

THE IMPACT OF SERVICE QUALITY, BRAND IMAGE,
AND BRAND TRUST ON PATIENT SATISFACTION OF
PRIVATE HOSPITALS IN DHAKA CITY OF
BANGLADESH: THE MODERATOR ROLE IS PRICE

BY

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the degree of Doctor of Philosophy in Business Administration.

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ABSTRACT

Nowadays, the Health Industry is accorded as a high priority economic hospital industry all over the world. People are very concerned about their health and hold the expectation to get proper treatment and quality services from hospitals. Like other industries, a very popular hospital is graded by its services quality and sometimes even branded as a Five Star hospital. Because the Health Care Industry has become a very competitive economic sector, hospital management are focusing more on providing premium services, maintaining their image to become trustworthy to their patients, while ensuring good profits. That is why the aim of this study is to quantitative research the impact of Service Quality, Brand Image, Brand Trust, and Price on Patient Satisfaction of Private Hospitals in Dhaka, the capital city of Bangladesh. To collect the data, a usable sample of 359 patients was selected from eight renown private hospitals in Dhaka. A questionnaire was also used to collect data via the convenience Sampling Method. To accomplish the objectives of the study, we performed robust data analyses on the collected dataset. This includes Descriptive Analysis, Reliability and Validity Tests, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Hypothesis Testing by SEM. Furthermore, the study was conducted via using the Statistical Package for the Social Sciences (SPSS) and AMOS software through the Structural Equation Modelling (SEM) technique. The findings of this study come with higher reliability and validity where five new dimensions emerged in service quality construct along with another four constructs. The highest variance comes in Advance Technology & Skilled Specialist of Service Quality. We found that Brand Image and Brand Trust has a higher significance on patients' satisfaction, while no significance was found for price. These findings of this study are very substantial for the private hospital sector of, not just Dhaka, but Bangladesh as a whole. With the enhancement of Private Hospitals' Brand Image and Brand Trust, these findings can be used to serve as useful and set marketing strategies that ultimately retain the existing patients, as well as attract new patients of private hospitals in Dhaka city for higher purchases. By ensuring practitioner and policy maker emphasis on brand image and brand trust. marketing can also benefit by making their hospital's business a globally lucrative industry.

ملخص البحث

تُعَدُّ صناعة الصحة من أهم الصناعات الاقتصادية في جميع أنحاء العالم حالياً. يهتم الناس اليوم كثيراً بصحتهم و يتطلعون إلى الحصول على العلاج المناسب والخدمات المميّزة العالية من المستشفيات. فمثل الصناعات الأخرى، تتفوق المستشفيات بناءً على جودة خدماتها، وأحياناً تُوصَف بأنها مستشفيات خمس نجوم. نظراً إلى أن صناعة الرعاية الصحية أصبحت مجالاً اقتصادياً تنافسياً للغاية، فهي تركز على تنظيم المستشفيات على تقديم خدمات متميزة والحفاظ على منصبها لتصبح موثوقة لدى مرضاها سعياً إلى تحقيق أرباح جيدة. لذلك، اعتماداً على البحث الكمي، تهدف هذه الدراسة تحقيق تأثير جودة الخدمة وصورة العلامة التجارية والثقة في العلامة التجارية والسعر على اطمئنان المرضى في المستشفيات الخاصة في دكا عاصمة بنغلاديش. من أجل جمع البيانات، تم اختيار عينة صالحة الاستخدام من 359 مريضاً من ثمانية مستشفيات خاصة مشهورة في دكا. كما استخدمنا استبياناً لجمع البيانات من خلال طريقة العينة المريحة. لتحقيق أهداف الدراسة، قد اعتمدنا على تحليلات بيانات متماسكة على مجموعة البيانات التي تم جمعها، (EFA) يشمل ذلك التحليل الوصفي، واختبارات الموثوقية والصلاحية، والتحليل العاملي الاستكشافي (SEM) واختبار الفرضيات باستخدام نموذج المعادلات الهيكلية، (CFA) والتحليل العاملي التأكيدى وبرنامج (SPSS) علاوة على ذلك، تم إجراء الدراسة باستخدام حزمة البرامج الإحصائية للعلوم الاجتماعية أظهرت نتائج هذه الدراسة موثوقية وصلاحية (SEM) من خلال تقنية نموذج المعادلات الهيكلية AMOS عالية حيث ظهرت خمسة أبعاد جديدة في بُنية جودة الخدمة إلى جانب أربعة بُنى أخرى. وجاءت أعلى

نسبة تباين في التكنولوجيا المتقدمة والاختصاصيين المهرة في جودة الخدمة. وجدنا أن صورة العلامة التجارية والثقة في العلامة التجارية لهما تأثير كبير على اطمئنان المرضى، في حين لم يكن للسعر أي تأثير مذكور. هذه النتائج ذات أهمية كبيرة لمجال المستشفيات الخاصة، ليس فقط في دكا، بل في بنغلاديش كلها. مع تعزيز صورة العلامة التجارية والثقة في العلامة التجارية للمستشفيات الخاصة،

يمكن استخدام هذه النتائج لوضع استراتيجيات تسويقية فعالة تحتفظ بالمرضى الحاليين وتجذب مرضى جدد للمستشفيات الخاصة في مدينة دكا لتحقيق مبيعات أعلى. من خلال ضمان تركيز الممارسين وصناع القرار على صورة العلامة التجارية والثقة في العلامة التجارية، يمكن أن يستفيد التسويق أيضاً بجعل أعمال المستشفيات صناعة مربحة على مستوى العالم.

APPROVAL PAGE

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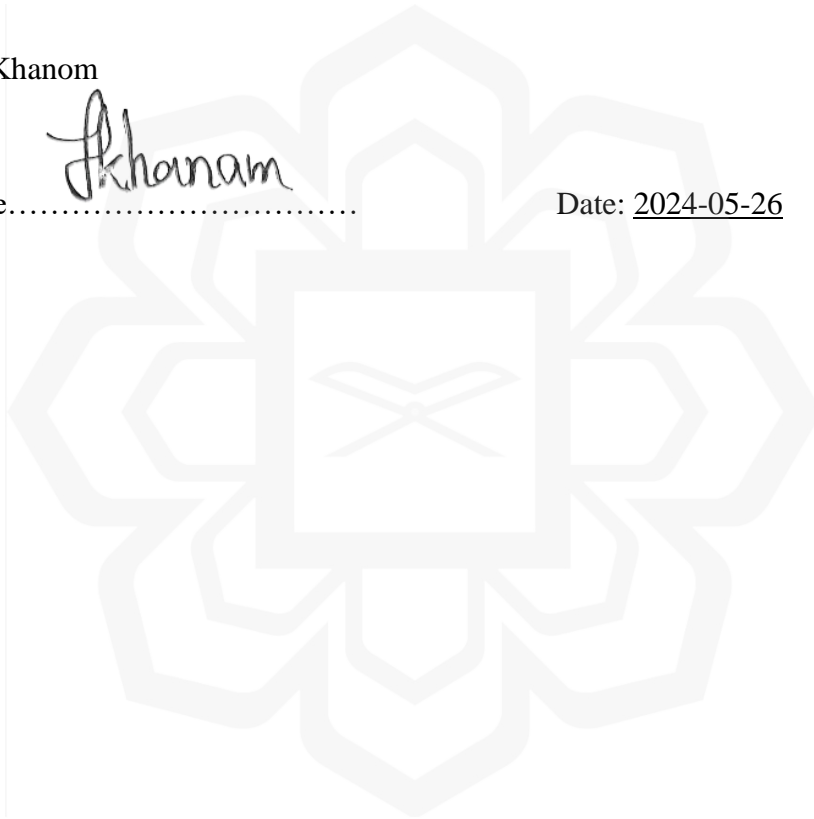
DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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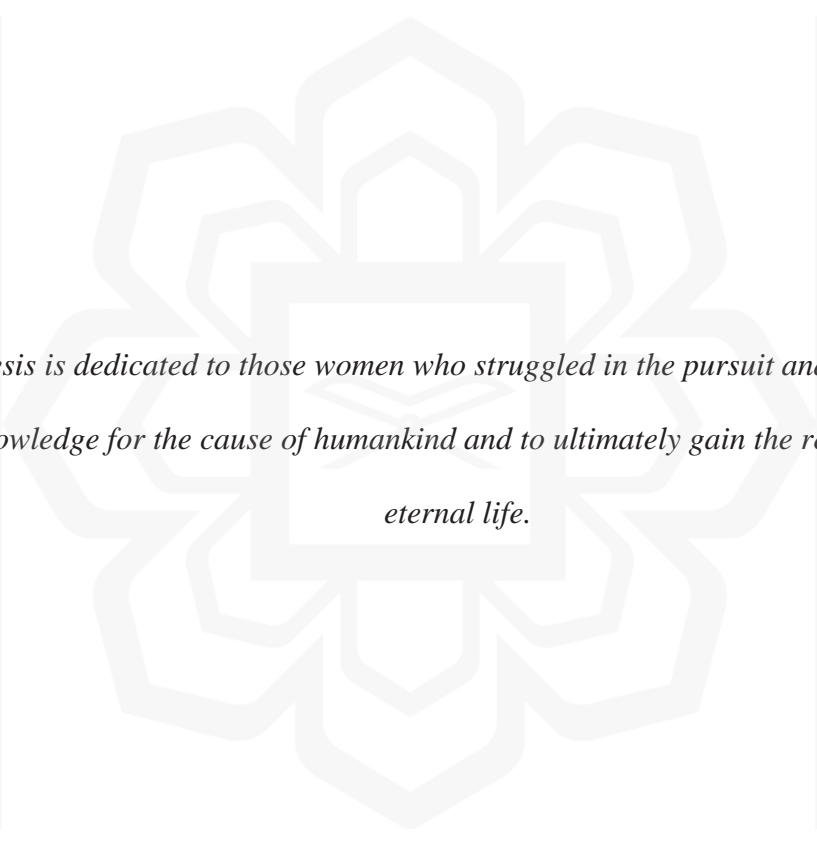
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This thesis is dedicated to those women who struggled in the pursuit and dissemination of knowledge for the cause of humankind and to ultimately gain the rewards in the eternal life.

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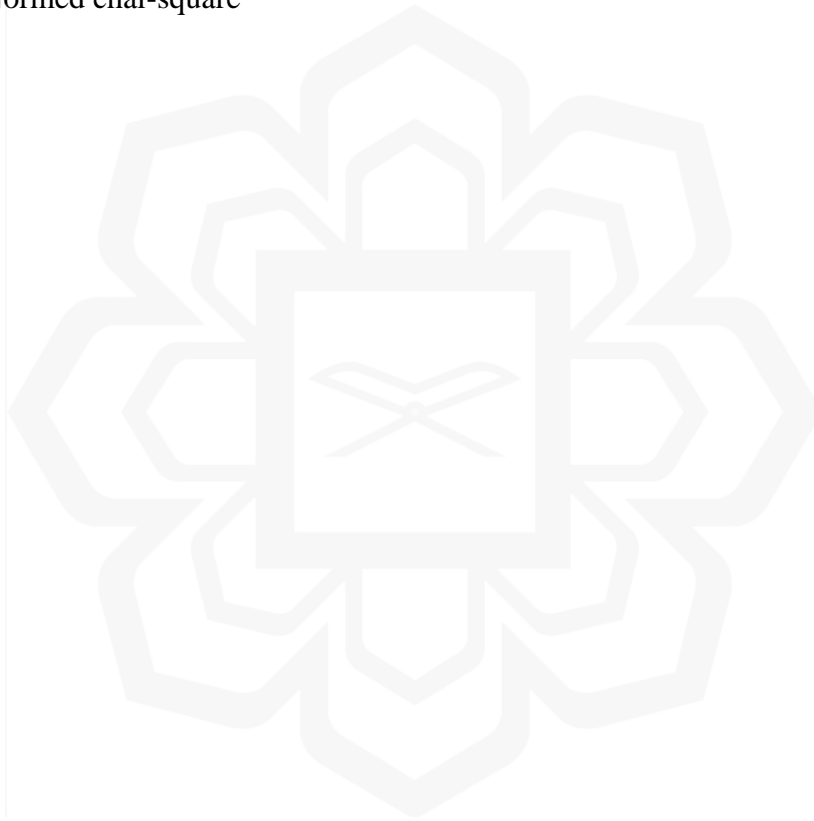


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LIST OF SYMBOLS

α	Alpha
$>$	Greater than
$<$	Smaller than
χ^2	Normed chi-square



LIST OF ABBREVIATION

BBS	Bangladesh Bureau of Statistics
BI	Brand Image
BT	Brand Trust
CS	Customer Satisfaction
CL	Customer Loyalty
DGHS	Director General of Health Services
HB	Health Bulletin
IBF	Islami Bank Foundation
MOH&FW	Ministry of Health and Family Welfare
PS	Patients Satisfaction
SQ	Service Quality
USA	United States of America
WHO	World Health Organization
WOM	Word of Mouth

CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Nowadays, business enterprises are becoming very competitive and challenging. To sustain all kinds of business, Customer Satisfaction (Fynes et al. 2005) is the top priority to survive in a market that is primarily based on customer's wants and expectations (Parasuraman et al. 1990). In this case, a business entity should sustain and deliver service quality to their customers (Poerwadi et al. 2019).

In the current business world, health care industries are becoming one of the fastest growing business institutions (Ferreira, et al. 2023). Since healthcare is regarded as a service provider, it is very pertinent that this sort of industry makes constant improvements in the services that they render (Wulandari et al. 2024., Agarwal et al. 2022., and Akil & Ungan, 2022). Although Hospitals provide similar services like other service industries providers, the value of service is quite different and distinguished (Shabbir et al. 2016., & Yousef et al. 1996). Hence, the health services are more inclined to choose customers that face unique challenges compared to other businesses (Lombardozzi, 2023., Agarwal et al 2022, Rumi et al. 2021, and Yousapronpaiboon & Johnson, 2013).

In the Health Sector services, the 'patient' is the primary concern and is the valued 'customer' of hospitals (Mohsin et al.2021). According to Grogan et al (2000) and Sritharan & Velnampy (2011) that a patients' satisfaction plays a central role in evaluating the service quality of a hospital and in judging towards success and in advancing the health care structures. Patients' satisfaction is described by their judgment according to their expectations and continued ties with the hospital. Here, judgment can be both technological and personal treatments which directly influence patient satisfaction (Campbell et al. 2000). Furthermore, for a worst-case scenario wrong inspection and treatment can lead to a patient's death. Generally, patients' satisfaction lies mainly with the hospital's facilities and service quality, its positive brand image (Hosgor & Sevim, 2022; and Hawrysz et al. 2021; Altaf et al. 2018), trust and reasonable hospital's price. Thus, Ng and Luk (2019)

stress that patient satisfaction has become the vital and key quality indicator to achieve competitive advantages amongst hospitals (Hosgor & Sevim, 2022; Surydana, 2017). Even in the last few decades, patient satisfaction was given significant attention in health care assessments of the World Health Organization's (WHO) structure (Murray & Frenk, 1999) to accomplish the hospitals' management goal, an excellent brand image to develop a meaningful indicator of services (Hosgor & Sevim, 2022; O'Connor et al., 1994). Hence, the hospital management should attempt to provide zero defect service to satisfy customers (Zaim et al., 2010). Furthermore, it is essential for the hospital management to provide dynamic, sincere, and prudent treatments which are related to healthier life.

Besides service quality (Alijanzadeh et al., 2016., Shabbir et al. 2016) to ensure patient satisfaction, brand (Hosgor & Sevim, 2022; And Hawrysz et al. 2021 and Wu, 2011) and price (Andaleeb, 2001 and Zubayer, 2017) also contribute significant roles to the present hospital business prospects. Wu (2011) is of the opinion that to satisfy patients and encourage them for repeat visitations hospitals should undertake the market strategy that emphasizes its brand image. Da Silva & Alwi (2008) and Lai et al (2009) also found that a positive Brand Image results in various kinds of positive consequences including customer satisfaction and repurchase of products (Hosgor & Sevim, 2022; and Hawrysz et al. 2021 and Wu, 2011). The brand image is the perception or sense of the customer about an organization and is vital for competitive advantage purposes (Hawrysz et al. 2021; Barich & Kotler, 1991 and Sener, 2014). When brand trust assessment matches customer expectations then customers are more confident about both the product and service and would by word of mouth recommend it to others (Poerwadi et al., 2019).

Therefore, in the hospital business for both private and public hospitals, patients' views are directly involved in choosing a hospital that led to level of patient satisfaction (Ferreira et al. 2023., Habib & Chanda, 2021, and Shabbir et al, 2016). That is why, in establishing a good internal infrastructural system of a hospital, some major concerns include the importance to beef up medical dealings, medical expertise, state-of-the-art information technology, reduced death rate of mother and child, minimized medical errors, increased Patients' Security, minimized cost, reduced waiting time and so forth (Salem

2016, MOHE 2016, Teo, 2013 & MOH 2012). Thus, many studies concluded that systematic review and assessments are crucial factors in establishing hospitals' success (Ferreira et al. 2023., Begum et al 2021; Cronin & Taylor 1992, Irfan & Ijaz, 2011; Yousapronpaiboon & Johnson, 2013).

In this study focuses attention to the Private Health Sector in Bangladesh. As the country is said to be incapable of utilizing its existing resources efficiently and accurately (Farhana, 2017). Despite the increasing economic growth in Bangladesh in recent years, improvement in the health care infrastructure is still far behind (Zubayer, 2017). The Bangladesh Bureau of Statistics (2014) reported that 31% of the population lives under poverty hence public hospitals play a vital role in giving essential services to its citizens (Rimi et al. 2014). However, due to the poor public health infrastructural systems and the lack of financing in the public health care system, 80% of Bangladeshis had to turn to private hospitals (World Bank Report. 2003). As a result, in the last few years, private hospitals have been increasing but the quality of services is not to mark (Khandakar et al., 2007). Many private hospitals have failed to achieve patients' trust in Bangladesh (Farhana, 2017 & IBAF 2014).

Hence, it is extremely important for hospital managements to know the reasons and understand the stage of satisfaction to meet patients' demands for their success in business ventures (Mohiuddin, 2020 and Farhana, 2017).

1.2 OVERVIEW OF HOSPITALS IN BANGLADESH

Bangladesh is a small country located in South Asia. It is one of the most densely inhabited countries in the world (Shafiqur et al., 2010). Bangladesh is 8th in terms of population with 168 million people and among one of the highest Muslim populated countries in the world (The Report of United Nations, 2023., and BBS, 2023). Where Dhaka, is the capital city of Bangladesh residences approximately 12 million people. Dhaka contributes more than 35% of the country's economy and is the center of its political, economic, cultural, educational, medical and research base. It was said that the number of hospitals density of the population of Bangladesh were not enough to serve the huge number of patients in Bangladesh (Ahmed et al., 2015).

According to the Bangladesh Bureau Statistics (BBS, 2018), in terms of health care facilities which included public, private and non-government health care facilities there was a total number of 5816 health care facilities which included public, private and non-government health care facilities. The BBS further elaborated that in 2015 the total number of hospitals was 1,683. This number was after deducting clinics, medical centers, nursing homes etc. Out of the 1,683 hospitals, 678 were public hospitals while 1005 were private hospitals. Moreover, in those hospitals, facilities for administration, infrastructure, staffing and gender distribution, showed a huge inadequacy as per what is needed (Annual Report: Health Bulletin, 2016; MOH&FW, 2019). There are countless other shortfalls within the existing health care infrastructure including the lack of competent management, shortage of essential supply and deficiency of medicine and necessary instruments (MOH&FW, 2019, Andaleeb, 2000). When compared to the huge number of populations in Bangladesh, those facilities were obviously unsatisfactory. The Health Bulletin of DGHS (2014) exposed a clear picture depicting the existing unsatisfactory situation in Bangladesh health care services whereby even the staff's class (designation), sectional, filled, and vacant posts are also very alarmingly unbalanced (BBS, 2022).

In terms of staff gender distribution, the Bangladesh health care services fared very unsatisfactorily (DGHS, 2016). The disproportionate staff gender distribution clearly did not fulfil the government's need for 60% male and 40% female staffing. Furthermore, the 34% vacant posts also showed a huge lack of manning the health institutions of the country (BBS 2022., HB, 2014. And DGHS, 2016). While the WHO report stated that doctors-patients ratio is supposed to be at 5.27:10000 (Mohiuddin, 2020).

Apparently, overall, the health care delivery system in Bangladesh was starkly incompetent to serve the huge number of patients when the number of doctors-patients ratio was too minimal and disproportionate. For example, it turned out that consultancy hours were less than one minute per patient for outpatients. On the other hand, the average waiting time spent seeing doctors was 1.5 hours. Patients grappled for essential services due to limited equipment and instruments. For instance, one hospital bed was miserably meant for 1667 patients and to make it worse, most of the time there were no doctors on duty as

34% of the total medical posts were left vacant and not filled in overall (Mohiuddin, 2020. and Andaleeb, 2000).

The World Bank Report (1987) also disclosed that only 30% of patients could access hospital services in Bangladesh while the rest of them had no access at all (Mohiuddin, 2020.; Molla 2019., Andaleeb 2027, and Sen & Achery, 1997). However, since 2015, situations had somewhat improved especially when the government set specific targets to reduce several dangerous diseases such as MDG 4 (reduce child mortality rate as set by WHO) child death, maternal death, increase immunization coverage, minimize malaria, diarrhoea, and tuberculosis infections (Ahmed et al, 2015). Even the Ministry of Health and Family Welfare (MOH&FW, 2010) also revealed a report showing that the medical expenditures and facilities in the Bangladesh Health Care were low as compared to the needs of the ordinary citizens. Meanwhile, middle-class citizens whose incomes have gained purchasing power could now afford to turn to private hospitals instead of depending solely on public hospitals to receive quality care services (Begum et al. 2021; Begum, 2017)

1.2.1 Private Hospitals in Dhaka

Because of the increasing demand for quality health care services from the Middle-income segment of the population, numerous private hospitals are rapidly established in Dhaka city. This influx of private hospitals is also to counter the imminent problem of the lack of public hospitals and public dissatisfactions of them (Zubayer, 2017; Andaleeb, 2000, Savas, 2002, Kara et al. 2003). It is found that among other key reasons in opting for Private Hospitals in Bangladesh include factors like availability of doctors, caring nurses, and competent specialists. These reflect the satisfaction level of patients (Hasan et al. 2012 and Huque, 2011). Of course, most private hospitals are ever ready to give treatments to patients who can afford to pay more. Nevertheless, even though it is undeniable that some Private Hospitals in Bangladesh do provide better-Quality Services compared to Public Hospitals (Ahmed et al. 2015) but as revealed by two earlier studies, there were a lot of complaints

and dissatisfactions that came from patients of private hospitals (Mohiuddin, 2020.; Andaleb, 2007).

Among the serious socio-economic issues faced by Bangladeshi population relating to health care services is definitely very expensive. A total of 67% Bangladeshi is forced to pay from their own pocket for health treatments. In fact, the world standard for the need to pay for healthcare is only below 32% (Fahim et al, 2019, Mohiuddin, 2020). Where Bangladeshis had to fork their own money to enjoy good health care service from private hospitals instead of public hospitals. In addition, availability of hospitals plays another important factor in addressing this predicament. There are 1005 private hospitals compared to only 138 public hospitals in Dhaka and this is obviously insufficient for the 12 million populations in Dhaka alone not to mention for the millions of other patients who come for treatment from other parts of Bangladesh (MOH&FW 2021, 2020).

To these worse situations, a previous study found that out of 138 Public Hospitals only 93 of them have had their licenses renewed by 2020 and among them, only 65 are in the capital city of Dhaka (MOHE&FW, 2021). Mohiuddin (2020) and Nuri et al (2019) found that likewise the public hospitals, bad reputations of private hospitals also made people unhappy about healthcare in Bangladesh. In 2019 the Daily Star, 27th March reported that 65% of the teaching staff of Private Hospitals lacked applied knowledge and many doctors who completed MBBS degree were ill equipped and were with insufficient skills. These factors really risk security issues and ‘trust’ to patients (Mohiuddin, 2020). Surprisingly, in terms of availability of hospital beds, Public Hospitals of Bangladesh have a total of 1200 ICU beds but in the private hospitals only 737 ICU beds are available.

