	4.00	607.00	70
	Sample collection procedure/technical skills	232.00	282.00	108.00	0.00	622.00	75
	waiting time for report	244.00	222.00	42.00	11.00	497.00	74

Table 10: Scoring Table for Laboratory

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
Laboratory	Staff ability to handle your queries	70	Medium	73
	Staff Behaviour	70	Medium	
	Sample collection procedure/technical skills	75	Medium	
	waiting time for report	74	Medium	

Table 11: Laboratory satisfaction Level

4.6.4 Regarding Pharmacy, three questions were asked to patients, Staff ability to handle your queries, Courtesy and help offered, Availability of medicine, Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
Pharmacy	Staff ability to handle your queries	49	119	11	1	180	187
	Courtesy and help offered	56	63	77	1	197	120
	Availability of medicine	60	91	37	2	190	127

Table 12: Frequency Distribution for patient response for Pharmacy

The following results were derived

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Pharmacy	Staff ability to handle your queries	196.00	357.00	22.00	1.00	574.00	80
	Courtesy and help offered	224.00	189.00	154.00	1.00	566.00	72
	Availability of medicine	240.00	273.00	74.00	2.00	585.00	77

Table 13: Scoring Table for Pharmacy

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
Pharmacy	Staff ability to handle your queries	80	High	76
	Courtesy and help offered	72	Medium	
	Availability of medicine	77	Medium	

Table 14: Pharmacy satisfaction Level

4.6.5 Regarding General Comments, four questions were asked to patients Cleanliness and hygiene within the hospital, Experience and facilities, Price and Time and quality of service delivery, Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
General Comments	Cleanliness and hygiene within the hospital	133	132	19	1	285	32
	Experience and facilities	118	122	25	12	277	40
	Price	72	106	52	22	252	65
	Time and quality of service delivery	92	128	44	15	279	38

Table 15: Frequency Distribution of patient response for General Comments

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
General Comments	Cleanliness and hygiene within the hospital	532.00	258.00	110.00	1.00	900.00	79
	Experience and facilities	472.00	366.00	50.00	12.00	876.00	79
	Price	288.00	318.00	104.00	22.00	688.00	68
	Time and quality of service delivery	368.00	384.00	88.00	15.00	825.00	74

Table 16: Scoring Table for General Comments

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
General Comments	Cleanliness and hygiene within the hospital	79	Medium	75
	Experience and facilities	79	Medium	
	Price	68	Low	
	Time and quality of service delivery	74	Medium	

Table 17: General comments satisfaction Level

4.6.6 Regarding Physiotherapy services, two questions were asked to patients, skills of physiotherapist and waiting time, Out of the 317 replies the following was the frequency distribution:

Scoring index	4	3	2	1		0
Parameter	Outstanding	Good	Satisfactory	Poor	Total	No Response
Skills of physiotherapist	25	86	55	1	167	150
waiting time	54	57	59	9	179	140

Table 18: Frequency Distribution of patient response for Physiotherapist

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Physiotherapy	Skills of physiotherapist	100.00	258.00	110.00	1.00	467.00	70
	waiting time	216.00	171.00	118.00	9.00	496.00	69

Table 19: Scoring Table for Physiotherapy

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
Physiotherapy	Skills of physiotherapist	70	High	70
	waiting time	69	Low	

Table 20: Physiotherapist satisfaction Level

4.6.7 Regarding Nursing, three questions were asked to patients, Quality of Care, Nurses Explanation, Response time, Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
Nursing	Quality of Care	150	134	12	7	303	14
	Nurses Explanation	99	73	114	7	293	34
	Response time	84	98	85	10	277	40

Table 21: Frequency Distribution of patient response for Nursing

The following results were derived

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Nursing	Quality of Care	600.00	402.00	24.00	7.00	1019.00	84
	Nurses Explanation	396.00	219.00	228.00	7.00	836.00	71
	Response time	336.00	294.00	170.00	10.00	790.00	71

Table 22: Scoring Table for Nursing

Parameter	Questions	% Satisfaction	Level of satisfaction	Average Satisfaction
Nursing	Quality of Care	84	High	76
	Nurses Explanation	71	Medium	
	Response time	71	Medium	

Table 23: Nursing satisfaction Level

4.6.8 Regarding security, one question was asked to patients, Helpfulness of security staff, Out of the 317 replies the following was the frequency distribution:

Scoring index		4	3	2	1		0
Parameter		Outstanding	Good	Satisfactory	Poor	Total	No Response
Security	Helpful ness of security staff	84	124	29	2	239	78

Table 24: Frequency Distribution of patient response for Security

PARAMETER		Outstanding	Good	Satisfactory	Poor	Score	% Score
Security	Helpful ness of security staff	336.00	372.00	58.00	2.00	764.00	80