Unfortunately, in 2020, during the COVID-19 pandemic, the Minister of Health candidly disclosed that there were only five hundred ventilators in both the Private and Public Hospitals in Bangladesh against the 168.7 million people (UN, 2018) in the country (Hasan, 2020 and Mohiuddin, 2020). Moreover, from the Ministry of Health list (Bangladesh MOH, 2020, 2019) only a few of the private hospitals had emergency services and facilities with their own laboratories, 24 hours accessibility and very few had more than 250 beds facilities. Among those Private Hospitals only 39 Hospitals had enough ICU beds

while 22 other Hospitals had only 10 ICU beds or so. Some hospitals had more than 10 CCU beds (MOHE & FW, 2020).

Among the 65 licensed private hospitals (MOHE & FW, 2021) in Dhaka city, most patients preferred services from the following Private Hospitals i.e., Evergreen Private Hospital, Ibn Sina Private Hospital (Mona, 2017., Begum, 2017., Zubayer, 2017., Begum & Alam, 2016), Islami Bank Private Hospital (Annual Report of IBF, 2015) and Ad-Din Private Hospital (Fistula-Care, 2012), Green life Hospital, Dhaka Central International Medical college Hospitals, Impulse hospitals, Uttora Adhunik Hospitals (MOHE & FW, 2019). Islami Bank Private Hospitals has been recognized that for almost two decades now, these hospitals had served millions of people to live healthier lives (IBF, 2015). At present, four hospitals namely the Square Hospital, Apollo renamed Evercare and other related hospitals had around 40,000 in-patients in six months (Zubayer, 2017). In terms of price private hospitals are of course very expensive and unaffordable for some middle-income population and most of the poor citizens of Bangladesh (Sheikh et al. 2022 and Christo et al. 2014). Hence, both in-patients and out-patients that got their treatment from Private Hospitals had to struggle to pay for their hospital bills because 67% of the price had to be borne by the patients themselves (Mohiuddin, 2020).

Nevertheless, despite the high prices imposed by private hospitals patients still had to flock to these health care institutions to get treatment. Figure 1.1 shows numerous patients struggling for space in a corridor of a private medical college during the COVID-19 pandemic in 2019 even though the fees imposed on them were not commensurate with the facilities that they paid for.



Figure 1.1 shows patients' struggle in a private medical college indoor during pandemic situation in 2019

Source: Patient Experience Journal, Volume 7 issues 2 (Mohiuddin, 2020)

A recent study by Sarker et al. (2021) revealed that many patients faced difficulties to pay for their treatments where nearly 43% of households paid their hospital bills by selling their properties, borrowing money, or getting financial support from relatives (Sheikh et al. 2022). Unfortunately, many studies discovered that there is no significant difference in services from Private Hospitals despite their exorbitant price (Begum et al. 2020, Mohiuddin, 2020, Zubayer, 2017, & Andaleeb et al. 2007). It is common knowledge that because of the high costs of private hospitals, 40% to 60% of the citizens cannot afford to pay and had to suffer and endure lack of treatment for their prolonged diseases (Baker & Maksud, 2003, Andaleeb, 2007, 2000). Remarkably, there are a few private hospitals such as Ad Deen hospitals, Islami bank private hospitals etc. that lower their bills to assist in reducing patients' sufferings and to save the needy and middle-income patients' lives. They provided quality services at low and affordable costs. Three Private Hospitals notably the Islami Bank Private Hospital, Ibn Sina Private Hospital and Ad-Din Private Hospital even

practice free treatments and provide discounts in special cases (IBAF, 2014., Ad-Deen org., 2022) in compared to competitors in the market.

The main objective of these philanthropic private hospitals is to contribute and assist the government in providing affordable health care costs with a good environment and using the latest technological facilities for the benefit of the population. These efforts resulted in an exemplary image for the hospitals. Their effective and efficient quality services led to higher patients' satisfactions (IBF, 2014; Addin.org, 2016; IBNS Trust, 2016). They had served a huge number of patients, protecting them from unexpected deaths and suffering from prolonged diseases (IBF., 2014 & 2022).

Thus, the study aims to evaluate weaknesses of all private hospitals in Dhaka, investigate their deficiencies and suggest ways to overcome these challenges. The study then will identify the reasons behind current patient dissatisfactions as regards services rendered and price incurred to them by private hospitals in Dhaka especially pertaining to their service quality, brand image, brand trust as well as the worthiness of price.

1.3 PROBLEM STATEMENT

Hospitals' business has distinct characteristics, higher competitive and open-door strategies compared to other service businesses (Moshood et al.2022., & Agarwal et al. 2021) that are directly and indirectly related to patient satisfaction. Previous studies have supported that patient satisfaction is dependent on its 'Service Quality, Brand Image (Sukawati, 2021 & Wu, 2011) and towards its Trusts (Begum, 2017., Jamil et al. 2016., Sciulli & Missioen., 2015; and Wu, 2013, 2011). Freedenberg (1997) also emphasizes that to provide Patient Satisfaction for the hospital's Service Quality is essential in maintaining quality control, quick services, and efficient health treatment. Several other studies also confirmed that an organizational brand's superior level of Service Quality is related to achieving high profit, cost saving and high market share (Sudirman, 2022., Parasuraman, 1985.; Fullerton & McCullough, 2014.; Rust & Zahoric, 1993).

In Bangladesh in the last few decades, a significant number of private hospitals were established, and progress had been made towards the improvement of the overall health services. Yet, there are a lot of obstacles still being faced (Sheikh et al. 2022). Though the growth rate of Private Hospitals is notably high in Dhaka, the number of patients' demands for service quality remains unsatisfactory. This is mainly due to mismanagement, inaccurate services, non-filling of vacant positions for doctors, nurses and staff despite their high demands, long waiting queues and delays for treatments (Mohiuddin, 2020., Molla, 2019, MOH & RW, 2017, Rafiqzaman et al. 2017, Rashid, 2007, & Chaudhury et al. 2006, Andaleeb, 2007 & Barket et al. 2003). These represent essential services to be provided and to be improved upon (Zubayer, 2017 & Andaleeb, 2011. 2000).

Meanwhile, the new concept of hospitals' Brand Image plays a vital role in current competitive advantages (Ferreira et al. 2023, Hawraysz et al. 2021, Altaf et al. 2018) to gain Patients Satisfaction (Vimla &Taneja, 2020) in private hospitals. According to Sukawati (2021), brand images directly boost patients' focus to pick a hospital (Weng et al. 2023) to reflect whether it is a splendid choice or otherwise for patients to decide. But in Dhaka, Private Hospitals seem to lose out on Brand Image as compared to Public Hospitals since they showed no significant improvements even though they offer almost 80% of the facilities as promised but they failed to gain Patients' Satisfaction. Because of this image of Private Hospitals in Bangladesh is poor it had caused many patients to resort to neighboring countries to get better health care services (Farhana, 2017).

On the other hand, Lovelock (2017) believes that the higher level of patient satisfaction leads to the enhancement of patients' trust (Farhana, 2017 & Jhon et al. 2007). As, brand trust is a decisive feature for patients both before as well as after enjoying the services (Fatema, 2019). Therefore, hospital's Brand Trust can bring about the 'repurchasing power' of services and to maintain long term relationships with patients as well as create a differentiation on the services provided to the patients (Hosseini, 2017).

Literature reveals that many patients manage to gain health care services from different sources and that they can get quality treatment and trust from private hospitals in Dhaka (Mohiuddin, 2020). Begum et al. (2021) views that private hospitals tend to offer

better service quality to meet the patient's satisfaction compared to public hospitals. They acknowledge the price for treatments that patients must pay is three times higher and for critical diseases is more than five times higher than Public Hospitals. Yet sometimes, these private hospitals still lack service quality, hospital image and trust causing many patients to go overseas hospitals for treatment instead (Begum, 2017).

As a developing country, even though Bangladesh has emphasized patients' views into account as far as health care services is concerned but little has been done to measure the satisfaction and standards of the hospitals' service and image. So, Begum (2017) insists that it is vital to investigate and identify the real problem of hospitals in Bangladesh (Begum et al. 2021, Andaleeb et al. 2007) and specially to overcome the various health care problems and to make sure that patients' security is put in place (Heuvel, 2006).

According to prior research the choice to pick the hospital is shaped by the service quality, price, and patients' satisfaction (Dhakate & Joshi, 2023). Thus, patients' satisfaction should be emphasized where local hospitals need to find out the hospitals' Brand Image deterioration (Huang & Lai, 2021). And, to increase patient satisfaction there is also the need to identify the hospital's service quality to re-gain its Brand Image and Trust (Huei et al. 2015). In the meantime, on examining price-efficient schemes (Otani & Kurtz, 2004) Begum et al. (2021) and Begum (2017) justify that it is vital to assess the price regime as well to see if it has any significant influence to procure the services of the private hospitals in Dhaka (Zubayer, 2017).

Though in Bangladesh, some remarkable studies have been conducted on public and private hospitals by scholars such as Sheikh (2022), Begum et al. (2021), Mohiuddin (2020), (Molla 2020), Razia et al (2019), Andaleeb (2011 & 2000), Andaleeb & Siddique, (2001), Andaleeb et al. (2007), Sharker (2008). However, only a few studies have been conducted on private hospitals except for those done by Begum et al. (2021), Rumi et al. (2021), Begum (2017), Zubayer (2017); Nagongo (2012); Shafique et al (2010). In fact, they specifically suggested that more research needs to be done on service quality. Begum (2017) emphasized hospitals' image and trust while Begum et al. (2021) highlighted that so far there is no research on cost or hospital bills by private hospitals, especially in Dhaka.

Hence, this is the research gap that needs to be filled. It is vital for hospital management to understand patients' needs, wants, expectations and experiences derived from services rendered by private hospitals so that they can focus on their shortcomings and to fulfil customers' future needs (Barik et al. 2023 and Zubayer, 2017). Henceforth, this study aims to fill this gap by undertaking proper assessment of private hospitals within Dhaka especially to identify their service quality level (Begum et al. 2021., Zubayer, 2017) and subsequently to suggest sustainable competitive advantages via introducing premium health care services and practices for them to adopt and finally to beef up their hospitals' image and trust (Weng et al. 2023., Begum, 2017., Zubayer, 2017., Yousafzai et al. 2014., & Khan, 2013).

This research findings are likely to fill up the gap and beneficial for private hospitals in Dhaka city and Bangladesh hospitals at in attaining the proper hospitals' services, Image and Trust to satisfy existing patients as well as increase their appeal to new patients. As far as private hospitals in Dhaka are concerned, improving service quality is essential for Patients Satisfaction which tantamount to repeat visitations for services, minimized risks, reduced price, and finally retaining existing patients as well as securing new customers (Shabbir et al. 2016). In the long run, these will also discourage Bangladeshis from resorting to private hospitals of foreign countries for treatments (Begum, 2017).

1.4 OBJECTIVES OF THE STUDY

Essentially, there are four Research Objectives (ROs) for this study. They are as follows:

1. Examine whether service quality has a significant impact on patient satisfaction of private hospitals in Dhaka.
2. Examine whether brand image has a significant impact on patient satisfaction of private hospitals in Dhaka.
3. Examine whether brand trust has a significant impact on patient satisfaction of private hospitals in Dhaka.
4. Examine whether price moderates the impact of service quality, brand image, brand trust and patient satisfaction of private hospitals in Dhaka.

1.5 RESEARCH QUESTIONS

Then, as regards Research Questions (RQs) of this study, they are:

1. Does service quality impact on patient satisfaction of private hospitals in Dhaka?
2. Does brand image impact patient satisfaction of private hospitals in Dhaka?
3. Does brand trust impact on patient satisfaction of private hospitals in Dhaka?
4. Does price moderate the impact of service quality, brand image, brand trust and patient satisfaction of private hospitals in Dhaka?

1.6 SIGNIFICANCE OF STUDY

The hospitals industry faces many challenges in providing effective healthcare services to achieve ultimate patient satisfaction. Handling patients is an immense order as improper treatment can endanger a patient's life (MacDonald, 2013). Hunt (2002) cites a report by the Institutions of Medicine published in 1999 that nearly 98,000 people die every year in the United States because of errors in treatment. Essential service of hospitals is serious paraphernalia and fundamental concern for patient's security (Gurses & Carayon, 2007).

Thus, providing high levels of health care services is mandatory for patients and modern living standards (Padma et al. 2010).

Bangladesh as a developing country needs to focus its attention on the importance of patient satisfactions on the hospital's services provided by both the public and private hospital management. Hence, studies such as this one are timely and greatly needed. Undoubtedly, Bangladesh's economic growth is also very much influenced by institutional Service Quality like hospitals therefore customers'/patients' demands should be top agenda for hospital managements (Sukuwati, 2021., Malhotra et al. 1994, and Pham, 2011). Though there are many well-known private hospitals in Dhaka to support the health care sector towards the economic growth of Bangladesh, yet significant economic discrepancy remains (DNCC, 2022).

Literature reveals that approximately over 50 thousand patients from Bangladesh travel to neighboring India each year for health care reasons. Besides India many patients travel to Australia, USA, Singapore, Malaysia, and Thailand to get better health treatments as well (Zubayer, 2017., Begum, 2017., Banik et al, 2011., Andaleeb 2011, 2011, 2007). As a result, Bangladesh loses a huge amount of revenues due to foreign exchanges of more than USD 71.2 million (500 million Taka) per year (Begum, 2017, Chandan, 2002., & Whittaker, 2008). Indeed, this is really disturbing that for a country with many private hospitals a great number of patients still had to go abroad for treatments (Khan, 2013). That is why Begum (2017) insists that Dhaka Private Hospitals' Image and Quality Service should be upgraded to meet Patients' Trust and Satisfaction.

This is supported by other researchers like Mohiuddin (2020), Begum (2017), Zubayer (2017), Andaleeb (2011, 2007) where they too believe that the poor Image and Brand of local Private Hospitals need to be upgraded to World standards to discourage them from causing the outflow of Bangladesh currencies to other countries.

Hence, this study needs to understand patients' views and feedback to sort out further improvements in marketing strategies and facilities to be practiced by all private hospitals in Dhaka. Competitive advantages in terms of excellent Brand Image and Trust should be the most important selling points in their marketing strategy. Then the dependent

variable i.e., Patient Satisfaction will be evaluated (Begum, 2017; Yousafzai et al. 2014) against the impact of independent variables of Service Quality, Brand Image, and Brand Trust (Wu, 2011) and against the moderating variable of Price. The findings on the relationships of all these variables have been described in more detail theoretically and practically especially in Chapter four of this study.

From previous literatures i.e., Parasuraman et al (1985, 1986); Wu, (2011), Andaleb (2011, 2007, 2001, 2000)., Sharker (2008)., Zubayer (2017)., Begum (2016)., Nagongo (2012)., Shafique et al (2010), it is discovered that there is a research gap about the hospital's management, quality services, Branding and Price hospital's services. Apparently, very few research has been done on these important aspects of hospital services in Bangladesh. Strengthening the research capacity on the Health Industry can reduce national health problems in an effective and efficient manner. It has been revealed that in the last decades the research capacity developed is very limited, as limited resources and unavailable data are obstacles to strengthening the capacity (MOH&RW, 2009).

Therefore, it is hoped that the results of finding of this research will not only achieve its objectives but will recommend useful guidelines to strengthen Service Quality, improve Corporate Image/Brand, Trust and Patient's Satisfaction through Affordable Cost schemes in all Private Hospitals in Dhaka, the capital city of Bangladesh.

1.7 DEFINITION OF KEY TERMS

1.7.1 Customer Satisfaction

As far as Hospital Services is concerned, Customer satisfaction is Patient Satisfaction. This is conceptualized as having a transaction-specific meaning and it is based on the customers' real-time experiences on services rendered to them (Cronin & Taylor, 1992).

1.7.2 Patient

A patient is an individual who obtained health care services that are operated by healthcare professionals (Medicine Net. Retrieved 9th oct 2021). For this study they are patients of Private Hospitals in Dhaka.

1.7.3 Patient Satisfaction

Patient Satisfaction is the outcome of healthcare's acts that are involved with patient's individual preferences and expectations (Ware et al.1983) upon receiving treatment for their physical and psychological illnesses.

1.7.4 Private Hospital

A Private Hospital is a hospital that is owned by an individual company or non-profit organization for the treatment of sick persons and is funded privately through payment of medical services by patients, insurance, groups, or foreign embassies (Begum, 2017)

1.7.5 Service Quality

Service Quality is the level of Satisfaction between a customers'(patients) expectation of a service and their perception of the services offered (Parasuraman. 1988; p. 5).

1.7.6 Service Quality Dimension

Parasuraman et al., (1985, 1988) found ten factors to judge the organization's Service Quality by customers. The ten independent variables factors are broken down into five variables namely tangibility, reliability, responsiveness, assurance, and empathy. These are named as the Service Quality Dimensions (Schneider & White, 2004).

1.7.7 SERVQUAL

SERVQUAL is an instrument devised by Parasuraman et al, (1988) to measure Service Quality based on the gaps between customers' perceptions and expectations of Perceived Service Quality.

1.7.8 Brand Image

Brand Image is a variant of perceived quality and admiring features (Yagci et al., 2009) where hospital's Brand Image is the entirety of values, beliefs, concepts and feelings that a patient grasps about certain hospital and its services (Kotler & Clarke, 1987).

1.7.9 Brand Trust

Brand Trust is defined as the favor of the average consumer to depend on the capability of the brand to fulfil its identified function (Chaudhuri and Holbrook, 2001).

1.7.10 Price

Price is charged for a product or services that consumers exchange for having or using the product or services (Kotler & Gray, 2014).

1.8. CHAPTER SUMMARY

Overall, Chapter One elucidates the study to be undertaken, overview its background outlines the Research Objectives (ROs), Research Questions (RQs), Problem Statement, Significance of the study and finally conveys the justifications for this research. As the background framework, current conditions and situation of Private Hospitals in Dhaka, the capital city of Bangladesh is examined, and their shortcomings exposed. Next, Chapter two will deliberate on the secondary data that directly relates to customer/patient satisfaction, hospital's patient satisfaction theory, the theory of service quality, the concepts of brand image, brand trust and price (expenditures for treatment). The literature reviews (LR) of chapter two will give ideas and useful knowledge in developing the conceptual framework, hypotheses and simultaneously identify the research gap that this research would work on.

Chapter three will then concentrate on the crafting of appropriate research methodologies and data analysis methods to be employed by research of this kind.



CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

Chapter two deliberates quite extensively on past and previous studies relevant to the topic of this thesis. The Literature Reviews (LRs) done are quite comprehensive as they finally guide the researcher on the study's overall Conceptual Framework. The LRs also enabled the researcher to identify Theories relevant to the study. Generally, Research Data is in the form of secondary and primary Data. Empirical Data that has been collected by other researchers could also be retrieved from the LR and constitute as secondary data. These secondary data are extracted from relevant academic journals, books, newspapers, the internet, government publications, etc. Primary data, on the other hand, is gathered from Surveys, Questionnaires, Interviews, Focus Group Discussions (FGDs) etc.

In this study the importance of the customer as a patient and its significant variables are emphasized on existing hospitals' business marketing. This is in accordance with Zehra & Arshad (2018) who insist that it is crucial firstly to understand Customer-cum-Patient Satisfaction based on their experiences of hospitals. In addition, the descriptions of service quality, brand image, and brand trust are deliberated as they are related to the research variables and assert direct impacts on Patient Satisfactions (Afsar, 2014). Thus, the study collected and utilized both forms of data, i.e. Primary and Secondary data, to develop a Model based on the experiences of patients throughout the variables that influence Patient Satisfaction towards the services of Private Hospitals especially in Dhaka city.

2.2 CUSTOMER SATISFACTION

Customer Satisfaction has been a popular topic acknowledged in marketing practices and academicians' research since the 70s. Gitman and Carl (2005) emphasizes that Customer Satisfaction and product quality are both key survival paraphernalia to succeed for the organizations in competitive business (Wulandari et al. 2024., Morgeson et al. 2023 and

Islam, 2015). In the Health care business, delivering and providing Patients ‘Satisfaction is one of the key challenges for the industry players (Mill, 2002., Kandampully & Sparks 2001., Parasuraman et al. 1988., Oliver and De Sarbo, 1988., Bitner, 1990., & Band., 1978).

The term ‘Customer Satisfaction’ refers to ‘the number of percentages of total customers whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction’ (Farris et-al. 2010). Japanese business leaders adopted this famous quote about customers:

‘Customer is the most important part of the production line.’ (Chakrapani, 1998).

An organization’s performance depends on exactly what customers ‘want’ according to their expectations (Parasuraman et al. 1990). Many scholars agree that the key goal of an organization is to deliver satisfaction (Taylor & Cronin, 1994, Babakus & Mangold, 1992). Satisfaction can be defined as customers’ wants, needs, emotions etc. These are subjective in nature. On the other hand, objective factors are defined as product/services’ features (Modest, 2022). Satisfaction should be the key focus of any organization as satisfied customers will release, promote, and advertise through word of mouth and bring in more customers to the organization (Zeithaml & Bitner, 2000). Meeting customers’ ‘wants’ of the products and services reflects the level of Customer Satisfaction towards the organization. When the promised performance of the organization fits with the ‘wants’ then the customers are satisfied customers (Zeithaml & Bitner, 2000., Oliver 1997).

According to Pizam & Ellis (1999) customer satisfaction is the common marketing method of business as supported by customers’ repurchased intentions and the widespread ‘word of mouth’ incidences by other customers as regards the products and services. Customer satisfaction is the post-purchase experience of merging the purchase and consumption and the guide for pursuing and improving the modern business to make them more potentially sustainable (Kitapct et al. 2014).

However, customer satisfaction is found to be the post-purchase experience whether customers like or dislike the products after they consumed them or whether they are

satisfied or not satisfied with the services delivered (Woodside et al. 1989). Repurchase or Repeat visitation of customers/patients lies on the Service Quality.

In addition, any kind of business ‘buyer’ or ‘purchaser’ of products are called ‘customer’. But for institutions, business buyers or purchasers of services are not suitable to be referred to as ‘customer’. For example, in educational institutions, the ‘customer’ is called student. In healthcare institutions, the customers are the ‘patients and their care givers’ (Shcakley & Ryan, 1994). For transportation business the customer is called ‘passenger’. However, Patients and their ‘care giver’ can be considered as ‘customer’ because in economic sense they are purchasing hospital facilities like curative needs and health equipment which are constantly delivered to them according to their diseases and frequency of use boost up the demands for them (Ofili, 2014). Henceforth, in this research ‘Patient’ of private hospitals in Dhaka are interchangeably referred as ‘Customer’.

2.3 PATIENT SATISFACTION AND HOSPITALS

At present, in health care institutions patient satisfaction is more crucial than ever before while the patient’s voice plays a significant role in advancing health care structures (Wulandari et al. 2024, and Sritharan & Velnampy, 2011). In hospitals, patients’ primary concern in general is the treatment that is presented by the hospital’s management (Murante, 2010 & Begum, 2017). Shcakley & Ryan (1994) describe patients become customers when they consume health benefits and begin to ascertain the best selection of hospital services based on the supportive evidence they have gathered (Begum, 2017).

Satisfaction refers to experience with exact valuation of specific organization that causes approvals (Schneider & White, 2004). Oliver (1997) found patient (customer) satisfaction is a pleasant judgment of self-actualization of consumption about services or products. Erdem et al (2008) stated that the definition of patients’ satisfaction is between expectation and perception of the psychological level of satisfaction.

Patient satisfaction is an individual’s feelings as they evaluate services with pleasure or displeasure about a hospital. Patient’s positive reaction occurs with recurring

visits, the purchase of products or services and word of mouth communication to other consumers in the hospital (Abedniya & Zeim, 2011). Patient satisfaction needs to be valued by hospital provider the patients themselves and the third party as investors (Ofili, 2014).

In hospitals, patients are not able to determine the technical qualities, but their opinion can be advanced to improve its services. The patients can decide what to accept or what not to accept which can provide serious consequences for negative effects (Begum, 2017). According to Grogan et al. (2000) patients play a significant role in measuring the quality of the hospital industry to accomplish success. Soon et al. (2017) and Duggirala et al. (2008) found patient satisfaction on services had a great impact on the hospital's quality performance to outsiders too (Ramez, 2012, Amin & Nasiruddin, 2013, Huei et al. 2015, & Shabbir et al. 2016). O'Connor et al. (1994) stated that,

'Patient's viewpoint is a meaningful indicator of a hospital's superior services. Patient satisfaction affects a customers' mind and reactions in different ways (Sook et al. 2017). Patient satisfaction is positively related to service quality and patient's trust in private hospitals (Shabbir et al. 2013).

To increase turnover of patients and achieve high profit for hospitals, the management should give top priority to Patient Satisfaction to be loyal and continue to visit the hospital (Schneider & White, 2004. p. 20; Sritharan & Velnampy, 2011., & Abedniya & Zeim, 2011). To identify Patient/Customer Satisfaction, some aspects in the hospitals industry where the Customers' perception cannot be generalized according to their values in the context of culture (Amin & Nasiruddin 2013). Amin and Nasiruddin (2013) acknowledged that various aspects like interpersonal relationships are very important between patients and hospital providers (Crowe et al. 2002). Urden (2002) discovered cognitive approach, patients' emotions, and perception of patients' satisfaction. The patient and doctor relationship also has a great impact on patient satisfaction in hospital service quality (Mortel et al. 2008, & Hashem et al., 2011).

Besides that, consumption of a sale is intermediate between personal beliefs and values (Linder-Pelz, 1982) as matching personal expectation and orientation is another factor to satisfy patients, if not that means dissatisfaction (Gill & White, 2009., & Fox &

Storms, 1981). Technical and interpersonal care have impact on the level of patient satisfaction and as a result, influence their judgment according to their expectations regarding hospital care whether to stay loyal to the hospital (Campbell et al. 2000).

For the private hospitals in Dhaka, Patient Satisfaction is a key focus in improving their whole operation and market share (Farhana, 2017) ensuring its continuous efforts to satisfy patients (Ofili, 2014). On the other hand, excellent treatment of patient satisfaction is vital in developing the financial growth of hospitals resulting in healthier citizens and leading to a healthier environment in the country (Zubayer, 2017).

Therefore, to increase Patient Satisfaction, the main goal is to provide healthier citizens by giving superior Service Quality which leads to the hospital's Image and Trust, thus enhancing the entire financial growth of hospitals (Andaleeb, 2000, & Shabbir et al 2016). Thus, the patients are the key to the hospital's service provider to provide better service and satisfy patients (Allaham, 2013). Table 2.1 summarizes the main themes of various research carried out pertaining to Customer Satisfaction/ Patient Satisfaction.

Table 2.1 Main theme of Customer Satisfaction

Year	Author(s)	Main theme of Customer Satisfaction (CS)
2022	Modest.	Define satisfaction as subjective factors and for objective factors
2019	Fatema	Explain importance of managerial knowledge about the needs and demands of customers.
2018	Zehra and Arshad.	Define importance of Patient Satisfaction as the best practice for hospitals to provide Quality Service towards the customer.

2015	Khairul.	Importance of Customer Satisfaction and Product Quality to succeed for the organizations in competitive business
2010	Farris et-al.	Explain the definition of Customer Satisfaction
2002, 2000, 1990, 1988, 1978	Mill.; Kandapully and Sparks.; Bitner.; Parasuraman et al. Oliver & De Sarbo.; Band.	Explain the challenges of industry that deliver and provide Customer Satisfaction as one of the key challenges
2000 1998	Zeithaml & Bitner. Oliver.	Satisfied customers will be able to publicize, promote and spread through word of mouth to bring in more customers to the industry.
2001	Kotler and Amstrong.	Effective marketing tactics for product and services while Patients (Customers) Satisfaction should be predominantly defined
2014 1998	Kitapci et al. Chakrapani.	Importance of Customer Satisfaction

Table 2.2 Main theme of Patient Satisfaction

Year	Author(s)	Main theme of Patient Satisfaction (PS) in hospital context
2017, 2010, 2013, 2017.	Farhana.; Murante.; Allaham. Zubayer.	<p>Explain patients are the primary concern for treatment that is presented by the hospitals management and market share.</p> <p>Importance of excellent treatment for Patient Satisfaction to develop financial growth; healthier citizen is interrelated to healthier environment of a country.</p>

2016, 2000	Shabbir et al.; Andaleeb.	Define Patient Satisfaction as providing healthier citizens through superior Service Quality for the hospitals' Image and Trust, thus enhancing financial growth
2011	Sritharan & Velnampy.	Explain significance of Patient Satisfaction to improve health care structures
2017	Soon et al.	Patient Satisfaction needs to be given the highest priority in hospitals
2016	Durriyah	Explain importance of Service Quality dimension and Patient Satisfaction of public hospitals in Brunei Darussalam
2014	Ofil.	Explain customer as a patient to whom hospital's facilities are provided
2013	Amin & Nasiruddin.	Acknowledged the various aspects in hospital's Patient Satisfaction like interpersonal relationship between patients and hospital providers
2011	Abedniya & Zeim.	Define the factors of patients' positive reaction that occurs with recurring visits, purchase of products or services and word of mouth to gather Customers Satisfaction for the hospital
2008	Duggirala et al.	Define the importance of Patient Satisfaction in hospital's quality performance to outsiders.
2000	Grogan et al. (2000)	Explain patient's significant role in measuring the quality of hospital industry's success

2.4 EMERGING THEORY OF CUSTOMER SATISFACTION

In this study, some theories of Customer Satisfaction have been found in the literature. To build a new infrastructure in business management services for Customer Satisfaction, the previous theory needs to be underpinned. The phenomenal theory of Customer Satisfaction was introduced by some prominent scholars in the management areas. In the long run, a business with the Customer Satisfaction Theory makes a sound and strong customer relationship in marketing (Khan et al. 2020).

To satisfy customers, improvement of current product and service quality has been widely highlighted in the literature as it is an appropriate competitive strategy for achieving sustainable competitive advantage (Gupta & Chen, 1995). However, business industries were not concerned about Customer Satisfaction prior to the 70s (Mill, 2002). Starting from the 1970s, Customer Satisfaction began to be acknowledged in marketing by academicians (Churchill & Surprenant 1982). Later, Customer Satisfaction became widely recognized as an important marketing concept and method (Wang and Lo, 2002). Though the Customer Satisfaction investigation has been assembled since the 50s it only became widely emphasized from 80's onwards.

Previous research revealed a clear relationship between Customer Satisfaction and repeat purchases in business marketing (Mill, 2002). The most well-known Customer Satisfaction Theories include the Dissonance Theory developed by the Festinger (1957), the Assimilation Contrast Theories by Sherrif & Hovland (1961), the Adaption Level Theory by Helson in 1964 and Oliver in 1977 developed The Expectancy-Disconfirmation Model also called as Theory or Paradigm. Besides those Theories mentioned earlier those are The Equality Theory, The Comparison level Theory, The Evaluation Congruity Theory, The Attribution Theory and The Value-Prospect Theory recognized under the Customer Satisfaction purview by many scholars (Yuksel & Yuksel, 2008). Adee (2004) believes that Customer Satisfaction Theories can simply be classified under three main categories, namely the Expectancy-Disconfirmation Theory, the Equity Theory, and the Attribution Theory. As regards customer expectation about services, Anderson (1973) maintains that it is influenced by four physiological theories namely the Assimilation Theory, the Contrast

Theory, the Generalized Negativity Theory, and the Assimilation Contrast Theory (Modest, 2022). However, renowned academicians, especially Oliver, underscored some shortcomings on those theories especially in influencing Customer Satisfaction (Yuksel & Yuksel 2008). After evaluating all the theories from the literatures, the researcher found that the Expectancy-Disconfirmation Theory is more related to finding the patients satisfaction in the hospitals industries service quality that is adopted.

2.4.1 The Expectancy-Disconfirmation Theory (EDT)

In 1977 and 1980 Oliver developed a highly promising concept or framework to evaluate customer satisfaction named The Expectancy-Disconfirmation Theory (Yuksel & Yuksel 2008, Modest 2022, Mill 2002, & Isac 2014). The EDT is a remarkable theory for evaluating Customer Satisfaction (Elkhani & Bakri, 2012). Ryzin (2004) discovered effective standpoints of the EDT associated with Customer Satisfaction which revealed the gap between expectations and performance of services (Ryzin, 2006). The key benefit of EDT is that it is a very efficient method to assess Customer Satisfaction with only two factors i.e. expectations and performance. So direct measurement of disconfirmation is not necessary (Parasuraman et al.1994). See Figure 2.1 below for illustration.

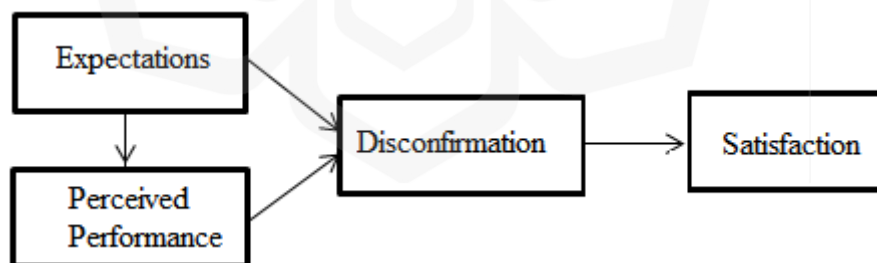


Figure 2.1 - Model of Expectancy Disconfirmation Theory (EDT)

Source: Expectancy disconfirmation theory model, Adaption from Richard Oliver (1980) (Bakri and Elkhani 2012).

It is acknowledged that the most widely accepted conceptualization of the Customer Satisfaction concept is the EDT (Watt, 2007). This theory was developed by Oliver (1980), who proposed that satisfaction level is a result of the difference between customer's perceived expectation and performance of the Service Provider.

According to Szymanski and Henard's meta-analysis study, the outcome shows that the EDT is the best predictor for Customer Satisfaction (Ekinci & Sirakaya, 2004). Barsky (1992) believes that the most broadly acknowledged theories for Customer Satisfaction are the combination of the Disconfirmation Paradigm and Expectancy Theory (Mill, R.C., 2002). The EDT is the knowledge about satisfaction's range and direction of the experience after service performance against expectation (Modest, 2022). As Oliver (1980) discovered that the EDT is in fact the customer's decision-making process of Purchas's built on customer expectations, attitudes, and intentions.

Here, Customer Satisfaction describes their beliefs regarding the product/services' evaluation up to the concerned level after experiencing new services (Mill, 2002). Vavra (1997) believes that the core of the satisfaction method is evaluated with what was assumed after the service performance. This procedure is named the confirmation or disconfirmation method (Modest, 2022). Oliver 1980 states that there are two implications whereby firstly it is expectation before purchase of the product/services and secondly is the expectation after the consumption of the product/service that is shaped by expectation (Modest, 2022). The Disconfirmation Theory's process is fulfilled when the Customer's Satisfaction assesses the real service performances with their standards of expectations (Oliver. 1980, Mill. 2002). This finding is known as confirmation, disconfirmation, satisfaction, or dissatisfaction. Therefore, if service performances exceed expectation, it is labelled as satisfaction, if not; it is labelled as dissatisfaction (Modest, 2022).

The disconfirmation theories involve four factors often referred to as expectations, perceived performances, satisfaction, and dissatisfaction. Expectations are the state before the service is purchased and perceived performances happen when the customer's perceptions arise about the services. And satisfaction happens after the consumption of

services and satisfaction by meeting the expectation. On the other hand, dissatisfaction happens when there is a shortfall between expectations and performance.

On the other hand, the Expectancy Theory is when customer expectations are solely formed by their own feelings and understanding about the product, services, or the environment (Oliver, 1980). Expectancy usually happens when customers frequently judge the product/services and its advantages or when deciding to re-use the services. Tokman (1932) discovered customers find out their judgment when service expectations meet their definite outcome (Mill, 2002). The customers' attitudes perform an object's attributes and strengths based on their beliefs (Heler et al. 1979, & Mill, 2002).

Therefore, the above assessment concludes that the Expectancy-Disconfirmation Theory have three variables essentially 'expectations' which happen prior to purchase of services, 'perceptions' which happen when services are consumed and 'comparison' which happen when perceived performance with prior-expectation leads to positive or negative disconfirmation or confirmation (Oliver, 1980).

In conclusion, Satisfaction (positive disconfirmation) occurs when the product or service is better than expected. On the other hand, if the performance is contrary to what is expected, it will result in dissatisfaction. Studies show that Customer Satisfaction has a direct and indirect impact on business results. In other words, EDT has both positive and negative impacts and can be sourced from patients' views.

Thus, this study is inspired by this Theory. This Theory can yield Patients Satisfaction whether they are satisfied or dissatisfied with the different variables relating to the services rendered to them. The determinant factors influencing Patients Satisfaction are Service Quality, Brand Image, and Brand Trust. Price is the moderating variable. So, the Expectancy-Disconfirmation Theory is confirmed to be the most significant and appropriate theory in measuring Patients' Satisfaction. This has direct impact in business marketing of Health care ventures.

2.5 SERVICE QUALITY

Ever since the 80s, quality has garnered important attention to gain success in products and services (Parasuraman et al. 1985). Customers' demand of products increased due to superior quality more than before (Leonard & Sasser, 1982). Quality has a positive relation to business revenue, consumer pride and spending market share (Kalidas, 2007). Rabin (1983) maintains that quality has become a great valuable trend to customers at present. Product quality is directly linked to Customer Satisfaction which is obligatory in building long-term affiliation with the customers (Kalidash, 2007) where Service Quality is also a valuable feature for Customer Satisfaction (Nigell et al. 1999). Therefore, the concept of Service Quality has turned into a popular subject for many researchers (Atilgan et al. 2003). The Service Quality Theory is a key factor to differentiate services from products.

It is found that Service Quality is formed by two separate words: 'Service' and 'Quality'. Service means activity and Quality means operational efficiency or better performance in business (Kotler et al. 2006). According to Schneider and Brown (1995: p 19), Service is a psychological experience which is more than physical possession. Service Quality is an intangible (Zaheer & Akhter, 2014) thing thus services are very complex to evaluate unlike products (Cruz & Melleero, 2012). Services can be both in tangible and intangible forms offered by a company. Customer Satisfaction can be secured through high quality products and services (Gatty & Getty, 2003., & Gupta & Chain, 1995). On the other hand, Service Quality always refers to service delivery (Schneider & White, 2004).

Although Service Quality is not easy to describe (Kalidas, 2007), many scholars have managed to define it. Service Quality is the ability of a business firm to latch a customer with that firm (Kotler, 2006). Thus, Service Quality means the ability to give better performance for the customers in business. Customers have distinct values and judgment on various grounds on the same services in different ways (Edvardson, 1996). Parasuraman et al. (1985, 1988) define Service Quality as 'an excellent delivery system according to customer expectation'. Improving Service Quality will intensify Customers' Satisfaction, help to retain existing customers, and attract new customers which would lead to market expansion, gains and improvement in market share and profit (Ramayah et al.

2003). The importance of Service Quality to the success of business is best concluded by Zeithaml & Bitner (2003, p. 101):

"Excellent service is a profit strategy because it results in more new customers, more business with existing customers, fewer lost customers, more insulation from price competition, and fewer mistakes requiring re-performance of services".

According to Gronroos (1984), Service Quality mainly perceives two types of customers which are technical and functional. There are three other components of services which are inseparability, variability and perishability that affect the development in the system (Kotler & Keller 2006). The importance of Service Quality requires examining the context of strategic management of corporations (Powel, 1995). This has led many firms to pursue Service Quality to differentiate themselves from their competitors, thus gaining a competitive advantage (Zairi, 2000).

However, the issue of how the implementation of quality strategies might lead to the attainment of one's firm competitive advantage is perhaps inadequately covered in the service marketing literature (Davidson, 2003).

2.5.1 Service Quality Theory Development

In the early 20th century; the importance of controlling the quality of a product in the industrial sector was introduced and succeeded in American and Japanese firms. At first it was known as Service Quality, later it was labeled as Total Quality Management (TQM). After World War II, work on total quality control by Feigenbaum (1983), W. E. Deming (1982, 1986), J. M Juran (1964, 1980, 1988, and 1989) started to surface. There is another management pioneer, Kaoru Ishikawa, who introduced seven basic tools of Quality Circle (QC). They are Fishbone Diagrams, Scatter Diagrams, Histograms, Tally Charts, Control Charts, Stratification and Pareto Analysis (Ishikawa, 1968).

From the late 70s to 80s, Service Quality had been developed separately from Manufacture Quality. The aim was to differentiate between goods and services and to

provide quality goods to intangible and heterogeneous services to achieve Customer Satisfaction such as individual service, business, auto repairs, miscellaneous repair services, motion pictures, recreational, health services, legal, educational and many other business services. This Service Quality has been developed widely, especially in Western countries (Schneider & White, 2004: p. 14). Though the effects of the Service Quality have been developed further (Rust et al. 1994, 1996), in many cases, the company's success lies on the bottom-line return on investment, enhanced Customer Satisfaction and increased market share (Milakovich, 1995; p. 3). Therefore, Service Quality is a major concern for customers in current business.

2.5.2 Service Quality Theory

For this research, some related theories on Service Quality have been found in the literature. The phenomenal Theory of Service Quality was introduced by some prominent scholars whose expertise lies in the management areas. In the United States, product quality is no longer great news as it had already taken place a quarter century ago in the world's competitive business in the name of 'quality'. Obviously, the current world is concerned with product and production quality, but Service Quality and Service Delivery have emerged as the new phenomena in business organizations (Schneider & White, 2004: p. 14). In many Western countries, quality is geared towards services and services are gaining importance and dominance in economics (Schneider & White, 2004., & Zeithaml & Bitner, 2000).

Service Quality Theories are mostly known as measuring tools and models as well as dimension instead of theory. Examples are Deming's Theory or Juran's Theory. Diverse facets of Service Quality cannot be measured without utilising a model. While Product Quality can be measured tangibly, Service Quality needs to be measured intuitively as its focus is on the attributes (Chakrapani, 1998). Without customers' concern, Service Quality cannot be measured while products can be measured tangibly in the laboratory (Chakrapani, 1998). According to Schneider and Brown (1995, p.19); 'Services yield psychological experience more than they yield physical possession'.

In the management field, many Service Quality Models have been developed in in-service quality sectors like those developed by Parasuraman et al, (1985, 1988) i.e. the SERVQUAL Model Theory, Service Theory (Gronroos, 1984) Disconfirmation Theory (Belaid et al. 2015; Ramanathan, 2009; Lethinen & Letihinen, 1984), Compliance Theory (Osman and Owen, 2016) and many other theories. Other scholars have also developed Service Quality Theories in Management and Economic Science. These Service Quality Theories, Models and Dimensions are popular in present society, and they dominate the economy (Schneider & White, 1994, Zeithaml & Bitner, 2000., & Sridharan & Velanmpy, 2013). Brady and Cronin (2001) discovered a crucial connection between Product Quality and Service Quality Theories. According to literature, there are some popular theories that can measure Product Quality and Service Quality.

2.5.3 The SERVQUAL Model

Currently the most common Service Quality management tool is SERVQUAL (Landrum et al, 2009). The SERVQUAL Model has been applied in service and retailing organizations. Service Quality is a function of pre-purchase customers, expectations, perceived process quality and perceived output quality. Parasuraman (1988) defines Service Quality as the gap between customers, expectations of service and their perceptions of the service experience. Based on Parasuraman's (1988) conceptualization of Service Quality, the original SERVQUAL instrument consists of 22 items. The data collected on the 22 attributes are normally grouped into five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Numerous studies have attempted to apply the SERVQUAL Questionnaire. This is because it has a generic service application and is a practical approach to the subject. The ABI report underlines that generally in previous research, Service Quality and the term 'SERVQUAL' were used as keywords in many academic journals and publications. Both terms are used for theoretical analysis as well as application of SERVQUAL in various profitable and non-profitable organizations (Buttle, 1996). According to the Buttle (1996), Service Quality instrument has been made to

measure service features in a variety of companies or organizations such as hospitals (Mangold & Babakus, 1991), hotels (Saleh & Ryan, 1992), travel and tourism agencies (Fick & Ritchie, 1990), telephone companies, car services, insurance companies, banks (Kwon & Lee, 1994), dental health care clinics (Carman, 1990) and many more.

2.5.4 Service Quality Dimension

Initially, ten determinants were identified by Parasuraman, (1985) to measure Service Quality. They are tangibility, reliability, responsiveness, communication, access, competence, courtesy, credibility, security, and understanding/knowledge of customers (Buttle, 1996).

Later in 1988, Parasuraman refined, re-organized and re-developed the ten dimensions into five dimensions only especially to measure services. They are tangibility, reliability, responsiveness, assurance, and empathy. Almost all these dimensions go under the Gronroos' (1984) technical and functional Service Quality Theory. Parasuraman (1988) constructed the 22 items or instruments to assess customers' expectations and perceptions and called them RATER dimensions. RATER is the abbreviation for Reliability, Assurance, Tangible, Empathy and Responsiveness. In each dimension there consists 4-5 of items according to the element applied to assess each dimension separately (Buttle, 1996).

Reliability is the ability to involve performing the promised service dependably and accurately. It includes the company doing the service right the first time, meaning that it honors its promises to the customers (Parasuraman, 1985). This is the most important service component of service perception for customer loyalty (Kalidas, 2007). Reliability also extends to providing services when promised and maintaining error-free records and accuracy of bills and other financial documents. Assurance refers to the knowledge and courtesy of employees and their ability to convey trust and confidence (Buttle, 1996) which includes competency, courtesy, credibility and security. According to Parasuraman et al. (1985) competence means possession of the required skills and knowledge to perform the

services. Courtesy involves good manners, respect, consideration and pleasantness of contact personnel that include consideration for customers' belongings, neat and clean contact personnel (Parasuraman et al. 1985). Credibility requires trustworthiness, authenticity and honesty since customer interest involves execution of services to the customers from the bottom of their heart. Credibility goes to the organization's name, reputation of personal characteristics and good interface with the customers. Finally, Security refers to the freedom from any risk, threat, or uncertainty. It involves physical safety, financial safety, and privacy (Parasuraman et al. 1985).

Tangibility is the physical evidence of an employee including the personality and appearance of personnel, tools, and equipment used to undertake the service. For example, some hotel chains such as Hilton, Mandarin, Sheraton, and Hyatt consciously ensure that their properties conform to global standards of facilities wherever they are located (Asubonteng et al. 1996). Credit cards, bank statements and hotel room access cards are good examples of physical facilities for services (Parasuraman et al. 1985).

Empathy refers to the obligation of caring for and giving individualized attention to customers/patients including access, communication and understanding (Parasuraman, 1985). Access involves attitude, capability, and ease of contact. It involves convenient operation hours, time duration of services, convenient locations, and service facilities. Communication means that continuous streams of information are being given to the customers to give them a clear understanding (Parasuraman et al. 1985). This reduces the communication gap or eliminates miscommunication between the organization and the customers. Responsiveness is the institution's willingness to help customers and provide prompt service to customers. They offer quick service, professionalism in handling and recovering from mistakes. Consequently, a Service Provider's ability to provide services in a timely manner, ready mail, deliver on time or prepare a transaction slip instantly (Parasuraman, 1985) are key indicators of Service Quality to customers. The responsiveness can be nurtured by evaluating the length of waiting period for a customer's request to get assistance, from customer question to getting answer, etc., and through

continuous improvement on the procedure of delivery, staff's attitude and other requests that arise from customers (Kalidas, 2007).

2.6 SERVICE QUALITY IN HEALTH CARE INDUSTRY

In the last few decades, Service Quality has improved significantly (Amin & Nasiruddin, 2013). In countries around the world, numerous researchers, industries, and experts have developed and utilized the Service Quality concepts by Dabholkar et al. (1996), Angur et al. (1999), Arasli et al. (2005, 2008), Aagja & Grag (2010), Chacker (2003), Jabnoun & Chacker (2003), Amin & Nasiruddin (2013).

Service Quality assessments are carried out in many industries such as online shopping, IT consultation, mobile communication (Lai et al., 2007), education (Arambewala & Hall, 2006), hotels (Olorunniwo et al., 2006), health care (Jabnoun & Al Rasasi, 2005), hospitals' industry and many more. Service Quality for patients of Hospitals, patrons of hotels and restaurants is very important. Over the decades, in terms of health care and wellness, people have upgraded their health standards and are very concerned about getting superior services from health care industries (Maqsood et al., 2017).