Table 25: Scoring Table for Security

Parameter	Questions	% Satisfaction	Level of satisfaction	Overall Satisfaction
Security	Helpful ness of security staff	80	High	80

Table 26: Security satisfaction Level

The result of overall satisfaction level showed that the patients for all the areas are showed in the table below:

Patient Satisfaction			
Parameter	Questions	% Satisfaction	% Average Satisfaction
Customer care	Staff ability to handle your queries	76.88	76
	Courtesy and help offered	76.80	
	Speed of service delivery	73.92	
Parameter	Questions	% Satisfaction	% Average Satisfaction
Doctors Consultation	Doctors treatment and care	77	72
	Doctors courtesy	77	
	Waiting time	62	
Parameter	Questions	% Satisfaction	% Average Satisfaction
Laboratory	Staff ability to handle your queries	70	73
	Staff Behavior	70	
	Sample collection procedure/technical skills	75	
	waiting time for report	74	
Parameter	Questions	% Satisfaction	% Average Satisfaction
Radiology	Staff ability to handle your queries	71	76
	Courtesy and help offered	72	
	waiting time for report	86	
Parameter	Questions	% Satisfaction	% Average Satisfaction
Pharmacy	Staff ability to handle your queries	80	76
	Courtesy and help offered	72	
	Availability of medicine	77	
Parameter	Questions	% Satisfaction	% Average Satisfaction
General Comments	Cleanliness and hygiene within the hospital	79	75
	Experience and facilities	79	
	Price	68	
	Time and quality of service delivery	74	
Parameter	Questions	% Satisfaction	% Average Satisfaction
Physiotherapy	Skills of physiotherapist	70	70
	waiting time	69	
Parameter	Questions	% Satisfaction	% average Satisfaction
Nursing	Quality of Care	84	76
	Nurses Explanation	71	
	Response time	71	
Parameter	Questions	% Satisfaction	% average Satisfaction
Security	Helpful ness of security staff	80	80
AVERAGE SATISFACTION			75

4.7. Patient's suggestions and comments for improving the quality of health services at the OPD of Thumbay Hospital

Out of 317 patients, 52% of the patients provided suggestions and comments for improving the quality of health services at the OPD clinic while 48% of the patients did not. Mostly, each patient gave his/her suggestions and comments by focusing on more than one point of view. Regarding the question of the important things/areas that should be done to improve the quality of health services, patients gave suggestions and comments. The suggestions and comments were categorized into types of suggestions & comments received in the table below:

Type of suggestions and comments received (frequency of each type of comment)

Suggestions and comments	Frequency	Percent
The waiting time for seeing doctors	50	15.77%
The commencement of working hours of doctors	15	4.7%
The interpersonal manner of nurses and doctors	20	6.30%
The size of OPD clinic's space	15	4.7%
cleanliness of space and toilets	12	3.78%
Availability of car parking & cafeteria	17	5.36%
The quantity of toilets, especially toilets for disabled and elderly people; and chairs at the waiting area	10	3.15%
Possibility of having one stop service at the OPD clinic	10	3.15%
The possibility of having a standard cost for drugs	15	4.7%

Patients also provided their ideas about how to improve those things. Their ideas are presented as follows:

- Doctors and nurses should be more polite and friendly when interacting with patients. Ask patients more about what's wrong with them and provide clearer explanation and better advice to the patients.

- Increase number of doctors and dentists. Number of doctors should be appointed for the afternoon hours of the OPD clinic. Doctors should start working as early as the schedule stated.
- Toilets and space should be cleaned more often and tissue paper in the toilets should be provided. Special toilets for elderly people and disabled should be constructed.
- First time visitors should be separated from follow up patients. The order number to see doctor for the emergency cases should not be applied.
- Billing & Registration counters should be separated for insurance & self-paying patients.

5. Discussion

5.1. Methodological concerns

The questionnaire was designed for interviewing in order to minimize Or avoid any misunderstanding or confusion about questions, and missing data. Systematic random sampling had been performed to avoid selection bias. Moreover, The researcher observed the process of the data collection by herself to ensure the Quality of the data.

5.2. Patient's satisfaction towards health services at the OPD clinic Thumbay Hospital

- Result of the **overall average satisfaction** indicated by this study was 75%. In connection with this result, the overall satisfaction level of this study was higher than the satisfaction level found by the study of Tangman kong worakoon who reported that the level of the overall satisfaction of the clients towards the services of Lad Yao hospital was 52% (78).
- It was observed that there was wide variation in the level of satisfaction received by patients in different studies conducted in different times and places across Thumbay Group of hospitals(Quality Assurance Department Patient satisfaction Quality indicator data 2013, 2014)
- The above different determination of satisfaction level might be one leading factor of the wide variation in the proportion of satisfaction level obtained from those studies.