Therefore, like other organizations, the Health Care industry's primary concern is to enhance Service Quality and retain patients (Aagja & Garg, 2010) like other organizations. Naturally, a healthier hospital environment and better services will increase the possibility of patients to stay put with those hospitals every time they need treatment (Arasli et al., 2008).

The Gulf Region Health Care Industry services were measured by Jabnoun and Al Rasasi (2005). Also, another similar study which involved six hospitals in the United Arab Emirates (UAE) was done (Ramez, 2012). Other works are found were in Jordan hospitals (Alasad & Ahmad, 2003), in Turkish hospitals (Pakdil & Harwood, 2005; Bakar et al., 2008), in South Korea's health care institutions (Chi et al., 2005), in Indian health care services (Rabini & Mahadevapa, 2006), in Greece health care (Glabeli & Pazadopoulos,

2009), in Malaysian hospitals (Sohail, 2003; Selim, 2017) and in Bangladesh health care institutions (Andeleeb, 2000, 2001, 2007).

Although hospital services are slightly different, they can be measured by different dimensions (Maqsood et al., 2017). Many studies found different Service Quality dimensions that vary according to countries. For example, to measure Service Quality in hospitals in the USA, the dimensions were more concerned with admission and discharge processes, doctors, nurse care, family and friends' compassion and pleasant environments (Otani & Kurz, 2004). Most of the developing countries, however, emphasize more on the seven dimensions which are related to hospital Service Quality (Duggirala et al., 2008). A study focusing on patients' Service Quality in Indian hospitals revealed substantial impacts using the seven factors specifically organizational processes, process of medical care, clinical caring process, patients' security, hospitals' infrastructure system, staff quality, and communal responsibility (Salim, 2006).

Another research by Aagja and Garg (2010) found five dimensions in Public Hospitals' Service Quality which are dominant, and they are admission process, discharge process, medical service, social obligation, and overall service of the hospital. Admission criteria, knowledgeable and experienced doctors, nurses, and other medical staff (Martinez & Fuentes, 1999), cleanliness, and hazard free environment are also vital (Amin & Nasiruddin, 2013). Quick attendance and emergency handling are also important criterion for health care services (Maqsood et al. 2017).

Quick response is very important as far as health care matters is concerned. Unfortunately, in many hospitals patients had to wait for an uncertain period to see a physician (Rossiter & Reynolds, 2010). Likewise, long awaiting Time is common when getting advice on other technological matters.

Patient Satisfaction is described with clear functioning description from both customer and hospitals. The tangibles and observable measurements are very hard to explain on Patient Satisfaction. Service complains, average waiting time and product benefits are difficult to discern as their definitions are sometimes ambiguous and general (Naik, 2010). Rapid service system, instant discharge rules, willingness to help patients and

continuous improvement of Service Quality are key impacts on Patient Satisfaction (Maqsd et al. 2017, p.556). Yang and Park (2001) found that long awaiting time for hospital's services decline Patient Satisfaction which affects the hospital service value as well.

Hayes (1998) also explains that satisfaction aspects are consistent with interactions, timeliness and responsiveness which is allusions to customers' needs (Naik, 2010). Maqsd et al (2017) examined that specific time impacts Customer Satisfaction and performances. Thus, Patients' Satisfaction prime concerns consist of accessibility of services, medical support, time, and cost of services.

Therefore, the dimensions improve Patient Satisfaction and reliability to the Health Care industry (Chahal & Kumari, 2010). Low to non-existence of Patient Satisfaction measuring systems could cause the organization to be lacking in market orientation (Camison, 1996). Attributes of the service and product that add value for the patients and increase their satisfaction might be unknown and that will not guide the hospital operators towards improvement. The National Health Care Policy comments that many hospitals do not care about Patient's Satisfaction. Most hospital's patients complain about the small number of doctors, nurses, staff, and inadequate facilities for both in patients and out-patients' cases (Ford et al. 2002). Heskett, Sasser and Schlesinger (1994) place importance on the service link to organization profit chain. On the other hand, for service profit chain Heskett et al. (1994) developed a theoretical framework. That framework shows that workplace design involves employee trustworthiness, productivity, satisfaction, performance, etc. which lead to service value to institution's operations towards Patient /Customer Satisfaction and trustworthiness and effect their growth revenue and profitability significantly (Schneider & White 2004, p. 18). Table 2.2 below is a comprehensive LR summary of what other research talked about regarding the main themes of Service Quality and its direct relationship towards Customer/Patient Satisfaction.

Table 2.2 - Main theme of Service Quality (SQ)

Year	Author	Main theme (Service qualities)
2013	Sridharan & Velanmpy Irfan and Ijaz	Discussed Service Quality Theory, Models and Dimensions in organization.
2011	Abedniya and Zaiem	Explained importance of quality for organization's success.
2010	Zaim et al. Olu Oju	Elaborated on importance of Customer Satisfaction in organization.
2009	Landrum et al	Discussed importance of Service Quality on product quality and manufacturing quality and how to strengthen relationship between organizations and customers.
2006		
2004	Kotler Schneider & White.	Viewed that SERVQUAL tool as the most common Service Quality management tool.
2003	Zeithaml and Bitner	Discussed Service Quality as the ability of business firm to fasten the customer with that firm.
2000	Zairi	Discussed the Service Quality Management's evaluation and analysed according to various scholars. Also explained importance of Service Quality, total quality, and Service Quality Theories for economic growth of a country.
1999	Nigel, Brierley, and MacDougall	Provided the factors of excellence services and strategies for profit for new customers and to continue further business with existing customers, lost customers, more insulation from Price competition, and fewer mistakes requiring re-performance of services.
1998	Chakrapani	
1996		Discussed Service Quality and differentiated between their competitors and competitive advantages.

1995	Buttle	Explained Service Quality as a valuable feature for Customer Satisfaction and discussed the importance of customers to measure the Service Quality. Considered Service Quality as the measurement tool for many organizations.
1989	Schneider and Brown.; Milakovick; Gupta and Shen. Powel.	Explained that service produces psychological experience more than physical experience and discussed Service Quality in Management, its evaluation and its necessity in total quality and Service Quality Theories on economic growth within the organization.
1988	Hedval and Plastschik	
1985	Parasuraman's et al Parasuraman et al.	Explained Service Quality as a modest strategy to get competitive advantages and good product.
1988	Zaithaml, V.A	Explained that Service Quality needs to be examined in the context of strategic management of corporation.
1984	Gronroos.	Discussed Service Quality as an organization's willingness, which enables it to serve the customer.
	Lethinen and Letheinan	Discussed Service Quality as an excellent delivery system according to customer expectation. Explained the five dimensions namely Reliability, Assurance, Tangibility, Empathy and Responsiveness. Explained that the organization needs to know its Service Quality and to develop business strategies according to the views of the customers' expectations and perceptions. (2011). Viewed that Service Quality is perceived for customers both in technical and functional segments and defined Service Quality as an idea which is the judgement of customers' expectations and perceptions about services.

2.7 BRAND IMAGE

In business marketing, the success of the company or brand sometimes depends upon its marketing policies and capabilities (Sudirman et al. 2022, Sukawati, 2021). It is a method that involves the expectation and satisfaction of the customers' demands where there is a common benefit for both the companies and the customers. Marketing is a key task of organizations (Tanu et al. 2018). If the company's marketing policy is vigorous, it signifies the brand. Branding has appeared as a basic means to distinguish a business's outcome from its competitors (Tanu et al, 2018).

Day (1994) and Ernst (2000) acknowledged that the capacity of the company's (Brand) achievement varies on its competence to contribute among the rivals (Tanu et al. 2008). According to Kotler (2000), the American Marketing Association defines Brand as:

“A name, term, sign, symbol or design or a combination of them to distinguish the product or services from its rivals”.

The firm's name is a Brand in itself, so the firm or company's Brand name is important to provide excellent service (Berry 2000, & Berry et al.1998). Kotler (2000) states that excellent Brand Image will take place to enhance the business. At present, nearly all businesses have their own Brand, and they are constantly striving to maintain and improve their Brand Image (Wijaya, 2013).

A brilliant Brand Image is a sequence of exciting experiences as well as different feelings about the business that reinforce the position of the Brand in the customer's heart (Wijaya 2013). From Brand recognition to Brand Image is the step of mindshare about the industry. The excellent Brand Image creates consumers' confidence of Service Quality and feeling of security in choosing the products/service from that company (Chin-Chuang et al. 2012). Kottler (1991) revealed that Brand Image differentiates a product or services from its rivals. In fact, Brand Image is a combination of name, reputation, pattern and logo or symbol.

Wijaya (2013) maintains that Brand Image performs a significant role in the improvement of the Brand or institution. However, several scholars (Huei et al. 2015) are

extensively examining whether indeed Brand Image is very essential to consumers (Sukuwati, 2023) purchasing behaviors and customer decision-making about the business service. Brand Image is not only a positive perception or specific form of image but also can be negative image evaluated by customers about the institutions (Nahar et al. 2018). Yagei et al (2009) found that the Theory of Brand Image does not only relate to intangible products but also company's entities (Huei et al. 2015).

The Brand Image signifies the awareness to make decision to repurchase the product and service of that Brand subjectively and objectively. In this perspective, Brand Image has a comprehensive influence on the current competitive market to a powerful position amongst similar product and service (Wijaya, 2013). Thus, at present, competitive business Brand Image is the key success aspect and its superior Brand Image delivers the market position (Kem et al. 2008, & Huei et al. 2015).

Brand Image make the company available to advance a Brand's product from one market to another market segments via Brand extension (Tauber 1988., & Aker & Keller 1990), Brand alliance (Rao & Rueckert, 1994) and enhanced value of the products by varying Customers' experience and perception (Aker & Stayman, 1992., Putu & Wells, 1984., & Wijaya 2015, p.59).

The Brand title has a strong ability to put pressure on the supply channel (Wijaya 2015). The Brand Image offers the entire business entity's current information regarding product, services and so forth (Hogan, 2005).

Therefore, in conclusion, Brand Image provides the total picture about the name of the company to its customers. The positive and negative Brand Image are dependent on the organization's activities as scrutinized by the customers (Nahar et al. 2018).

2.7.1 Theory of Brand Image

From prior academician's investigations, Wijaya (2015) highlights five dimensions of Brand Image (as illustrated in Figure 2.2). The five dimensions are Brand identity, Brand

personality, Brand associations, Brand behaviors and attitudes and Brand competence and benefits.

The first dimension, Brand Identity, is the physical or tangible characters associated to the Brand such as logo, colors, sound, smells, packaging, places, corporate identities, motto, etc. The second dimension, Brand Personality is the distinct characteristics just like human personalities such as manners, noble, pleasant, dynamic, creative, autonomous and empathy.

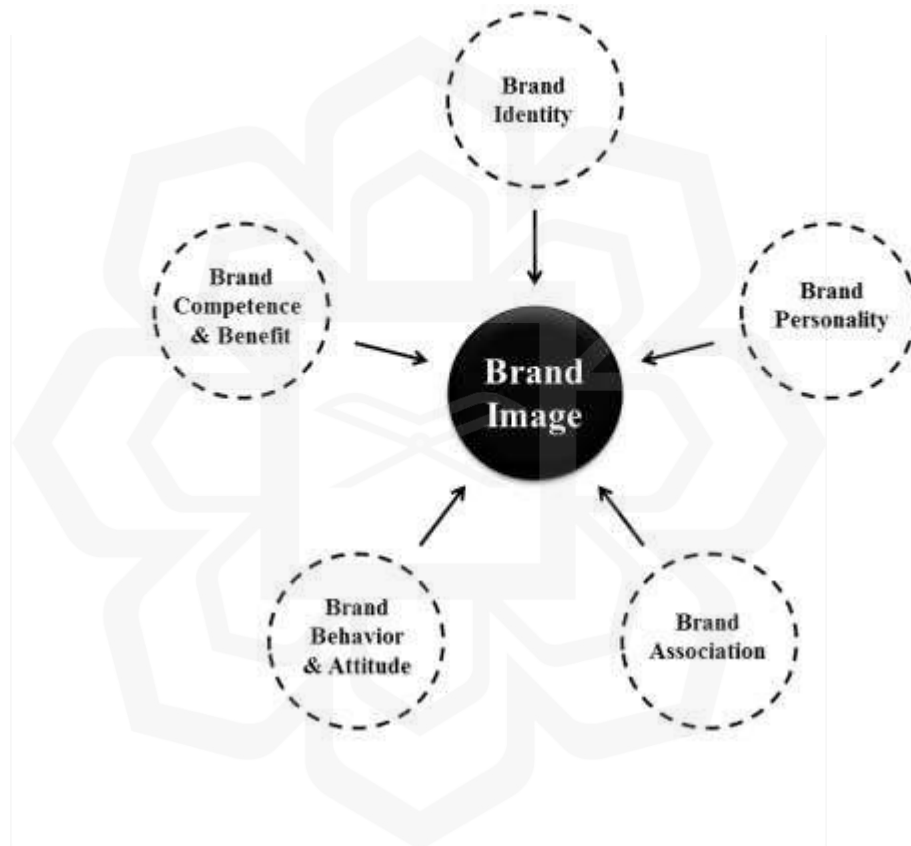


Figure 2.2 - Dimensions of Brand Image

Source: Dimension of Brand Image: Concept developed from (Aaker, 1991; Keller, 1993; Aaker 1997; Arnould et al 2005, Davis, 2000; Drezner, 2002; Hogan, 2005; Mowen and Minor, 2001; Plummer, 1995; Ushaw, 1995, Brexendorf and Kernstock, 2007; Wijaya, 2012).

Brand associations are the third dimension which associate the particular Brand with unique offers, promotions, sponsorship programs etc. For example, branded products like Obamacare, Coca-Cola and McD are often associated with special promotions. The fourth dimension which is Brand behaviors and Attitudes often interact and communicate with consumers to effect perception and judgment about certain Brand. Lastly, Brand Competence and Benefits appeal to the values, advantages, and unique competency of a certain product to quench customers' needs, desires and dreams etc. (Wijaya 2013, 2015).

2.7.2 Brand Image of Hospitals

In today's business, any type of corporate image is vital, especially the Health Care sector because of consumers'/patients' life risk issues (Huei et al. 2015). Sener (2014) accentuates that Hospital's Image is one of the key factors for patients to select a hospital. Hospital's Image is the notion that patients have about the hospital (Barich & Kotler 1991). Hence, impression of patients about a hospital reflects its Hospital Image (Sener, 2014). If patients have good, clear, and positive views about the hospital then frequent re-visits will occur. Wu (2011) said positive Brand Image of hospitals provides a competitive advantage. Park Y.S (2010) relates that the image of hospitals reflects unsatisfactory services due to long awaiting time, uncertainty, consumer stress and anger (Suridana, 2022, 2017). These negative experiences make patients feel frustrated and this significantly leads to dissatisfaction about the hospitals' Brand Image. On the other hand, there is an inverse relationship whereby surveys show that comfortable environment, excellent facilities, quick services for doctor consultation and their caring behaviors make patients feel satisfied about the hospital's good image.

Among the standards on virtuous hospital's image include good management system, economic power, hospital communication systems, Service Quality, innovative competences, capable staff, corporal capability and concern about societal accountabilities etc. (Izaei & Saydan, 2013, Ozata & Sevebc 2006, Ayhan & Canoz, 2006. & Sener, 2014).

Positive Patients' Satisfactions will preserve the hospital's long-term goals, enhance the inner and outer interaction, accomplish the targets and accord hospitals their competitive advantages in lieu of favor, trustworthiness and believe (Bolat, 2000., & Erdogan et al. 2006).

Therefore, in making an influential hospital's image, its mission and vision should be clear, customer satisfaction, and service quality should be delighted. The hospital's management needs to be involved with powerful support of broadcasting while priorities should be on advertising, funding, and concerning social activities (Bolton, 2006. & Sener, 2014).

2.8. BRAND TRUST

Various studies have found that Brand Trust has a direct impact on Customer Satisfaction (Fatema, 2019). Berry (2000) emphasizes that Branding performs a substantial role in boosting Consumer Trust (Hosseini & Behboudi, 2017). Chaudhary and Holbrook (2001) discovered:

‘The willingness of the average consumer to rely on the ability of brand to perform its stated function’.

Morgan and Hunt (1994) discovered trust is mainly an intangible service such as financial matters, transaction, and other security issues. Trust occurs as one party approaches another party to trade upon honesty and reliability (Hosseini & Behboudi, 2017). Brand Trust is a vital factor in Customer Satisfaction even before and after the use of the product and services. Brand Trust occurs direct from business transactions experienced by customers through the Brand. Purchasers will decide, select, and pick the Brand based on their degree of Trust in the company (Fatema, 2019). Brand Trust is vital for producing, sustaining, collaborating, and enduring long term relationship with the customers as well market competitors in today's business (Hossieni & Behboudi, 2017). In Islam, the Quran and Hadith emphasize to maintain Trust in both business transactions (Mu'amalat) and personal dealings. ‘Tawaqqul’ is an Arabic word meaning ‘trusting,

relying, depending or have confidence on something (Brill 2006). In Islam, Trust solely on Allah (swt) for everything or rely on His plans wholeheartedly.

‘Surely, Allah loves those who place their trust in Him’ (Surah Al Imran Verse159).

Even Prophet Mohammad (saw) continuously warned the Ummah to provide quality product and service with honesty and trustworthiness so that purchaser is not cheated. A seller who provides service dishonestly will be punished by Allah (swt) (Sahih al Bukhari, chapter on Mu’amalat). Thus, individuals and business operators should be careful in any kind of dealing so that customers will be faithful to them.

Delgado-Ballester and Munuera-Aleman (2005) defined ‘Trust’ as faithfulness or confidence towards the Brand that guarantees value to the customers (Fatema, 2019). Therefore, in the context of Private Hospitals, patients can completely rely on or have faith and emotions (Sudirman et al. 2022) in the Brand’s performance, treatments or any other facilities rendered. Therefore, based on the level of Trust patients will choose the branded hospitals for treatment.

2.8.1 Brand Trust Theory

Brand Trust significantly affects customer satisfaction (Fatema, 2019 Chaudhary and Holbrook (2001)). Hospitals’ Trust relies on a few factors such as patients’ attitudes, perceived service quality, stature and employees’ manners to patients and care givers, staff’s favorable or unfavorable attitudes (Kemp et al. 2014), respectable relationship (Morgan & Hunt 1994), belief and support and having confidence in the hospital (Hosseini & Behboudi, 2017). Shoniregun et al. (2004) found that customer relationship with the management need to develop a Trust Model that merges the strategy and law on trust, technological trust, public trust etc. (Deghounpuri et al. 2019).

2.8.2 Brand Trust in Hospitals

In the health care context, Brand Trust, beliefs, and feelings that patients have on the hospitals represent the hospital Brand Image (Sudirman et al 2022., Kotler & Clarke, 1987). Kemp et al. (2014) found hospitals are particularly worth the individuals' Trust that are patients experienced (Hosseini & Behboudi, 2017). Brand Trust shows an excellent lens for the organization that has great effect to run Brand loyalty to repurchase service. Thus, Brand Trust controls Brand loyalty (Fatema, 2019).

Patient's role is increasing hospital awareness on Brand issues as life threatening matters evolve in many cases. Hospital Brand Trust and positive image demonstrates key status to boosting Patient Satisfaction that affect the growth of market shares too (Hosseini & Behboudi, 2017). To earn the hospital's Brand Trust, hospital staff should gain professionalism and technical expertise and show empathy to vulnerable patients via sympathy to them, knowing their wishes and wants and showing concerns (Sener, 2014). To develop more Patient Satisfaction and Trust, hospitals need to boost their facilities too. To create Brand Trust, hospitals need to improve patient-centered services such as reliability, tangibility, responsiveness, assurance, and empathy (Wu, 2001. & Sener, 2014). Brand Image has positive influences on Brand Trust. Thus, Brand Trust feasibly is an extremely powerful method of each institution (Surapto, 2020).

Any Brand should have the capability to provide customer Trust and that Trust varies on purchasers' desires. However, hospitals' Brand Trust depends on beliefs, preferences and guarantees given by the hospitals (Zehra & Arshad, 2018). Hospital management should provide remarkable experience to safeguard patient's Trust. Usually, Patients in critical conditions come to the Private Hospitals to get comfort and to overcome discomfort. If Hospitals cause more discomfort, it will reduce Trust and cause negative turnover from that Brand.

Table 2.4 demonstrates the summary of main themes regarding the literature in Brand Image and Brand Trust and other issues in the hospital context.

Table 1.4 - Main theme of Brand Image, Brand Trust in the Hospital Context

Year	Author(s)	Main theme (Brand Image, Brand Trust of Hospitals)
2019	Fatema.	Importance of Brand for target market further in-depth to successfully operate
2018	Nahar et al.	Definition & explains on Brand image owners about the institution
2015 2013. 2012.	Huei et al. Wijaya. Chin-Chuang et al.	Definition of brand Image and importance of Brand for hospitals.
2015., 1992., 1984.	Wijaya.; Aker & Stayman. and Putu & Wells.	Importance of Brand Image that enhances value of the products by varying the experience and perception
2014	Sener	Acknowledged that hospitals Image as one of the key factors in selecting a hospital
2011	Wu	Said positive Brand Image of hospitals provide a competitive advantage.
2006. 2006.	Bolat. Erdogan et al.	Importance of positive Patient Satisfaction that preserve the hospital's Brand long-term goals, enhance the inner and outer interaction, accomplishing the targets
2014	Sener	To earn the hospital's Brand Trust, hospital staff should gain professionalism and technical expertise and show empathy to patients with vulnerable conditions
2000	Kotler.	American Marketing Association define Brand as, <i>'A name, term, sign, symbol or design or a combination of them to distinguish the product or services from its rivals'</i> .
1991.	Kotler.	Revealed that Brand Image characterize a product or service.

2019	Fatema.	Brand Trust and its impact on Customer Satisfaction
Year	Author(s)	Brand Image and Brand Trust in hospitals
2020	Surapto.	Brand Image has positive influence on Brand Trust. So, Brand Trust feasibly is an extremely powerful method for each institution
2018	Zehra & Arshad	Explain hospital's Brand Trust differs on beliefs, preferences and guarantees given by the hospitals
2017	Hosseini & Behboudi.	Explain that Trust occurs as confidence reaches one party to another party to trade upon honesty and reliability.
2015	Huei et al.	Importance of corporate image especially the hospital sector as it is essential because of consumers'/patients' life at risk issues
2014	Kemp et al.	Discovered hospital's individual's Trust that is patient's experiences
2001	Chaudhary & Holbrook	Discovered that, <i>'The willingness of the average consumers to rely on the ability of Brand to perform its stated function'</i> .
2000	Berry	Studied that branding plays a substantial role to boost Consumer Trust
1987	Kotler & Clarke	Explain health care context, Brand Trust, beliefs and feelings that patients perceive on the hospitals that represents the hospital's Image

2.9 PRICE AS THE MODERATING VARIABLE

Baron and Kenny (1986) studied Moderator variables as an independent variable that can influence the path or fortify affiliation that appears as both independent variables and dependent variables (Holmbeck, 1997. Lindley & Walker, 1993. & Quoquab, 2018, p.110). This affiliation can be positive for independent variables and negative for dependent

variables or vice versa. Moderator variables can be constant variables as well (Quoquab, 2018).

In some cases, moderator can be integrated to the model where one study result found positive effects whereas later, other studies found no direct relation between them, and that the moderator can solve these problems of differences (Quaquab, 2018). Moderator variable scientifically modifies the weakness or strengthen the correlation among analysis and result (Quaquab, 2018, p.141). In this study, Price is the moderator between the independent variables of Service Quality, Brand Image and Brand Trust and dependent variable is Patient Satisfaction.

2.10 PRICE FOR SERVICE

Product or Service prices are vital and has a significant effect on customers' judgments. Substantial costs influence some effects on choosing the Brand (Afsar, 2104). Price is the sum of money or value that is charged for a product or service that customers exchange for having or using the product or service (Kotler and Gray, 2014). For effective service quality and get patients' satisfaction, the hospitals' brand strategies of price allocation and price management are necessary (Agarwal and Dhingra, 2023). Price also plays a vital role in selecting the Brand. Many purchasers decide to buy separate Brands in various groups in terms of product and services' price (Keller, 1998., & Asfar. 2014, p. 10).

Superior Service Quality, offers, coupons, free gifts, prolonged guarantees, and minimal interest are correlated and highly advocated for Customer Satisfaction (Iddrisu, 2011) Even Suresh Hander et al (2002) classify five principles of Brand Trusts and Image for Customer Satisfaction that emphasizes on distribution systems, disciplinary rules and tangibility of product and services (Hashem & Ali, 2019). Dodds et al. (1991) stated that Price, brand name and brand information (trust) about the product quality and services are the guidelines for customers' readiness to purchase the product.

Zeithaml (1988) identifies four diverse meanings of value of services for the customers. They are value for money, value for whatever customers want, value for the

quality that the consumer expects for the price paid and value for what the customers received for what they paid. Here, out of four, two are related to price and this signifies the importance of price.

In the narrow perspective, benefit is identified as quality while sacrifice is represented as price paid. This narrow perspective is criticized as very basic and only reflects one factor of the perceived benefits and sacrifices (Oliver, 1980). Hence, the concept of expectation includes the total number of benefits and sacrifices which consist of both monetary and non-monetary aspects.

Table 2.5 - Main theme of Price in the hospital context

Year	Author(s)	Main theme (Price)
2014	Afsar, B.	Explain price is vital and has significant effect on consumers' judgments and affects choice of brand
2014	Kotler and Gray.	Explain the value that is charged for a product or services that customers exchange for having or using them.
2011	Iddrisu.	Price matter satisfaction to patients from offers, coupons, free gifts, prolonged guarantees and minimal interest is correlated
2009	Prasana et al.	Explain that Price has substantial influence on Customer Satisfaction
1991	Dodds et al.	Stated price information about product quality and services are the guidelines for customers' readiness to purchase the product.
1988	Zeithaml.	Identifies four diverse meanings of value of services from customer side. Out of four factors two are related to price.

Table 2.6 illustrates the summary of the Basic Theory, Model, Dimension, and Instrument of all the variables discussed in the literatures of the study.

Table 2.6 - Main topic of Theory, Model, Dimension, and Instrument of all the variables

Year	Author(s)	Theory of Customer Satisfaction / Patients Satisfaction (PS)
1957	Festinger.	The Dissonance Theory.
1961	Sherrif & Hovland	The Assimilation Contrast Theories.
1964	Helson	The Adaption level Theory.
1973	Anderson.	The customer expectancy about services has four physiological theories.
1977	Oliver.	They are the Assimilation theory, the Contrast theory, the Generalized Negativity, and the Assimilation Contrast theory (Modest, 2022).
2008	Yuksel & Yuksel.	The Expectancy-Disconfirmation Model. The Equality Theory, The Comparison level of Theory, The Evaluation Congruity Theory, The Attribution Theory, The Value-Prospect Theory etc also recognize (under the Customer Satisfaction's area by many scholars).
1997., 2013., 2016., 2020.	Aliman & Mohamad.; Oliver.;Duriyyah.; Andervazah et al., Haryanto & Sitio.	Measurement instrument of Patients' Satisfaction in hospitals

Year	Author(s)	Theory of Service Quality (SQ)
1950-1993	W. E. Deming	Provided TQM theory and Deming's fourteen points (14 points and explained Total Quality Services (TQS). Chain reaction of Quality theory.
1988	Armand V. Feigenbaum	Discussed Total Quality Control (TQC)
1951	Kaoru Ishikawa	Explained Quality Circle (QC)
1984; 1988	Parasuraman, Parasuraman, Zeithaml and Berry	Explain Service Quality theory and conceptual model of Service Quality including Gap Theory
1984	Gronroos	Nordic Service Quality Service Quality Theory; two factor Theories
1994	Oliver; Walker	The Expectancy-Disconfirmation Theory
2016	Osman and Owen	

		Compliance Theory
1988	Parasuraman.	Conceptualization of Service Quality, the original SERVQUAL instrument consist of 22 items and the data of 22 attributes are divided into five dimensions i.e. tangibles, reliability, responsiveness, assurance, and empathy.
1991. 1994. 2010.	Mangold & Babkas. Heskett, Sasser and Schlesinger. Aagja and Garg.	Service Quality instrument has been made to measure service features in a variety of companies such as hospitals. Developed a theoretical framework of service chain to organization profit chain, designed with employee trustworthiness, productivity, satisfaction, and performance. Five dimensions in hospital service quality namely admission process, discharge process, medical service, social obligation, and overall services.
Year	Author(s)	Model of Brand Image (BI) and Brand Trust (BT)

2015	Wijaya	Five dimensions of Brand Image in hospital service quality are admission process, discharge process, medical service, social obligation. (Concept developed from Aaker, 1991; Keller, 1993; Aaker 1997).
200.,1995. 2004. 2014.	Chaudhary and Halbrook.; Lasser et al. Shoniregun et al. Kemp et al.	Discovered basic measurements instruments for Brand Trust. Trust Model that has merged strategy and law on Trust, Technological Trust, Public Trust etc. Hospitals Trust factors include patients' attitudes, perceived service quality, stature and employees' manners to patients and companions, staff's favourable or unfavourable attitudes.
Year	Author(s)	Price Factor
2020 2017	Haryanto and Sitio. Ogaji and Mezie - Okoye.	Developed measurements instrument of price. Developed measurement instruments of waiting time.

Thus, the study secondary data were found from above studies especially in the form of theoretical frameworks that relate to important indicators especially in terms of Patient/Customer Satisfaction, Service Quality, Brand Image, and Brand Trust. Consequences of Price or more appropriately hospital's charges were obtained from patients themselves and this data evaluated on patients/Customer Satisfactions. Hence, finally pinpointed in the Research Gap.

According to the research gap the study intends to develop a Model based on the experiences of patients i.e. through the variables that influence Patient Satisfaction towards

the services of Private Hospitals in Dhaka. According to Kotler & Amstrong (2001), effective marketing tactics for Patients' products and services should be predominantly defined so that the industry has perfect knowledge about the needs and demands (Fatema, 2019) of patients about the service quality and hospitals brand image and brand trusts. Because brands have huge influence on business industries and intensely affect customer satisfaction. Branding needs some uniqueness to deliver to the target market and successfully operate and succeed in business (Fatema, 2019).

2.11 THEORETICAL FRAMEWORK

Based on the extensive Literature Review (LR), this research has developed and proposed a Theoretical Framework. The LR highlights more on the general theory because all the mentioned literature has no specific theory as only the dimension and model are focused by scholars. Here, Patients' Satisfaction is inspired by the Expectancy Disconfirmation Model to get positive or negative feedback while service quality's basic ground of the SERVQUAL's Model formulated by Parasuraman et al (1988; 1989) has been revised by many scholars like Aagja & Garg (2010), Maqsood et al (2017), Babakuas & Mangold (1992), Alrubaeice & Alkaa'ida (2001), Sohail (2001), Aliman & Mohammad (2013), Irfan et al (2012), Kazemi et al., (2013) according to the nature of hospitals under study.

On the other hand, Brand Image is the dimension that most inspired the researcher to form the Theoretical Framework for the study that can easily fit with the measurement item and be able to test the dimension. Kem et al (2014) states that favorable and unfavorable attitudes about Hospitals Trust are focused on the Theoretical Framework while for the moderating role of price, it is inspired from Zeithaml (1988). The four values of services can fluctuate the positive or negative relationship among all the independent variables and dependent variables. As a result, based on the LR, this study derives from the Theoretical Framework as shown in Figure 2.3.

The Theoretical Framework of this research proposes Service Quality based on the theoretical background of service quality literatures and the SERVQUAL instrument

(Parasuraman et al, 1985.1988) etc. The Patient Satisfaction measurement instrument is based on the Expectancy Confirmation Theory (Oliver 1980) which measures expectation and perception of Patient Satisfaction and Trust. A comprehensive review of branding in marketing has also been discussed in this chapter to develop the Theoretical Framework. The framework shortens the study to suggest a few factors that influence Patient Satisfaction. The suggested influential factors towards hospital's Patient Satisfaction are Service Quality, Brand Image, and Brand Trust. In addition, the study also suggests that the Moderating Variable (MV) is Price. The MV needs to be evaluated against the three Independent Variables (IV) namely Service Quality, Brand Image, and Brand Trust. Above all, the main Dependent Variable (DV) is Patient Satisfaction.

2.12 THE HYPOTHESES DEVELOPMENT

For this research, hypothesis development is needed because a positivist paradigm is intended and to test the hypotheses (Quoquab, 2018). Besides that, this involves the relationship between independent and dependent variables and for distinctions between other groups, two independent or more factors are engaged (Quoquab, 2018).

From the above constructive reviews, the study discovers that Patients' Satisfactions have been analytically reviewed and examined by many scholars especially Parasuraman et al (1988), Kem et al. (2008), Oliver (1980), Otani et al. (2012), Kotler and Keller (2012), Zubayer (2017), Surydana (2017), Surapto (2019), Maqsud et al (2017), Mohiuddin (2020). However, they did not constructively conclude Patient Satisfaction level especially in relation to patients of Private Hospitals in Dhaka, Bangladesh.

As Pai and Chary (2014) highlights the Patient Satisfactions depend on the basic need of comfort, safety, security, privacy, and care from the hospitals (Zubayer, 2017) while Otani et al (2012) maintains that nursing care and doctor care influence greatly on Patient Satisfactions. Kotler and Keller (2012) also stress that Patient Satisfactions is one of the major conviction about performance of hospitals that reflects on its Brand Image either positively or negatively (Surydana, 2017) while Godfrey (1999) emphasized that

Brand Identity such as features, symbol, layouts of design and decoration, conveniences of cafeteria, parking lot and accessibility of Brand locations are basic key concerns affecting Patient Satisfactions on Hospital Brand Image (Zubayer, 2017).

Patients' Trust and long-lasting relationship with hospitals relies according to its value (Surydana, 2017), minimize the barrier of registration and admission procedures (Yogesh and Satyanarayana, 2016), beliefs, assurance, and confidence about brand function (Surapto, 2019).

On the other hand, though patients give priority on health instead of price, a developing and low GDP Bangladesh influence patients to think about the price too. As patients are more concerned about hospitals fees, price, and others related costs. Lupiyoadi (2001) identified that patients look for same service with lower price and choose the services where there is no need to pay additional charge to get hospitals' services. In many cases, Bangladeshi patients seek hospitals which charge them less because of their limited income (Surydana 2017).

That is why in many cases, prices can be moderated to satisfy or dissatisfy patients towards hospitals as well as for them to select hospitals' Brand. Thus, Price is a substantial influence on Patient Satisfactions, so price investigation needs to be carried out (Prasana et al. 2009). Consequently, based on the comprehensive LR done relationships of variables can now be deliberated; several hypotheses are then formulated and later tested.

2.12.1. The Relationship between Service Quality and Patient Satisfaction

According to O'Neill and Palmer (2003) studies have examined the relationship between Service Quality and Customer Satisfaction. A positive relationship exists between customers' perceptions of Service Quality and their willingness to recommend the service provider (Zeithaml, 1996). Service Quality is an antecedent of Customer Satisfaction and in turn Customer Satisfaction has a significant impact on purchase intention (Barsky, 1992).

Barsky (1992) notes that perceived value is influenced positively by perceived quality and negatively by price perceptions. In a more thorough study, Snoj and Mumel (2002) suggest that perceived quality has a positive impact on perceived value while perceived risk negatively influences perception. Satisfaction is required when someone feels positive after buying a specific item (Hunt, 1977) which can either be in any tangible or intangible form.

Patient/Customer Satisfaction is typically defined as a post-consumption evaluative judgment concerning a specific product or service (Kandampully & Suhartanto, 2000). It is the result of an evaluative process that contrasts repurchase expectations with perceptions of performance during and after the consumption experience. Some research found that performance level of expectation and performance has great link with satisfaction where quality is directly related to Customer Satisfaction (Liuser et al. 2001).

Many studies have investigated the relationship with the patients' behaviors (Kandampully & Suhartanto, 2000; Churchill & Surprenant, 1982. & Zeithaml & Bitner, 2003) and found the basis of satisfaction. According to the findings, Patient Satisfaction increases patient's loyalty, influences re-purchase intentions, leads to positive word-of-mouth (Zeithaml & Bitner, 2000., & Amin & Nasiruddin, 2013.) and increases market share and remains tied to the brand (Caruana, 2002., Donio et al. 2006., Ladhari, 2009., & Farhana, 2017). Result of a study by Cronin and Taylor (1992) show the existence of high level of perception in Service Quality upgrades to higher level of satisfaction. According to Parasuraman et al. (1985), their judgment is based on the differences between required value-added services and perceived services (Mahmood et al. 2013).

Besides that, satisfaction can be determined subjectively based on patient's needs and emotions against objective factors like product and service features. Likewise, the study found that cleanliness, security, value for money and courtesy of staff is the Mean factors in determining satisfaction (Nigell et al.1999). Other research reveals that room cleanliness and comfort, convenience of location, prompt attentive, safety and security and friendliness of staff are important to satisfy patients (Juwaheer & Ross, 2003). If the

hospitals (institutions) can fulfill the requirement and make them satisfied then that reassures them to increase their reliability to the hospital business too (Isoratie, 2016).

Therefore, based on the above literature and the relationship between hospital Service Quality and Patient Satisfaction, the following hypothesis is articulated i.e.

H1: Hospital Service Quality has a significant impact on Patient Satisfaction.

2.12.2 The Relationship between Brand Image and Patient Satisfaction

Hunter and Michi, (2000) found that the institution's Brand Image can fulfil customers' requirements, wants while availability of services and products are capable to provide Patient/Customer Satisfaction (Sener, 2014). It is common belief that a positive hospital Brand Image confirms Patient Satisfaction. Brand Image impacts through a streaming effect as suggested by Andreessen and Lind (1998) and Davies et al (2003) who found that Customer (patients) Satisfaction connects with Brand Image (Wu, 2011). A reliable institution is a good source according to customer perception and they feel less threatened to take advantage of its services (Huei et al. 2015).

Many scholars argued that Brand Image is directly influential to a patient's judgments about the hospital's services. Javalgi et al (1992) said a promising Brand Image not only have a significant impact on perceived services but also reinforces a competitive place in the business market (Huei et al. 2015). Brand Image affects customers' feelings and acts about the company (Khan et al. 2020). Thus, Brand Image has been acknowledged as an originator of Patient Satisfaction and good Brand Image manages to create superior satisfaction in the hospital (Wu, 2011). Therefore, Patient Satisfaction leads to patient's Trust which is important for the hospital industry. The positive word of mouth is favorable for the institutions' reputation/image and future profits (Zeithaml, 1996).

Based on above correlations between hospitals' Brand Image and Patient Satisfaction the second hypothesis is outlined as follows:

So H2: Hospital Brand Image has a significant impact on Patient Satisfaction.

2.12.3 The Relationship between Brand Trust and Patient Satisfaction

Akbar and Parvez (2009) discovered that Brand Trust is a substantial skill of brand reliability. Trust is an essential factor to build relationships with customers (Lytle, 1995, Mahmud et al. 2018) and Brand Trust is the key to secure the cooperative link for the patients as customers (Kundu & Datta 2015). Taher J. and Abdullah (2015) found Trust is the challenging correlation between customers and providers.

Many studies conclude that lack of Brand Trust occurs when numerous customers migrate from online operation to Brand (Ang et al. 2001). So, Brand Trust becomes like a 'glue' for Customer Satisfaction in the business or hospitals' long-term relation, positive customer relationship with the management and ultimately business achievement (Noor, 2013., Sing & Shirdeshmukh, 2000., Dhegahnpuri et al. 2019).

In business, market involvement is massively producing value to the Brand Trust and satisfied customers establish enthusiastic link between Brand Trust too (Kusik ,2007). The Brand should be more decisive as a complete method in marketing to build the link to purchasers and secure positive word of mouth (Keyani, 2012; Nazir et al., 2019). Because satisfied patients as customers present an efficient rule among purchasers and Brand to boost and retain long term affiliation.

Patient/Customer Satisfaction rebuilds long-term bonding, value of Brand and favorable word of mouth that promote to make common Brand Trust and status of the institution (Hanif 2010.; Punirin et al., 2019.; Zaman et al. 2012., Rahman et al., 2012). Oliver (2009) also found that Patient/Customer Trust is the intense concern of purchaser to lead to the continuous purchase of the product or service. On the other hand, Lau and Lee (1999) stressed that Brand Trust is the judge of customer that is threat free and carries positive outcomes. Brand Trust influences greatly towards Patient/Customer Satisfaction (Kiyani et at., 2012, Arinto et al.; 2016, Wulur et al. 2020).

Study shows that Patient Satisfaction describes the levels of the patient's wishes, hopes, targets and favors offered by the hospital's health and service provider (Debono &

Travaglia, 2009). Now and again, dissatisfaction or negative Brand Trust of the patient may have serious effects on the patient's body and mind (Farhana, 2017). So, faith and Trust on hospital treatment is valuable to the patient's health. In hospital services, the above studies found that there is a link between Patient Satisfaction and hospital Brand Trust. So, a third hypothesis is now suggested as follows:

H3. Hospital Brand Trust has a significant impact on Patient Satisfaction.

2.12.4 The moderating relationship between Price, Service Quality and Patient Satisfaction

Kotler et al (2010) found that Customer Satisfaction or Dissatisfaction happens when Service Quality falls below expectations. Satisfaction is more related to Trust because it relates to potential revenue, reduction in price transactions, control instability, anticipated cash flow, enhanced price tolerance and boost bargaining power (Surydan, 2017). So, patient's value is higher when the attitudes and service value is higher than expected. Hospital quality and good services substantially impact on Patient Satisfaction. Thus, Price and income level are considered to facilitate the Service Quality and Patient Satisfaction of the firms'/hospitals' Brand (Surydana, 2017, & Naik et al. 2010).

In some cases, if patients are satisfied with the hospital service, then patients are willing to pay more. Barkat et al. (2003) found that price adeptness is one of the most important factors to satisfy patients (Zubayer, 2017). Though price varies and strongly influences patients to select hospitals in developing countries but for long term, price minimization is significant, needed, and appropriate to be introduced (Hensher et al.). So, the following hypothesis can be proposed i.e.

H4. Price has a moderating impact on Service Quality and Patient Satisfaction.

2.12.5. The Moderating Relationship between Price, Brand Image and Patient Satisfaction

Brand Image is a set of principles concerning specific brands that perform an essential role in customer decision-making process (Lehu & Surapto, 2020, & Deni, 2020). The primary concern of customers' Trust is Brand Image. Business trustworthiness develops from the result of Brand Image (Lehu & Surapto, 2020). Lack of Patient Satisfaction affects Hospital Brand significantly (Naik et al. 2010).

Patient Satisfaction is an asset that should be examined and managed like a tangible asset for brand. The University of Michigan observed that on average the percentage of Customer Satisfaction increased to 2.37% in stock gain (Keninham & Vavra, 2001). Increased hospital's stock market shows that the financial stability of hospitals increased due to hospital's Brand Image and Trust among patients. Many researchers found that the purchaser's mind can change to choose the product quantity because of the Brand Image, Brand qualities and Price (Manoj et al., & Afsar, 2014).

Barsky and Labagh (1992) identify nine issues to fulfil customers' desires. Price is one of them (Hashem and Ali, 2019). While other brands may offer better prices and incentives, customers can stop buying the service and move to another Brand (Storbacka, 2001., & Hasem & Ali 2019). Therefore, for hospital's Brand Trust and Brand Image patients' assessments depend on hospital's Service Quality, images and as well as staff or nurses' performances, fees or lesser price (Sciulli & Missien, 2015). Reduction of the charge substantially impacts on Brand (Asfar, 2014). So, the fifth hypothesis of this study is as follows:

H5: Price has a moderating impact on Brand Image and Patient Satisfaction.

2.12.6 The Moderating Relationship between Price, Brand Trust, and Patient Satisfaction

Le (2017) found that the perceived price greatly interacts with the buying intention in various services (Benhardy et al. 2020). Developing and providing long-lasting Brand Trust with patients is essential for hospital's achievements/profits.

The degree of satisfaction is highly linked with five factors. They are product/services quality, touching emotions, lower price and no excessive cost and waiting time on the execution of the organizations' services (Lupiyoadi, 2001, & Suridana, 2017). Brand Trust really fascinates expertise as well as scholars (Deni, 2020). Brand Trust can reduce the ambiguity trust that the company is labelled against the needs and wants of customers (Benhardy et al, 2020). Trust triggers commitments as it diminishes the cost of bargaining power (Asfar, 2014., & Bendapudi & Berry, 1997). Dodds et al (1991) noticed that price promotion fluctuates to attract short term and long-term demands of the institutions. However, moderation of costs/charges are mostly short-term choice-making approach (Dodds et al. 1991). So, the last Hypothesis is formulated as:

H6. Price has a moderating impact on Brand Trust and Patient Satisfaction.

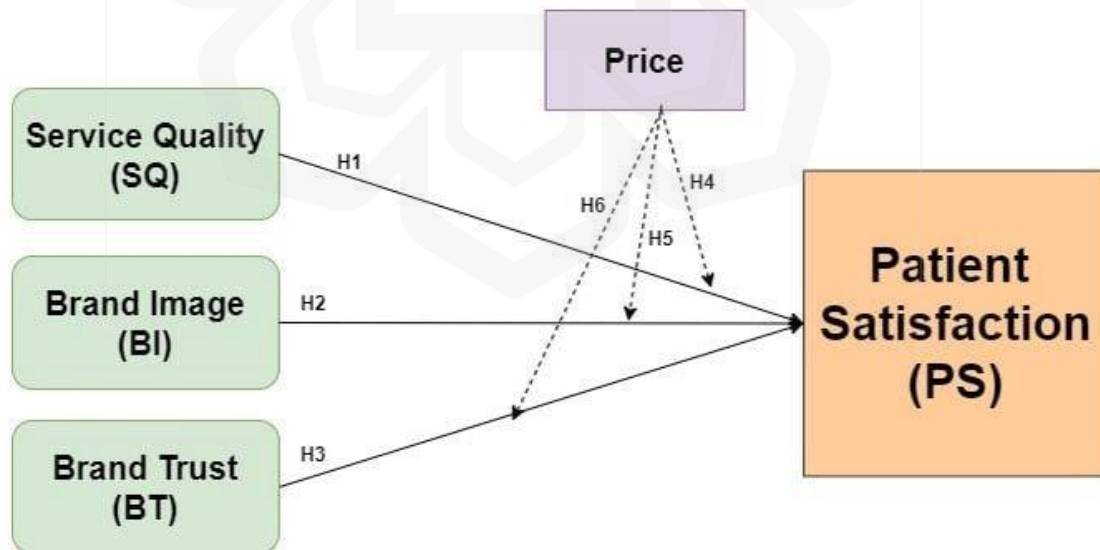


Figure 2.3 - The Theoretical Framework

2.13. SUMMARY OF HYPOTHESES

Overall, six (6) hypotheses have been formulated to show the relationship among the research variables. They are listed below:

Hp.1: Hospital Service Quality has a significant impact on Patient Satisfaction

Hp.2: Hospital Brand Image has a significant impact on Patient Satisfaction

Hp.3: Hospital Brand Trust has a significant impact on Patient Satisfaction

Hp.4: Price has a moderating impact on Service Quality and Patient Satisfaction.

Hp.5: Price has a moderating impact on Brand Image and Patient Satisfaction.

Hp.6: Price has a moderating impact on Brand Trust and Patient Satisfaction.

2.14. CHAPTER SUMMARY

In this chapter, a comprehensive Literature Review (LR) was done based on secondary and tertiary sources. The works from previous research that focused on Customer Satisfaction, Patient Satisfaction, Service Quality, Service Dimension, Brand Image, Brand Trust and Price as well as certain Theories, approaches, methods, frameworks, and techniques proved helpful in assessing all the Dependent and Independent variables that this research need to examine and therefore contributed significantly in devising the Six Hypotheses of the research.

This chapter also carefully initiated and constructed the Conceptual Framework. Several tables that are provided succeed in summarizing the LR at a quick glance and serve as useful and meaningful references for this research. The next chapter will propose the Methodology and detailed approach for the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter describes the research design and methodology that were used to examine the relationship of service quality, brand image and brand trust on patient satisfaction as well as price of Private Hospitals in Dhaka. Patient Satisfaction is the dependent variable in this study. Patient Satisfaction intensively influenced the management and marketing strategies of private hospitals in Dhaka. From the literature review, three independent variables have been identified to impart direct impacts on the prospects of private hospitals in Dhaka. They are Service Quality, Brand Image, and Brand Trust while Price has been recognized as the Moderating Variable and should be given prominence when drawing up the Conceptual Framework for this study.