GRADING	%	Satisfaction Level
OUTSTANDING	90-100	Very High satisfaction
EXCELLENT	80-89	High satisfaction

GOOD	70-79	Medium satisfaction
POOR	60-69	Low satisfaction

With regard to the level of satisfaction in eight components, namely

- **Staff Ability to handle queries,**
- **Experience of the patient in the facility,**
- **Physical environment,**
- **Courtesy of the staff,**
- **Availability of medical care resources, quality of care,**
- **Medical expenses and waiting time for receiving healthcare,**
- This study revealed that patients showed medium levels of satisfaction. The **price of medical services & waiting time** to see physicians namely received low satisfaction results: 68% and 62%, respectively, however **quality of nursing care and physical environment** received high level of satisfaction 86% and medium level of satisfaction respectively when compared with other components.
- These findings could reflect that patients were more concerned about medical expense, quality of care, waiting time and physical environment components than the others.
- With regard to accessibility to health services at the OPD clinic (waiting time for receiving healthcare services), mixed results were obtained from this parameter.
- The patients showed high levels of satisfaction with waiting time related to customer care, radiology, laboratory, nursing care but low levels of satisfaction with waiting time for doctor's consultation.
- With respect to quality of care component, 84% of the patients showed high levels of satisfaction with the quality of nursing care, however the level of satisfaction with medication services and physicians care was moderate reported at 77 %.
- These results could reflect that the patients showed moderate to low levels of satisfaction with the quality of care component of satisfaction survey of Thumbay Hospital.

6. Conclusion

Patient satisfaction is the key indicator that can reflect the health service quality at any level of health care facilities. Thumbay Hospital has plans for making patient satisfaction survey as a quality indicator for monitoring on a monthly basis for both inpatient and outpatient department. The objectives of this study were to **assess the level of patient satisfaction towards health services at the OPD of Thumbay Hospital** and to determine the **association between dependent and independent variables**. The dependent variable of interest was the patient satisfaction towards health services at the OPD of Thumbay Hospital.

The number of patients was calculated at 95% Confidence Level, 5 % confidence interval & the estimated population size 1800 (estimated 60 patients per day for 35 day period study) the sample size was calculated to be 317, systematic random sampling was employed to select patients from the OPD clinic of the hospital based on the calculations a patient was given the patient feedback form with an interval of 14 patients.

The result revealed that the age of the patients was in between 12 to 70 years and the mean age was 35.69 years with standard deviation of 12.61. Almost equal number of female & male patients participated in this study. A higher percentage (56.47%) of patients were married and more than half (88.1%) of them had completed education up to high school. Private and self-employed were the top rank (40.38% & 33.75%) occupation in this study. Most (70%) of the patients who used the healthcare services were insured. More than half (53.3%) of patients spent time between half to one hour to travel to the hospital. Over half of the patients (51.42%) visited the facility with recurring health problems.

7. Recommendations

This study leads to a number of recommendations for contributing to the improvement of quality of health services at the OPD clinic of Thumbay Hospital as follows:

- The accessibility to health services at the OPD clinic has been the major concern of patients, the researcher, therefore, strongly supports the comments given by patients, in which the hospital should consider waiting time for seeing doctors as a priority issue that needs to be addressed as soon as possible in order to meet the patient's satisfaction. The hospital should pay more attention to the regulation on working hours of his OPD clinic and put more efforts to reinforce the implementation of this regulation. And the recruitment of more doctors should also be considered.
- This study also revealed that quality of care needs to be improved, in particular in the area of physical examination and treatment performance by doctors, and the duration of time that doctors spend with patients. Clinical leaders of the hospital should review the physical examination and treatment performance by doctors.
- Interpersonal manner of doctors and nurses also should be considered to improve as much as possible. Two ways communication with politeness and friendliness should be applied during the provision of medical care services to patients. Training programs to address this issue should be established for the OPD clinic staff as soon as possible so that it will help to increase patient satisfaction level.
- This study pointed out that patients less satisfied with their medical expense. Even though the amount of patients who paid out of pocket was less than those who did not pay anything, their satisfaction still need to be considered and improved by carefully discussing with patients on their ability to pay and matching their need rather than their demand in case of their ability to pay is limited. In addition, price of medications should be posted in front of the pharmacy in order to keep patients informed for the sake of transparency, and this will help the OPD clinic to satisfy his patients.
- Further studies on patient satisfaction towards health services should be conducted in parallel with studies on job satisfaction of health service providers which will be useful to understand the concerns that make patients dissatisfied with health services provided by health facility and solve the problems accordingly.

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