This chapter explains about the research design, methodology, procedures, survey instrument, questionnaire design, distribution, and collection methods of the study. The data analysis software, justifications for using them and the validity and reliability of the data for the study are deliberated in this chapter too.

3.2 RESEARCH DESIGN AND METHOD

Research design is a general plan to answer research questions (RQs) which will then provide clear ideas about them (Saunders, 2015). There are mainly two types of research methodologies namely the qualitative and quantitative methods. The combination of both the qualitative and quantitative methods is named the mixed-method methodology. Qualitative research is where data is collected, using both structured and unstructured techniques. Qualitative research also provides in-depth understanding and pave towards theory building. This type of research is purposive, non-probability and small sized. It involves the longitudinal approach, and it draws data from an individual or a group, organization or institution, text, setting and environment, objects, artefacts, media products,

events, and happenings (Cooper, 2014). For Qualitative research, the data collection process involves Survey, Observation and Questionnaire etc.

On the contrary, quantitative research is a systematic empirical investigation on the relationship between quantitative properties and phenomena of hypothesis identified from pre-determined tools that deliver statistical results (Creswell, 2003). Quantitative methods come in various forms such as online survey, paper survey and mobile survey which are longitudinal and generally the sample design is large. Before commencing quantitative research and to ensure project consistency, it is critical to decide whether to employ the single or mixed-method approach. Both methods are very easy to describe and are very helpful to design and to validate the instruments. This study has been employed solely in quantitative research.

3.2.1 Research Method of the Study

The research approach of the present study is the quantitative method only. The first phase of this quantitative research will implement the process of measurement and test the framework of the study. the design tool will be adopted from previous studies carried out by Zailani & Sasthriar, 2011, Pereira-Moliner et al, 2012., Antony & Kumar, 2012., Gowen et al., 2012., El-Jardali et al., 2014., and Guesalaga, 2014., & Zeng et al., 2015.

In the first phase, the population and sampling were carefully studied and chosen and then the data collection method was decided upon i.e. administered via the Survey Questionnaire while the collection of completed questionnaires was collected personally. The second phase of this quantitative study was through the application of appropriate software to get the results and hypotheses tested. This exercise provided answers to relevant questions of the thesis such as research questions, problem statement and so forth. The entire research process is as shown in Exhibit 3.1 below. Basically, it involves five distinct phases i.e. the literature review phase, the research design phase, the data collection phase, the data analysis phase and finally the findings and conclusion phase. Detailed activities in each Phase are depicted clearly in the diagram.

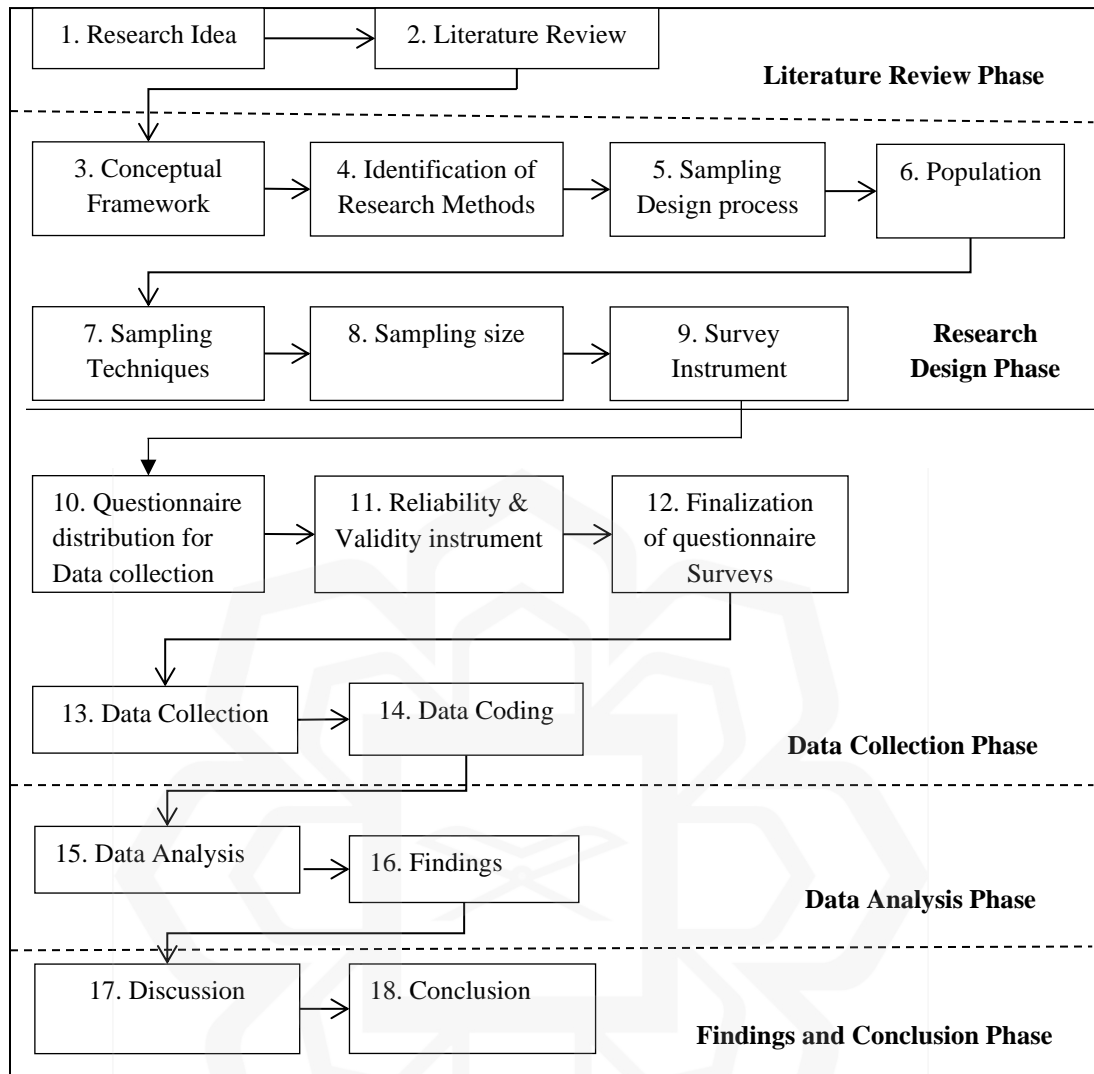


Figure 3.1 - The Research Process

3.3 POPULATION AND SAMPLING DESIGN

This section describes all the steps of the study involving its population and the sampling procedures adopted. The Sample Size frame, instrument and execution process is also defined and discussed here. Exhibit 3.2. shows the sampling process in its sequential order.

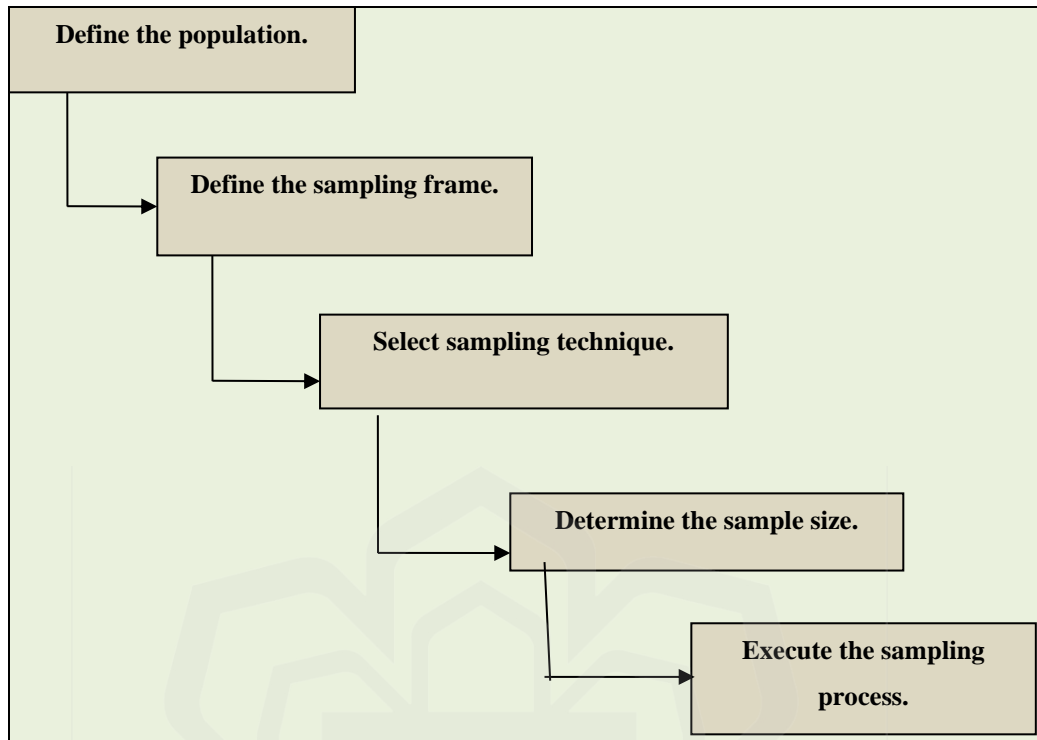


Figure 3.2 – Sampling Process of the Study

Source: Malhotra and Das (2009)

3.3.1 Population

Population refers to the entire group of people, events, or things of interest that the researcher wishes to examine (Sekaran, 2003). A sampling structure is precisely attached to the target population that is the record of elements from which the sample is taken (Cooper & Schindler, 2011).

In the present study, the population design is the selected Private Hospitals' patients in Dhaka. The population of this study is a set of patients (patients and their care givers) who are often regarded as 'customers' of Private Hospitals (Khosravi & Anvari, 2013). The intention to choose the Private Hospitals in Dhaka city is based on their central geographical locations that form the seat of the whole of Bangladesh government (Ahmed,

2016). Among all the listed Private Hospitals in Bangladesh, a majority are situated in Dhaka city where a huge number of patients from all over the country patronize their health care services (MOHE&FW, 2020). Therefore, in this study the Private Hospitals in Dhaka city is considered enough for the data collection purpose. Respondents of this study are both the in-patients and out-patients of the Private Hospitals. The data collection was done involving the respondents of these hospitals through the convenience Sampling Method.

3.3.2 Sampling Design and Techniques

Sampling Design is a technique where a small number of items are taken from the total population and to deduce conclusive facts about the population (Salim, 2017). The procedure of selecting the correct person, things, or items as a representative for the total population is called the Sample (Sekaran & Boughe, 2010). The Sample must be valid, as it influences the accuracy and precision of data collection (Cooper, 2015). There are two types of Sampling Design i.e. Probability Sampling and Non-Probability Sampling (Sekaran, 2003, p.270, & Cooper, 2015). The Probability Sampling is a sampling design where a portion of the population is known while conversely the Non-Probability Sampling is a sampling design where a portion of the population is unknown (Sekaran, 2003).

In this study, the researcher does not know about the known portion of the population (patients of Private Hospitals) thus the study opts for the Non-Probability Sampling. To collect the data, the study undertook the convenience Sampling method to find the primary data which falls under the category of the Non-Probability Sampling. The convenience sample is an easy, inexpensive, and fast method to survey questionnaire (Hill et al., 1999). The advantages of this of this sampling is less expensive, quick, and convenient and it is the most accessible in terms of choosing the members (Sekaran, 2003).

3.3.3 Population Frame and Sample Size

A sample is the sub-group of the population that includes some members from it. From studying the sample, the researcher should be able to draw conclusions and would be able to generalize the population under study. The sampling is the process of selecting enough elements from the population so that the sample and its characteristics could be well understood and finally the researcher could generalize quite accurately on the characteristics of the population (Sekaran, 2003).

For this study, eight Private Hospitals were selected based on the MOHE&FW (2021,2020) published list in their excel sheet out of all the 138 Private Hospitals in Dhaka. The reason for selecting these eight hospitals is because all types of disease treatments were operated there. These include general, acute, and chronic disease treatments and the accessibility of various service categories offered by them (Zubayer, 2017. Mona, 2017). In this study, the researcher found eight (8) similar categories (Amin, 2013) in these 10 hospitals. Another very important fact is that all the eight Private Hospitals chosen to have had their license renewed by the MOHE&FW (2021, 2020). All of them have emergency services, their own laboratories, all have at least 250 to 500 beds facilities with a minimum of 10 ICU beds and at least 10 CCU beds (MOHE&FW, 2021., 2020). They were the ones with the highest volume of patients compared to other Private Hospitals (Mona, 2017) as well as having 24 hours Emergency Department became their strengths. Thus, the population and respondents of this study have been chosen from those Private Hospitals (Boughe & Sekaran, 2010).

For the selection of the sample size, more than 30 and less than 500 is appropriate for most research. The sample needs to be broken down into sub-samples like male/female or juniors/seniors' categories (Roscoe, 1975; Sekaran, 2003). If the number of the population is more than 75,000 and within 100,000 then the number of sample size will be 384 respondents (Sekaran, 2003. p. 294). The minimum sample size of 30 for each category is acceptable (roscoe, 1975).

On the other hand, the Sample Size of Structural Equation Modelling (SEM) requires many samples though there is no fixed standard regarding the Sample Size to

examine any Research Model (Kline, 2011). But Haire et al., (2010) cautioned that if the Sample Size is too big for example more than 500 then the SEM Analysis will be complex, and a poor model fit will result against the Goodness of Fit (GIF). Thus, in SEM, many researchers choose a Sample Size within 200-400 with 10-15 indicators.

In quantitative research, the sample size is larger than the qualitative research (Marshall et al., 2013). For this study, self-administered questionnaires were executed to gather empirical data from patients of all the selected Private Hospitals in Dhaka city. Here the Multiple Regression Formula was used for Data Analysis therefore, the formula $N > 50 + 8m$ must be satisfied (Tabachnik & Fidell, 2007). Here, m is the number of variables, therefore, the sample size of 384 respondents is considered adequate as $50 + 8(5) = 90$. According to the formula and calculation, the targeted population, and Sample Size calculation, 384 questionnaires will be distributed in the eight hospitals according to the approximate number of patients/respondents taken from the literature review. The questionnaire was distributed in each of the hospitals according to the formula which is number of respondent multiplied by (x) the number of patients per hospitals divided (/) the number of total hospitals and sampling by using Microsoft Excel spreadsheet for this survey (Salem, 2017).

$$\text{Targeted sample size} \times \frac{\text{No. of estimated patients of each hospital}}{\text{No. of total Hospitals}}$$

Thus, the survey questionnaire selected based on the percentage of the number of populations in the sample frame and size for each designated Private Hospitals.

3.4 DATA COLLECTION INSTRUMENT

Data collection is the gathering of information to address critical evaluations of questions, which have been identified earlier. The most important issue related to data collection is selecting the most appropriate information or evidence to answer the selected questions. The survey questionnaire will be used to measure Patients' Satisfaction and to understand the factors that influenced it in the Private Hospitals of Dhaka. To understand the research targets a conceptual model will be tested by analysis. This type of survey can be measured

in two ways i.e. via questionnaire or Interview (Kalidash, 2007). This study conducted the questionnaire survey approach.

To collect the data in a formal and legal manner, the researcher has taken official permission from the Private Hospital's directors (Razia et al, 2019) and the legal or ethical clearance also has been issued from the selected Private Hospital's Ethical Review Committee (ERC) before conducting the data collection process (Begum et al. 2021). And the study was also reviewed and approved by the Institutional Review Board (IRB). Periodic report also submitted to confirm consents from patients and to guarantee the protections of patients' rights (Razia et al. 2019).

3.4.1 Survey Questionnaire

The survey for the study was done through a questionnaire within a four-month period in December'2022-March'2023. The study used the personal administered questionnaire. The advantage of the personal administered questionnaire is that the researcher can collect data with all completed answers of respondents in a very quick period (Sekaran, 2003, & Sekaran & Bougie, 2010). Questions were carefully phrased or crafted, sequenced, and cautiously asked of each respondent (Cooper, 2015).

Some questionnaire items were about the physical conditions of the hospital. The purpose of this survey is to investigate any effects on Patient Satisfaction through important variables like Service quality, brand image, brand trust, price at the selected Private Hospitals. The questionnaire was administered personally, mailed, or electronically distributed to the respondents (Sekaran, 2003). For this research, the Questionnaires were directly handed to the respondents to fill-up.

3.4.2 Measurement Scale

A total number of 50 questionnaire items were devised and adapted based on previous studies. The 1 – 5 Likert Scale that ranged from 'strongly disagree' to 'strongly agree' (Velnampy et al. 2011) was used to measure all variables in evaluating Service Quality,

Brand Image, Brand Trust, Price, and Patient Satisfaction. Likert scale is very easy used and fundamental tools in social science study (Joshi et al. 2015)

The questionnaire of this study was prepared in two languages i.e., in English and Bengali. This helped local respondents to clearly understand, accept and answer the Questionnaires quickly (Sekaran, 2003). The questionnaire was pre-tested by many researchers in previous studies before being applied to this survey. Thus, all service quality and other question are well organized and acknowledged by the literature, so it is not necessary to do pretests (Islam, 2015).

The 10 items in the questionnaire measured Patient Satisfaction that were adapted from various articles done by Maqsood et al (2017), Aliman & Mohamad (2015), Oliver (1997), Durriyah (2016. p.52), Andervazah et al., (2013), Haryanto & Sitio (2020).

In the meantime, the service quality survey is a process of measurement to collect information which is highly structured according to the original version of the SERVQUAL tools which contains five dimensions with 22 sub-items (Parasuraman et al. 1985, 1988). To measure hospital's level of service quality, many researchers applied some items from the SERVQUAL tools with the revised to match Private Hospitals' physical nature or setting. Therefore, revised items and related to hospitals manners 20 items taken from overall findings of Maqsood et al (2017), Ogaji and Mezie-Okoye (2017), Bluestein et al (2014), Sritharan & Velnampy (2011), Wu (2011), Boshoff & Gray (2004), De Jager et al. (2010), Saleh & Rayen (1992) and Modest (2022). For measuring brand image, 8 items were taken from Maqsood et al 2017, Rahman et al. (2012), Kem et al. (2008), Wu (2011), Babakua & Mangold (1992), Sohail (2001). Aagja & Garg (2010). While 7 items were considered for Brand Trust from Lasser et al. (1995), Chaudhuri & Halbrook (2001), Andervazah et al. (2013), 5 items were included to measure price especially from Haryanto and Sitio (2020). The Survey Questionnaires and answers are disclosed clearly in all in the Tables 3.1 to 3.5 while Patient Satisfaction is Table 3.1: Service Quality, Table 3.2: Brand Image is Table 3.3: Brand Trust is table 3.4 and price is Table 3.5 which are substantiated with their respective references and sources.

Table 3.1 – Patient Satisfaction

No	Patient satisfaction (Item)	Source
1.	Hospital indoor service is satisfactory	Maqsood et al. (2017)
2.	Hospitals are willing to listen to patients' problems	Maqsood et al. (2017)
3.	Advanced health equipment's are well maintained	Maqsood et al. (2017)
4.	Doctors are available on their duty	Maqsood et al. (2017)
5.	Nurses are available on their duty	Maqsood et al. (2017)
6.	Overall supportive facilities are excellent	Maqsood et al. (2017)
7.	The laboratory facilities are good (blood bank, lab, medicine etc.)	Maqsood et al. (2017)
8.	Staff (doctors, nurses, and administrative staff) attitudes are good	Aliman& Mohamad (2015). Kem et al (2008).
9.	You always come to the hospital for all types of treatments	Maqsood et al. (2017)
10.	Hospital charges are satisfactory	Maqsood et al (2017) Haryanto and Sitio (2020)

Table 3.2: Service Quality

No	Service quality (Item)	Source
1.	Hospitals gives quick attendance(service) to the patients	Aagja & Garg (2010); Parasuraman et al., 1985,1988, Maqsood et al 2017, Babakua & Mangold (1992), Alrubaeice & Alkaa'ida (2001), Sohail (2001)
2.	Hospitals have modern equipment for treatment of patients	Sohail. 2003., Parasuraman et al., 1985,1988,
3.	Hospital employees are sympathetic and able to handle patients' problems	Aagja & Garg (2010); modified from Parasuraman et al., 1985,1988, maqsud et al 2017, Babakua & Mangold (1992), Alrubaeice and Alkaa'ida (2001)
4.	Hospitals handle emergency situations well	Aagja & Garg (2010); maqsud et al 2017
5.	Hospitals have knowledgeable doctors	Aagja & Garg (2010); Maqsud et al 2017,
6.	Hospitals have knowledgeable nurses	Aagja & Garg (2010); Maqsud et al 2017,
7.	Hospitals have knowledgeable and experienced staff members	Aagja & Garg (2010); Parasuraman et al., 1985,1988,

8.	Hospitals take immediate precautions to prevent danger to patients	Aagja & Garg (2010); Maqsud et al 2017
9.	All the necessary medical specialists are available at the hospital	Al-Borie (2011), Wu, (2011).
10.	Hospital has neat and clean environment, clean rooms/wards/and clean washrooms etc	Aagja & Garg (2010); Maqsud et al 2017,
11.	When patients have problems, hospital staff are sincere and willing to help patients	Aagja & Garg (2010); Maqsud et al 2017,
12.	Hospitals maintain error-free/ keep accurate records of documents	Kazemi et al., (2013), Sohail (2001), Wu 2011
13.	The behaviour of employees in hospital build confidence in patients	Aliman & Mohammad (2013), Alrubaeice and Alkaa'ida (2001), Sohail (2001)
14.	Hospital has convenient operating hours for all patients	Aliman & Mohammad (2013), Irfan et al (2012), Kazemi et al., (2013),
15.	Hospitals give patients individual attention	Aliman & Mohammad (2013), Irfan et al (2012), Sohail (2001)
16.	The hospitals medication is up to the standards of healthcare services	Maqsood et al (2017)
17.	Employees of the hospital are well-groomed, neat, and tidily dressed,	Taner & Antony (2006), Irfan et al (2012). Chai et al (2005)

18.	Patients wait for a long time to get to see doctors	Ogaji and Mezie -Okoye (2017.; Bluestein et al (2014)
19.	Patients waits for a long time to get medicine at pharmacy	Ogaji and Mezie -Okoye (2017)
20.	Patients wait for a long time for laboratorial test in this hospital	Ogaji and Mezie -Okoye (2017)

Table 3.4: Brand Trust

No	Brand Trust (Items)	Source
1.	I rely on this hospital's treatment	Lasser et al. (1995), Chaudhuri & Halbrook (2001).; (Andervazah et al. (2013).
2.	I am dependent on this hospital	Lasser et al. (1995), Chaudhuri & Halbrook (2001).; Fatema, M 2019
3.	I trust (have faith) in this hospital	Lasser et al. (1995), Chaudhuri & Halbrook (2001),
4.	I believe this hospital does not take advantage of the patients	Lasser et al. (1995), Chaudhuri & Halbrook (2001), Andervazah et al. (2013
5.	I believe this hospital's management is trustworthy.	Lasser et al. (1995), Chaudhuri & Halbrook (2001), Andervazah et al. (20130
6.	I am happy to revisit this hospital	Kem et al (2008), (Wu 2011)
7.	Patients feel safe to do treatment in this hospital.	Chaudhuri & Halbrook (2001), Taner & Antony (2006), Aliman & Mohammad (2013), Kazemi et al., (2013).

Table 3.5: Price

No	Price (Items)	Source
1.	The hospital Price is not expensive	Maqsud et al 2017.; Haryanto & Sitio (2020).
2.	The price of laboratory test is affordable	Haryanto and Sitio (2020).
3.	Doctor's fee is cheap compared to other hospitals	Haryanto and Sitio (2020).
4.	The hospital provides services at reasonable price	Maqsood et al (2017)
5.	The overall price of this hospital is affordable	Haryanto and Sitio (2020).

3.5 DATA ANALYSIS

After collecting the questionnaires from the respondents, the Statistical Package for the Social Sciences (SPSS) 22 software and the Structural Equation Modelling (SEM) by AMOS software were undertaken to analyze the data. Then detailed systematic techniques were carried out consisting of descriptive analysis, Exploratory Factor Analysis (EFA), confirmatory factor analysis (CFA), reliability and validity tests and the structural equation modeling (SEM) were carried out. The SEM was used to assess the relationship of the variables.

3.5.1 Descriptive Analysis

Descriptive Analysis was done to appraise the age, gender, demography etc. of the respondents. To get a good understanding of the respondents' demographic profile, different scenarios were done based on the different kinds of statistical values like means, standard deviations, mean differences, frequencies, and percentages. As a result, the

different tests gave different outcomes when looking at the means, standard deviations, mean differences, test values and probability values etc.

3.5.2 Reliability and Validity

For reliability and validity, tests are very important to be measured that is found from previous literature. It is found that Reliability is solid and satisfies the inner consistency of the determining data (Sekaran, 2003). Sekaran (2003) also defines reliability as ‘a test to the consistency and stability of the measuring instrument’ and validity as ‘evidence of the instruments technique to measure a concept which does indeed measure the intended concept’. The purpose for the reliability and validity tests is to study whether the data is suitable to accomplish the research objectives (ROs) and whether the data is of appropriate quality (Taber, 2018). For validity, there are two major types of namely Content Validity and Construct Validity (Hair et al. 2010, & Sekaran, 2003).

Cronbach alpha is suitable as a reliability coefficient measurement (Sekaran & Bougie, 2010). Many experts have recommended the application of Cronbach alpha (Haier et al. 1995, Mayer, 2000., & Cooper & Saunders, 2001). Hence, for this research, the data collected were examined by reliability tests and then Cronbach’s Alpha analysis method was applied to confirm the measures taken were free from error and produced consistent results. It is said that the minimum value of acceptable Cronbach-alpha for reliability should measure 0.06 (Sekaran & Bougie, 2003; Islam, 2015).

3.5.3 Exploratory Factor Analysis (EFA)

The Exploratory Factor Analysis (EFA) was used to evaluate the study variables. This is one of the multivariate statistical techniques that can recognize a small quantity of hypothetical constructs and co-variation observed (Watkins, 2018). The EFA is mainly used to reduce data to a smaller precise set and to discover the underlying theoretical structures of the phenomena and the purpose of it is to find the relationship between the

variables and the respondents (Suhr, 2006). Typically, EFA is used to search for the probable basic factor structure of a set of measured variables instead of predetermined structure arising from the results (Child, 1990).

As EFA is more correct once each factor is corresponded to various determined variables in the study (Norris et al., 2009) and before developing the scale of confirmation factor analysis (CFA), the researcher needs to do the EFA (Norris et al., 2009).

EFA is a very important tool to measure the research model where the determining factors are developed and the model defined (Kline, 2011). After the EFA is completed, the number of constructs and the basic structure are discovered (Suhr, 2006). Before performing the EFA, many scholars advised to conduct the SPSS first (Byrne, 2010, & Pallant, 2007).

3.5.4 Confirmatory Factor Analysis (CFA)

After the EFA, this study performed the Confirmatory Factor Analysis (CFA). CFA is a method for measuring latent variables via correlated variations of the data set. The CFA can reduce data dimensions, standardizing the scale of multiple indicators and accounting for the correlation of data set (Kline, 2010, & Byrne, 2013).

CFA is a statistical technique used to verify the factor structure of a set of observed variables. It allows researchers to test the hypotheses on relationships between observed variables and the existence of underlying latent constructs. In fact, CFA is a blueprint developed when EFA and CEA are completed and had identified the factor structure that the researcher is thinking about (Suhr, 2006). CFA is an essential part of SEM and SEM will not be possible to perform without it. Kline (2011) advises that before using SEM, data analysis using the CFA analysis should go first. This can minimize errors and produce more accurate results while decreasing the influence of any other measurements (Kline, 2011).

3.5.5 Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) was used to assess the relationship with the variables. SEM is software that is used to test the connection among all dependent and independent variables. SEM was able to determine all the variables taken from all the Private Hospitals involved in this study. The hypotheses of the study were also tested through the SEM in AMOS software.

Through the SEM software, a hypothesis test was carried out to provide an understanding of the study. The frequencies were subsequently transformed into percentages and then they were presented into cross-tabulation analysis which made it easier to understand. Wolf et al (2013) state that there are two types of variables i.e., Endogenous and Exogenous Variables. They were used to test the effects of all the independent variables on the dependent variables (Ali & Reza 2015).

3.5.6 Justification of using SPSS and SEM

According to Wolf et al., (2013) SEM demonstrated its usefulness especially in the following situations and hence justified in employing it.

- SPSS can easily relate all the demographic relationships
- SEM analyzed data can find the relationship amongst all variables.
- SEM is the combination of Factor Analysis and Multiple Regression Analysis.
- SEM evaluates the multiple and interrelated dependency in a single analysis.
- SEM can handle large number of Endogenous and Exogenous Variables (Hair et al., 2010, & Wolf et al., 2013).
- SEM can test various types of Theoretical Models like the Regression, Path, and Confirmatory Factors Model etc. (Schumacer & Lomax, 2004).
- SEM is incorporated with latent variables (Byrne, 2010).
- SEM is useful for both dependent and independent variables in a relationship situation (Kline, 2011).

- SEM can evaluate direct effects between Endogenous and Exogenous Variables (Byrne, 2010).
- SEM can evaluate multi-level and multi-group analysis in different sampling units (Kline, 2011).

3.6 CHAPTER SUMMARY

Chapter Three elaborates on the Research Design, Methodology and the instruments undertaken for the data collection for this research. The usable Data collection involved 359 respondents from 8 Private Hospitals in Dhaka. The methodology employed in the data analysis is simply quantitative whereby certain software was applied which included the SPSS and SEM software. Very thorough quantitative analyses via detailed systematic techniques were also carried out consisting of descriptive analysis, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), reliability and validity tests and the Structural Equation Modeling (SEM) to ensure accuracy, validity and reliability of the results and findings. Justifications in employing the SEM were also listed to proof its strength in the Data Analysis procedures.

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

This chapter describes the research analysis methods used to get the results and findings upon data gathered from the respondents. In this study some statistical techniques have been employed to get the results. To ensure the quality of the surveyed data Reliability and Validity tests were also conducted. Then, missing data and outliers were identified followed by the Normality test. Meanwhile, for the second phase i.e., the demographic profile section, the descriptive analysis was done through the SPSS and AMOS software.

The third stage was to know the various kinds of Factor Analysis from the collected data and applied the Exploratory Factor Analysis (EFA) to ascertain them and then later confirmed by the Confirmatory Factor Analysis (CFA). Multivariable Analysis with the help of the Structural Equation Model (SEM) of AMOS software was applied. The findings need to be synchronized with the formulated Hypotheses and tested. Finally, to accomplish the Good Fit Model, the Conceptual Framework validated, and the Hypotheses verified.

4.2 DATA PREPARATION AND SCREENING

Data screening is important to identify deficient, irregular, or vague answers (Malhotra, 2004). Before the SEM could be engaged, data preparation and screening were vital steps for the researcher. Hair et al (2010) contend that to find the correct results, data preparation and screening procedure is crucial in handling missing data as well as outliers.

4.2.1 Missing Data

Missing data refers to those data where the questionnaire is not fully filled up by the respondents. A major challenge for the researcher to secure real findings in data analysis is the missing data (Tabachnik and Fidell, 2001). To avoid statistical obstacles the researcher

needs to be use the entire data sets because if the missing data are under threshold level, then there is a chance that the SEM produce extreme results (Hair et al. 2013) which can affect the correct relationship among variables and biasness can arise if based on estimate results (De Vaus & De Vaus 2001). According to Sekaran and Bougie (2010) missing data can happen due to some reasons such as lack of understanding about the question, not knowing the answer which led to respondents deliberately abandoning the question. Therefore, scholars, advice that if the missing data is 25% or more then it would be better to reject the whole questionnaire exercise and do all over again.

In this research after all the data sets were collected, they were categorized, labelled, and coded accordingly. All the missing and ambiguous data were sorted and excluded before running the software for analysis. Nevertheless, the descriptive analysis carried out by the researcher luckily produced superior level of accuracy and there were no missing data or illegal entries to the Questionnaires.

4.2.2 Outliers

Outliers are data which are completely different from other data points in the data set (Kline 2011). Many scholars cautioned that to get accuracy of results, data collection needs to be carefully handled otherwise adverse repercussions will arise later at the Statistical Analysis process (Pallant 2007, Schumacker & Lomax, 2004). This will in turn bias the outcomes of any correlation or hypotheses validation (Byrne, 2010). Thus, it is essential to cautiously identify the Outliers in the datasets and to either delete or lodge them in the correct ways to obtain accurate results (Schumacker & Lomax, 2004).

According to Kline (2011) there are two kinds of outliers' data namely the Univariate and multivariate outliers whereby to identify the univariate outliers he recommended to check the skewness and kurtosis of the univariate outliers. If the skewness score is more than 3 and the kurtosis is greater than 10 in index values, then it can be said that outliers exist. If outliers exist in the data set, then there is a need to find the outliers amongst the multivariate via the process called the Square Mahalanobis distance D^2

(Byrne, 2010.1998; Kline, 2011). This process will study the outliers detected by both the univariate and multivariate outliers via SPSS and AMOS software respectively.

4.2.3 Normality

There is another way to do data preparation and screening, that is via the normality process. Byrne (2010) and Arbuckle (2007) highlighted the importance of the AMOS program to confirm that the data is normal multivariate before the analysis.

Normality is defined as.

‘Shape the data distribution for an individual metric variable and its correspondence to the normal distributions which is the benchmark of statistical method’ (Hair et al 2010, pg. 71).

For this research, the total number of valid and usable questionnaires is 359 which is enough to apply the Quantitative tools decided upon by the researcher. The outputs in Descriptive Analysis terms are called ‘Mean and Standard Deviation’. According to scholars there is a reliable method where skewness and kurtosis tools are applied for normality tests. So, if data skewness is less than 3 and kurtosis is less than 10 (Kline, 2011) then the data set is said to be normally distributed.

4.2.4 Multicollinearity

Another important process for data preparation and screening is Multicollinearity. When high-level correlations happen among variables (Sekaran & Bogie 2010) or among two or more independent variables (Hair et al. 2013) then Multicollinearity is said to exist. By collaborating the tolerance value and the Variance Inflation Factor (VIF) Multicollinearity is identified but the tolerance value should be less than 0.10 and the VIF value should be 10 or above (Hair et al 2010). When the relationship involving two variables value is at 0.90 or above then Bivariate multicollinearity happens (Tabachnik & Fidell, 2012). In this study correlation is calculated too. Therefore, the study found the highest accuracy of

datasets through analysis of Missing Data, Outliers, Normality, and Multicollinearity process which has been done carefully at the data preparation and screening stages.

Table 4.1 – Multicollinearity

Tolerance	VIF
.978	1.022
.558	1.791
.556	1.799
.955	1.047

Thus, the study results exposed the tolerance and variance inflation (VIF) where both values were within the adequate range as listed in Table 4.1.

4.3 DESCRIPTIVE STATISTICS: RESPONDENTS' CHARACTERISTICS

In this study, firstly the descriptive statistics were provided to get a clear picture about the dataset especially the demographic part. Descriptive studies are complemented with several statistical examinations like frequency, mean and standard deviation (Sekaran and Bougie, 2010).

4.3.1 Response Rate

In this study, the respondents are the patients and their care givers of the selected Private Hospitals in Dhaka. Table 4.2 shows the Response Rate of the Survey Questionnaires.

Table 4.2 - Response Rate of the Survey Questionnaires

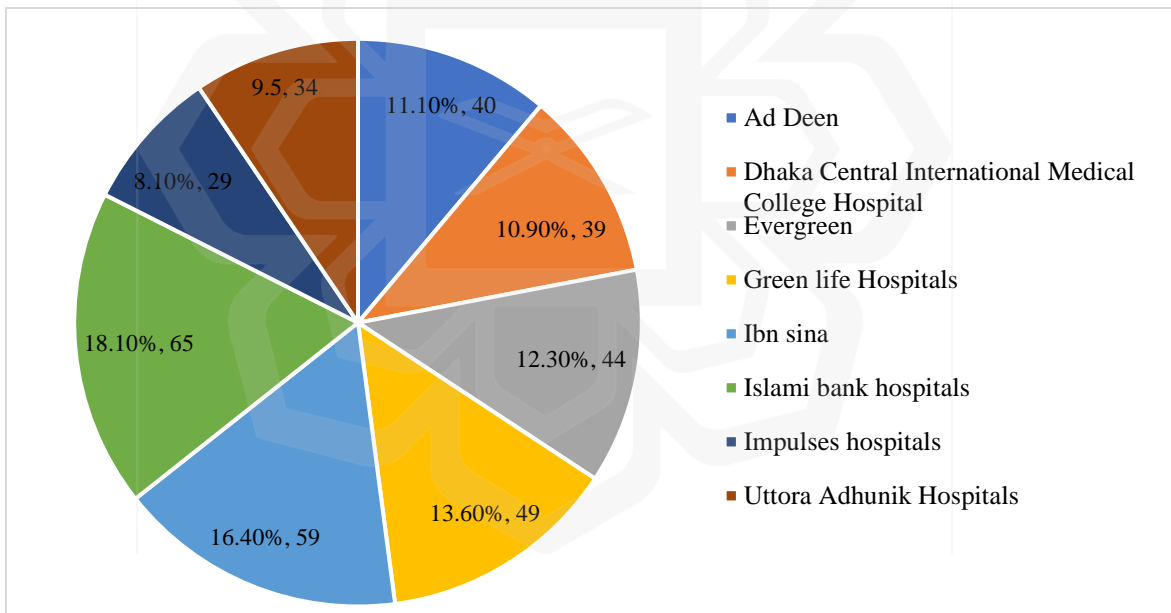
Descriptions	Response
Number of questionnaires distributed	450
Number of questionnaires returned	372
Number of incomplete questionnaires	13
Number of usable questionnaires	359
Number of questionnaires not returned	78
Percentages of response rate	82.66%
Percentages of valid response rate	79.77%

Source: Researcher's Computation (2023)

A total of four hundred and fifty (450) survey questionnaires were allocated to the respondents. Out of the 450 questionnaires 372 were received thus the response rate was 82.66%. On the other hand, among the 372 questionnaires returned 13 were inadequately answered hence leaving 359 usable questionnaires which constitute a valid 79.77% response rate.

4.3.2 Hospitals and Questionnaire Survey

The previous chapter explained that data was collected according to literature standards. Data was collected from respondents of eight (8) Private Hospitals in Dhaka. The hospitals were chosen according to eight similarities of size, nature and their license had been renewed by MOHE&FW in 2021, having adequate ICU beds, adequate CCU beds, patronized by highest number of patients per month (Mona, 2017) have own laboratory and



have a minimum of 250 bed facilities etc.

Figure 4.1 - Names and percentages (%) of Private Hospitals Pie-Chart.

As shown in Figure 4.1 the 359 questionnaires data were collected as demonstrated by the pie-chart of the eight Private Hospitals of Dhaka that was chosen for the study. The survey questionnaires were collected from the Ad Deen Hospital, Dhaka Central Hospital,

Evergreen Private Hospital, Green Life Hospital, Ibn Sina Private Hospital Limited, Islami Bank Hospital, Impulse Hospital and Uttora Adhunik Hospital. Synchronizing with the number of population (patients) size of the respective Hospital, the highest number among all the eight hospitals was from the Islami Bank Hospital where 65 questionnaires or 18.10% per cent of the total number of distributed was returned. On the other hand, Ibn Sina Hospital was the second largest number of data distributed where 59 questionnaires or 40% percent were returned and the least at 29 questionnaires or 8.10% that was returned came from Impulse Private Hospital.

4.3.3 Demographic Profile of Respondents

In this study, it is vital to know the respondents' demographic profile because the right type of respondents helps to fulfil the respective research objective (RO). The demographic profile includes respondents' gender, age, religion, occupation, level of education, level of income, kind of treatment and length of stay etc. Table 4.3 shows the frequency, percentage of demographic variables for gender, age, religion, occupation and education, kind of treatment and duration of stay of the respondents in the Hospital.

Table 4.3 - Demographic Profile of Respondents

Variable	Frequency	Percentage (%)
Gender		
• Male	270	75.2
• Female	89	24.8
Age		
• Below (<) 30 years	51	14.2
• 31years - 40 years	161	44.8
• 41 years -50 years	110	30.6
• 51 years and above	37	10.3
Religion		
• Islam	318	88.6
• Others	41	11.4

Occupation		
• Students	25	7.0
• Government service	21	5.8
• Business	114	31.8
• Private service	131	36.5
• Others	68	18.9
Education		
• Primary	19	5.3
• SSC	67	18.7
• HSC	155	43.2
• Master	88	24.5
• PhD	3	.8
• Others	27	7.5
Kinds of treatment		
• General	28	79.1
• Acute	34	9.5
• Chronic	41	11.4
Duration of visiting years		
• Below 1 year	247	68.8
• 1-2 years	57	15.9
• 2-5 years	40	11.1
• 5 years and above	15	4.2

4.3.3.1 Gender of Respondents

Table 4.3 reveals that most (75.2%) of the respondents were males. The gender distribution is skewed towards males which suggest that the survey was conducted in a male-dominated environment. The Table also illustrates that out of 359 respondents 270 of them or 75.2% were males while 89 (24.8 %) respondents were females. This also considers that besides male patients, care givers who were mostly males like father, husband or brother usually accompany female patients in Hospitals. This reflects Bangladeshi's culture and social norms.

4.3.3.2 Age of Respondents

As far as age is concerned there are four categories of age groups i.e. those below (<) 30 years old, 31-40 years old, 41-50 years old and 51 years old and above. In this age group, 51(14.2%) respondents were below 30 years old, 161(44.8%) were within 31- 40 years old,

110 (30.6%) respondents were within the 41-50 years old group and the remaining 37(10.3%) of the respondents were in the 51 years old and above group.

Apparently, the highest numbers (44.8%) of respondents were among the second group i.e. 31-40 years old and the group of 41-50 years old made up 30.6%. Thus, the survey was greatly shaped by these two age groups. The lowest (10.3%) of respondents were from the 51 years old and above group. Overall, these findings demonstrate that the survey involved respondents who were comparatively young to middle-aged people.

4.3.3.3 Religion of Respondents

Regarding religious background the respondents' profiles show that majority i.e., 318 (88.6%) of them are Muslims while the rest i.e., 41 (11.4%) are of 'other religion' groups. So, the findings confirmed the literatures that 'Islam' highly influenced the survey respondents as Bangladesh is a Muslim populated country.

4.3.3.4 Occupation of Respondents

In terms of occupation, 25 (7%) respondents were students, 21 (5.8%) government staff, 114 (31.8%) from the business sector, 131(36.5%) were private service practitioners and 68 (18.9%) were from other occupations.

So, the study gathers that the highest number (36.5%) of the respondents who came for treatments in Private Hospitals in Dhaka were from the private service business sector and the lowest (only 5.8%) were government staff. Also, the study found that most of the respondents were from private services practitioners working and earning a living.

4.3.3.5 Educational background of Respondents

As regards educational background, 19 respondents finished Primary Schools education, 67 completed SSC, 155 got HSC Certificates, 88 were with master's degree and 3 were PhD graduates while the rest (27 respondents) were from other background.

Conclusively, the highest number (155 or 43.2% of respondents) had HSC Certificates while only 3 (8%) respondents were PhD graduates. Overall, respondents of the survey can be considered as an educated equivalent of college degree.

4.3.3.6 Kind of treatments of Respondents

To find the kind of treatments Table 4.3 categorized them into three namely generic, acute, and chronic. It was found that 284 (79.1%) respondents visited the hospitals for general treatment, 34 (9.4%) for acute and 41(11.4%) for chronic disease treatments. It is obvious that most of the patients came for general treatments while few patients went to the hospitals for chronic and other acute treatments.

4.3.3.7 Duration of Hospital Stay of Respondents

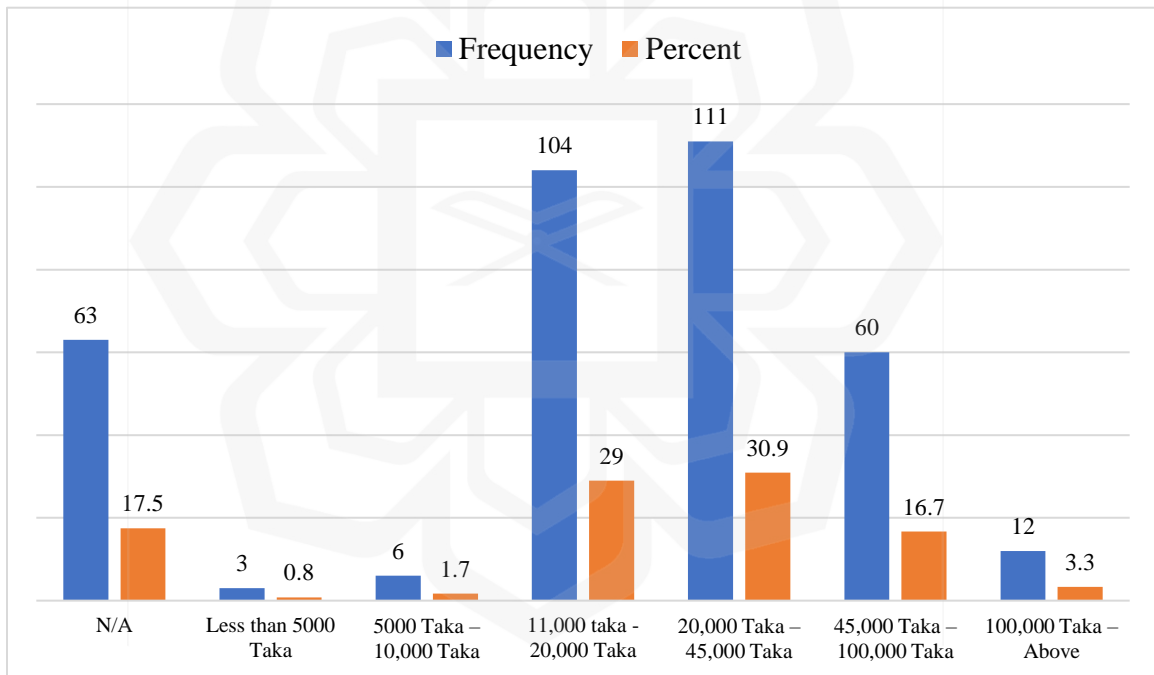
In the last parts of the demographic profile, information on the number of years spent by respondents (patients) for treatment was asked. Here the research found that the majority (247 patients) spent less than 1 year duration in the hospitals. 57 patients stayed within 1-2 years, 40 respondents stayed 2-5 years and 15 patients spent more than five years for treatments in the hospitals. Therefore, the highest number of patients (68.8%) stayed below (<) 1 year while only 15 respondents or 4.2% had to stay for more than 5 years in the private hospitals in Dhaka.

4.3.3.8 Income Level of Respondents

After going through Table 4.3 it is discovered that the Monthly Income level of respondents ranged from below 5000 Taka (BD) to 100,000 Taka (BD). The lowest income levels are

the poor people but are willing to bear the costs of Private Hospitals. 6 respondents earned within 5000 - 10,000 Takas, 104 respondents within 11,000 – 20,000 Takas, 111 respondents were in the 20,000 - 45,000 Taka categories, 60 respondents earned 45,000 – 100,000 Takas and 12 respondents earned 100,000 Takas and more. The latter level belongs to the high-income group according to the GDP of Bangladesh. However, after the survey the researcher had to add another column labelled ‘Not Answered’.

This reveals that income level is a sensitive issue as many respondents kept it blank. That is why it is discovered that 63 or 17.5% of respondents refused to answer about their income level. Nevertheless, the profile shows that a great number of respondents (30.9%) earned reasonably high income i.e., 20,000 – 45000 Takas which enabled them to seek treatments from Private Hospitals.



In addition, in the above demographic profile section an added inquiry was done asking respondents to write the names of other hospitals where they usually visit besides the ones already identified but it turned out that those were the most popular and most hospitals around.

4.4 RELIABILITY

Before conducting the confirmatory factor analysis (CFA) it was better to confirm the reliability i.e., where the Cronbach alpha α value should be within 0-1. In this study Table 4.4 shows that Cronbach alpha α is 0.847. This indicates high Reliability of data scale has been achieved.

Table 4.4 - Reliability Statistics of the Questionnaire

Cronbach's α	Cronbach's α based on standardized items	No. of Items
0.847	0.847	50

4.4.1 Descriptive Statistics (Questionnaire Attributes)

In this section, descriptive coefficients of items and all the variables of the construct of the conceptual model have been summarized. here with 359 valid survey questionnaires 50 items were administered by SPSS. There are five constructs in the framework of this study namely service quality, brand image, brand trust, price, and Patients' Satisfaction of the Private Hospitals in Dhaka. The key construct measurements relied on the research instrument. Table 4.5 summarizes the constructs and research variables' respective measurement items.

Table 4.5 - Construct and measurement items

Constructs (Variables)	Number of items (50)
Service Quality (SQ)	20
Brand Image (BI)	8
Brand Trust (BT)	7
Patients' Satisfaction (PS)	10
Price	5

The five-point Likert Scales which range from 1 to 5 namely 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree and 5 - Strongly Agree were applied to determine the constructs to be measured. On the other hand, it incorporates 'mean value' as well as 'standard deviation' of the respondents. At this point, mean value indicates 'average' response, standard deviation indicates 'the volume of variation in the set of a variable'.

correlation between every element in the construct ought to be 0.3- 0.9 (Sekaran & Bougie, 2016) and the construct should not be over 0.85 (Awang, 2012). The study analyzed all the constructs and discussed the descriptive statistics in the following sub-topics.

4.4.2 Descriptive statistic: Patients’ Satisfaction (PS)

Table 4.6 - Descriptive Statistics-Patients’ Satisfaction (PS)

Underlying Variable Items	Reliability (Cronbach’s $\alpha = 0.741$)			
	Mean	Std. Deviation	Skewness	Kurtosis
The Hospital’s indoor service is satisfactory	4.510	0.512	-0.12	-1.676
The hospital is willing to listen to patients’ problems.	4.640	0.515	-1.062	0.748
Advanced health techniques are well maintained	4.460	0.753	-1.955	5.475
Doctors are available on duty	4.690	0.485	-1.278	1.415
Nurses are available on duty.	4.580	0.557	-1.017	0.573
Overall supportive facilities are excellent	4.570	0.584	-0.971	-0.058
The laboratory facilities are good (blood bank, lab, medicine etc.)	4.250	0.971	-1.453	1.919
Staff (doctor, nurse and administrative) attitudes are good.	4.580	0.553	-0.875	-0.287
I come to this hospital for all types of treatments.	4.100	1.118	-1.081	0.161
Hospital Charges are reasonable	4.570	0.593	-1.201	1.234
Average Score	4.49	0.664		

Note: 1=Strongly Disagree, 5= Strongly Agree

The results were that the overall ‘Mean’ score was 4.49 and the SD was 0.664. This demonstrates that most of the respondents recognized the satisfaction about Private Hospitals. From the Table the maximum ‘Mean’ score was on the item ‘doctors are available on duty’ which is 4.690 and minimum ‘Mean’ score which is 4.10 was from the statement ‘I come to this hospital for all types of treatments. The table also shows that the Skewness and Kurtosis are favorable, and Reliability (Cronbach’s $\alpha = 0.741$) is high.

4.4.3 Service Quality (SQ)

Table 4.7 provides Reliability test results of the service quality and mean, standard deviation, skewness, and kurtosis in descriptive analysis. In this table the Reliability i.e., Cronbach's alpha is 0.882 which is very close to 1 showing that it has high Reliability in terms of the comprehensive scale carried out. The overall average 'Mean' score is 3.88 and the Standard Deviation is 0.824 which indicates that most of the respondents acknowledged that the Service Quality of Private Hospitals is moderately good.

Table 4.7 - Descriptive Statistics-Service Quality (SQ)

Underlying Variable Items -Service Quality (SQ)	Reliability (Cronbach's $\alpha = 0.882$)			
	Mean	Std. Deviation	Skewness	Kurtosis
Quick attendant/service for the patients	4.17	0.767	-0.559	-0.334
Modern equipment for treatment	4.02	0.803	-0.521	-0.023
Sympathetic & able to handle problems	4.16	0.801	-0.521	-0.631
Able to handle emergency situations	3.97	0.796	-0.488	0.025
Knowledgeable doctors	4.22	0.699	-0.522	-0.129
Knowledgeable nurses	4.04	0.826	-0.851	1.227
Knowledgeable & experienced staff	3.87	0.927	-0.912	1.182
Take quick precautions to prevent danger	3.84	0.896	-0.764	0.913
Necessary medical fields available	3.85	0.922	-0.826	0.978
Neat & clean environment, wards etc	3.78	0.89	-0.603	0.588
Sincere and willing to help patients	3.77	0.742	-0.346	0.423
Maintain error-free/ accurate records	3.71	0.773	-0.36	0.429
Actions of employees build confidence	3.74	0.795	-0.344	0.276
Convenient operating hours	3.87	0.651	-0.044	-0.261
Give patients individual attention	3.81	0.816	-0.308	-0.23
Medications are up to the standards	3.74	0.804	-0.365	0.085
Employees are well-dressed, neat & tidy	3.75	0.835	-0.369	0.483
Wait for long time to see the doctors	3.94	0.904	-0.72	0.474
Wait for long time to get medicine	3.855	0.944	-0.759	0.532
Wait for long time for laboratory test	3.69	0.904	-0.261	-0.189
Average score	3.88	0.824		

Note: 1=Strongly Disagree, 5= Strongly Agree

The highest Mean for the item about 'knowledgeable doctor' statement contains Mean value of 4.22 which is near to Strongly Agree. On the other hand, the lowest Mean score is regarding 'long waiting time for laboratory test' which scored 3.69 Mean values.

This suggests that there is some variation in the way that people perceive the Hospital's service.

4.4.4 Descriptive statistic: Brand Image (BI)

Table 4.8 - Descriptive Statistics-Brand Image (BI)

Underlying Variable Items -Brand Image (BI)	Reliability (Cronbach's $\alpha = 0.734$)			
	Mean	Std. Deviation	Skewness	Kurtosis
The hospital's location is convenient and easily accessible	3.580	0.851	-.366	.269
The physical facilities of hospital are visually attractive	4.520	0.712	-1.354	1.165
The hospital has advanced equipment and excellent facilities	4.280	0.849	-1.688	3.784
The hospital has comfortable environment compared to other hospitals	4.470	0.638	-.937	.402
The hospital has a good reputation	4.460	0.61	-.723	-.064
The hospital is involved with communities and social activities	4.180	0.857	-.675	-.404
The hospital has competent staff	4.430	0.677	-1.050	.948
The hospital doctors have good attitude	4.630	0.512	-.834	-.618
Average Score	4.38	0.71		

Note: 1=Strongly Disagree, 5= Strongly Agree

Table 4.8 shows Brand Image where the average 'Mean' score is 4.38 and the Standard Deviation is 0.71 which indicates that majority of the respondents perceived the Private Hospitals Brand Image as near to Strongly Agree. Among the construct of Brand Image, the above Table shows that the highest Mean score was the statement 'The hospital has comfortable environment compared to other hospitals' which scored 4.47 (SD: 0.63) while the lowest Mean score came from the statement that involves 'the hospital's location is convenient and easily accessible' at 3.58 and SD at 0.851. Thus, these findings give the picture that the respondents emphasized Brand Image and that the Management of the Hospitals should improve in terms of accessible location and other features that strengthen Hospitals' Image.

4.4.5 Descriptive Statistics: Brand Trust (BT)

Table 4.9 - Descriptive Statistics-Brand Trust (BT)

Underlying Variable Items	Reliability (Cronbach's $\alpha = 0.752$)			
	Mean	Std. Deviation	Skewness	Kurtosis
I rely on this hospital's treatment	4.40	0.594	-.918	2.425
I am dependant on this hospital	3.90	1.276	-1.194	.263
I trust (have faith) in this hospital	4.60	0.532	-.905	-.314
I believe this hospital does not take advantage of the patients	4.430	0.689	-.907	.000
I believe this hospital's management is trustworthy	4.20	0.714	-.561	-.541
I am happy to revisit this hospital	4.10	0.985	-1.306	1.618
I feel safe to do treatment at this hospital	4.50	0.532	-.585	-.199
Average Score	4.34	0.76		

Note: 1=Strongly Disagree, 5= Strongly Agree

Table 4.12 displays Descriptive Statistics on Brand Trust. Here the Table shows that the average or Mean score is 4.34 and the SD is 0.76 which shows that respondents placed highest degree on Brand Trust. The maximum 'Mean' score comes from the statement 'I trust (have faith) in this hospital' at 4.62 and SD at 0.53 while minimum Mean score relates to 'I am happy to re-visit this hospital' at 4.13 which indicates 'Strongly Agree'. The Reliability, i.e. Cronbach's α is 0.752, also shows high Reliability for Brand Trust.

4.4.6 Price

Table 4.10 - Descriptive Statistics- Price

Underlying Variable Items	Reliability (Cronbach's $\alpha = 0.786$)			
	Mean	Std. Deviation	Skewness	Kurtosis
The hospital Price is not expensive	4.2	0.848	-1.08	1.1
The Price laboratory test is affordable	4.2	0.821	-0.959	0.458
Doctor's fee is cheap compared to other hospitals	4.3	0.833	-1.172	1.288

The hospital gives good service quality at reasonable price	4.6	0.594	-1.631	5.621
The overall price of this hospital is affordable	4.5	0.629	-1.041	0.946
Average Score	4.36	0.74		

Table 4. 10 shows that the average ‘Mean’ score is 4.36 and the SD is 0.74 which considered reflect respondents’ maximum degree of tolerance towards Hospital Price. The maximum Mean score in this Table comes from the item ‘The hospital gives good service quality at reasonable Price at 4.6 and minimum score ‘The hospital price is not expensive’ at 4.2. Here questionnaires collection was mostly from the Islami Bank Hospital and also a large number from Ad Deen Hospital where their management policy stress on services at lower cost. So, compared to the advanced facilities provided it proves that good Service Quality at reasonable Price was ‘Strongly Agree’ by patients. Those hospitals that impose higher charges got ‘Strongly Disagree’ responses by patients. The measuring item also found high Reliability at 0.786 which is close to 1.

Overall, Table 4.6 – Table 4.10 results point to the general positive insights and satisfactions among patients on the evaluated variables. However, there are several distinctions in respondents' judgment, specifically on Brand Image, Brand Trust, and Hospital price rates. These findings could be investigated further and form valuable decision-making marketing strategies for hospitals to serve patients while making lucrative profits.

4.5 EXPLORATORY FACTOR ANALYSIS

According to Byrne (2010) exploratory factor analysis (CFA) is a worthy statistical method to identify the mis-fit variables. Exploratory Factor Analysis is able to reduce big number of variables into smaller sets and group them simultaneously with significant correlation (Hair et al. 2010; Kline, 2011). Hair et al (2015) describe that CFA is a preceding segment of the confirmatory analysis to ensure proper hypotheses testing.

In this study the reduction of data analysis via SPSS version 26 was operated for CFA on the constructs to secure the underlying factors. A total of 359 valid responses were applied to perform the analysis. To perform the analysis some ill-fitting item was eliminated, and Reliability test have been done. The fundamental element is the extraction technique with Varimax Rotation used in the EFA. It was found that VIF did not exceed the value of 5 which means that there is no question of Multicollinearity and predictor variables here.

According to Gorge and Mallery (2014) the two kinds of remarkable test to assess the adequacy of sample of the factor analysis are Kaiser-Meyer-Olkin (KMO) and Bartlett's test of Sphericity. KMO value is tolerable as its maximum is 1 and minimum at 0 (Field, 2009) whereas any value beyond 0.9 is adequate and when any value is above 0.5 it is agreeable. On the other hand, Gorge and Mallery (2014) state that the maximum value of Bartlett's test of Sphericity if less than 0.5 is acceptable.

Table 4.11 - The outcome of KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.845
Bartlett's Test of Sphericity	Approx. Chi-Square	8510.188
	df	630
	Sig.	.000

The above Table 4.11 shows the outcome of the KMO and Bartlett's results. The KMO value which is .845 in threshold is close to 1 thus confirming that the data significantly meet the requirement for Factor Analysis. So, data is adequate for investigating underlying dimensions. On the other hand, for Bartlett's value, the Chi-Square is 8510.188 and degree of freedom (df.) is 630 and Significant level (Sig.) is .000 which denotes ($p < 0.001$) and the correlation matrix contrast after identity matrix or the variables of the dataset was correlated amongst them in the study. Thus, the data set of KMO and Bartlett's is good for Factor Analysis. KMO is acceptable and its significant scores ensure the relationship among the variables.

From the literature, Hair et al (2010) found that communalities should be 0.5 and above and if it is less than 0.5 it should be removed. Communalities indicate the proportion of variance in every variable that can describe factors. The communalities score is 0 -1 and

when closer to 1 signals the high proportion of variance which is capable to describe factors (Ahmed and Taher, 2015; Al Ammar, 2008).

In this analysis communalities for every variable whether initial or extraction used Principal Component Analysis (PCA). Table 4.12 illustrates the Rotated Component Matrix. Here, the first component, i.e. Service Quality (SQ) is found to be in parallel configuration with the new five dimensions. This study had discussed briefly about the RATER with its 22 measuring items introduced by Parasuraman (1988) earlier. But other literature found that some items are not suitable for the healthcare industry, so this study has taken the single factor measurement model for Service Quality (SQ). Therefore, in this research SQ found new five dimensions that appear in the Rotated Component Matrix as shown in Table 4.12. Subsequently, the research has given new names according to the new dimensions' items of SQ.

The first dimension appears with 6 items i.e., SQ1 for 'quick attendant', SQ3 for 'sympathetic to patients and able to handle problem', SQ4 for 'able to handle emergency situation', SQ2 for 'modern equipment for treatments', SQ5 for 'knowledgeable doctors and SQ6 for 'knowledgeable nurses' comes in one bunch and named given as Service Quality of Advanced Technology and Skilled Specialist SQ_(AT_SS).

The second dimension appears with four items i.e., SQ7 for 'knowledgeable and experience staff', SQ9 for 'necessary medical fields are available', SQ8 for 'take quick precaution to prevent danger', SQ10 for 'neat and clean environment ex: words, washroom' and named as Service Quality of Precaution & Hygienic SQ (P_H).

The third dimension comes out with three items i.e. SQ12 for 'maintain error free, or accurate records', SQ13 for 'behaviors of employee build confidence' and SQ11 for 'sincere and willing to help patients. These are named Service Quality of Building Guarantee (BG). In addition, in this study a fourth dimension in Service Quality constructs four items appearing with SQ17 where 'employees are well dressed, neat and clean', SQ16 refers to 'medication apply which are up to the standards', SQ15 is 'give patients individual attention', SQ14 is 'convenient operating hours for patients' and are named as Service Quality of Facilities & Convenience Hour for Treatment SQ(F_ ChT) and finally the fifth

dimension related to Service Quality with three items i.e. SQ18 for ‘wait for long time to consult doctor, SQ19 for ‘wait for long time to get medicine from hospital pharmacy’ & SQ20 for ‘wait for long time for laboratory tests’ and they are named Service Quality of Awaiting for Treatments SQ(AT). Table 4.12 under the EFA testing Principle Rotated Analysis with Varimax Rotation is checked. Generally, 0.5 and above value is upheld while under 0.5 is eliminated. To obtain more accurate results the EFA was re-run to get higher accuracy. Among all the total nine dimensions of EFA, after considering the Kaiser-Guttman retention rule, the Eigenvalue of a matrix is more than 1. The total cumulative variance of Private Hospitals in Dhaka totaled nine factors that occurred in the Rotated Component Matrix which mainly comprise of the nine dimensions of Private hospitals in Dhaka. In this study all dimensions are renamed as Advanced Technology and Skilled Specialist SQ(AT_SS), the second component named as Precaution & Hygienic SQ(P_H), the third components as BI, the fourth named as SQ(BG), the fifth components as BT, the sixth components as SQ(F_ChT), the seventh components as SQAT, the eighth component as Hospital Price and finally the ninth components as Patients Satisfaction as shown in Table 4.12 below. All in all, 67.902 (67.9%) is above the threshold and Patients Satisfaction are found satisfied.

Table 4.12 - Rotated Component Matrix

Rotated Component Matrix									
	Component								
	F1 SQAT_SS	F2 SQP_H	F3 BI	F4 SQBG	F5 BT	F6 SQF_ChT	F7 SQAT	F8 PR	F9 PS
SQ1	.879								
SQ3	.874								
SQ4	.760								
SQ2	.749								
SQ5	.708								
SQ6	.647								
SQ7		.857							
SQ9		.827							
SQ8		.753							
SQ10		.709							
BI8			.771						
BI7			.728						
BI4			.690						
BI5			.597						
BI2			.568						
BI6			.540						
SQ12				.933					
SQ13				.929					
SQ11				.857					
BT2					.771				

BT6					.763				
BT5					.706				
BT4					.548				
SQ17						.804			
SQ16						.787			
SQ15						.743			
SQ14						.688			
SQ18							.796		
SQ19							.757		
SQ20							.541		
PR2								.898	
PR1								.839	
PR3								.764	
PS7									.701
PS3									.634
PS6									.630
Initial Eigenvalues	6.468	4.904	3.042	2.260	2.091	1.825	1.425	1.354	1.075
Percentage of variance	17.967	13.622	8.451	6.278	5.809	5.068	3.957	3.762	2.987
Cumulative percentages	17.967	31.589	40.040	46.318	52.127	57.195	61.152	64.915	67.902
Extraction Method: Principal Component Analysis.									
Rotation Method: Varimax with Kaiser Normalization.									

Table 4.12 illustrates that Service quality of Advanced Technology and Skilled Specialist AT_SS scored the percentage of variance at 17.96 where the highest Eigenvalue was 6.468. The second component is Service Quality of Precaution & Hygienic (P_H) which illuminated the percentage of variance at 13.62 where its Eigenvalue was 4.904., the third component which is Brand Image (BI) also clarified the percentage of variance at 8.45 where its Eigenvalue was 3.042, the fourth components i.e. Service Quality of Building Guarantee (BG) described the percentage of variance at 6.27 where its Eigenvalue was 2.26, the fifth components is Brand Trust (BT) described the percentage of variance at 5.80 where its Eigenvalue was 2.09, the sixth components is Service Quality of Facilities & Convenience Hour for Treatment (F_ ChT) explained the percentage of variance at 5.06 where its Eigenvalue was 1.82. On the other hand, the seventh components is Service Quality of Awaiting for Treatments (AT) confirmed the percentage of variance at 3.95 its Eigenvalue was 1.42, the eighth component i.e. Price described the percentage of variance at 3.76 where its eigenvalue was 1.35 and finally, the ninth components is Patients Satisfaction explained the percentage of variance at 2.98 where its eigenvalue was lowest at 1.07 found according to the Principal Component Analysis (PCA) with Varimax Rotation (VR) method.

Here the Reliability statistics also investigated and summarized them in Table 4.13 where each Independent Variables (IV) of Service Quality with new five dimensions and Brand Image (BI) and Brand Trust (BT) with underlining items and Cronbach alpha α separately.

Table 4.13 - Reliability Coefficient of the extracted factors of IV

Underlying factors		Number of cases	Number of Items	Cronbach's α
Service Quality (SQ) with new Dimensions	SQAT_SS	359	6	0.880
	SQP_H	359	4	0.892
	SQBG	359	3	0.947
	SQF_ChT	359	4	0.777
	SQAT	359	3	0.812
Brand Image (BI)		359	8	0.734
Brand Trust (BT)		359	7	0.752

Table 4.13 shows that with seven IVs including with new only among the nine variables, the SQAT_SS has six underlying items whereas SQP_H has four underling items, SQF_ChT has three items, SQBG has four items, SQAT has three underlying items and BI has seven items and lastly BT has eight underlying items. Thus, to exhaust all the items, appropriate labels should be assigned appropriately (Tahir, 2015).

Hair et al (2010) and Kline, (2011) recommended Cronbach's alpha α value. Here the Cronbach alpha α value is the Service Quality AT_SS scored 0.880, the Service Quality P_H Cronbach alpha α scored 0.892, SQBG Cronbach alpha α scored 0.947, while Service Quality F_ChT Cronbach alpha α scored 0.777 and SQAT Cronbach alpha α scored 0.812. On the other hand, Brand Image Cronbach alpha α scored 0.734 and Brand Trust Cronbach alpha α scored 0.752 respectively. Again Table 4.13 shows that the entire Cronbach alpha α results ranged from 0.70 to 0.947. They demonstrated strong consistency that ultimately

proved high internal consistency which is very near to 1 i.e. above threshold value (Sekaran and Bougie,2010).

4.6 STEPS IN THE STRUCTURAL EQUATION MODELLING (SEM)

According to Awang (2012) Structural Equation Model (SEM) is one of the up-to-date methods of multivariate data investigation to overcome earlier studies such as Ordinary Least Square (OLS) regression. The major approach of this SEM techniques is used to do quick analysis, perceive the instability and deliberate underneath assessment in contemporary business and research while it allows to link between numerous sequential factors that are set to simplify the constructions over similar indicators like The Regression Model that is commonly defined by estimating it as a substitute of testing solid model (Hair et al 2017) and to fit the model RMSEA should be less than .08, Chi-square or degree of freedom (df) requirements is less than 5 where the CFI need to be higher than 0.9 for a good model fit (Awang, 2012. & Hair et al. 2010).

SEM analysis involves several phases such as distinguishing separate construct, structural model validity (Hair et al 2010).

4.6.1 Operational Definition of the Constructs and a Prior Relationship

In this exploratory factor analysis stage, five construct of private hospitals in Dhaka Bangladesh, used the Measurement and Structural Model. The five constructs are Patient Satisfaction, Brand Image, Brand Trust, Cost and Service Quality. Here the reliability of all the items in the structure had fit in with the satisfactory threshold value above 0.7 proving its Reliability. The entire factor's Cronbach α explained in the previous section and the Table 4.13 where the threshold values were above 0.7. On the other hand, convergent and divergent validity also intersected the criteria.

4.6.1.1 Patient Satisfaction

In this study Patient's Satisfaction is the only Endogenous Variable in the underlying constructs. According to Ware et al. (1983) Patient Satisfaction in health care performance involves user's preference and expectation for treatment of their illness. The study used mostly the theory of the Expectancy-Disconfirmation that is supported by many scholars. The Expectancy-Disconfirmation Theory can explain the relationship among all the variables. To assess the construct which mainly comprised of indoor services, expertise behaviors and staff availability, caring towards patients, advanced technology, expectation for laboratories and treatments facilities etc.

4.6.1.2 Service Quality

Service Quality of hospitals is an Exogenous Variable in this study. Customer expectation and satisfaction about the services provided to them reflect Service Quality (Parasuraman, 1988). The philosophies that are linked in this study with Service Quality dimension in relation to Health Care Industry are Service Quality Model, SERVQUAL Model those factors mostly related to health care industry. Therefore, to evaluate Service Quality constructs like prompt services, modern equipment availability, taking immediate precaution, error free record, behaviors of staff, location, operating hours etc. are relevant. However, the underlying measurement items of Service Quality used for this study comprise of a combination of Endogenous and Moderating Variables.

4.6.1.3 Brand Image

Kotler and Clarke (1987) believe that patients hold on the Brand Image of Hospitals is entirely influenced by their values, beliefs, concept, and judgment that appeal to them. In this study Brand Image is the second Exogenous Variable. The Brand Image measuring scales supported by many scholars (Figure 2.2) evolved through study of the constructs. The important items to assess Brand Image in the constructs model include excellent facilities, comfortable environment, good reputation, direct involvement with community and social services. The results found in hypotheses showed positive relationships with Endogenous Variables.

4.6.1.4 Brand Trust

According to Morgan and Hunt (1994) Trust is an elusive service. Brand Trust is defined as the willingness of customers to depend on the capability of performance of the Brand Act (Chaudhuri and Holbrook, 2001). Brand Trust depends on numerous factors as mentioned in 2.9.1 of chapter 2. Brand Trust is the third and last Exogenous Variable in the Construct Model. Evaluating other constructs like ‘rely on treatment, dependability, Trust/feels safe about the hospital’ were found highly reliable in relation to positive relationships with the Endogenous Variables.

4.6.1.5 Price

The Price billed by hospitals is the one and only Moderator Variable in the model of this study. The price is patients’/customers’ exchange for money that they must settle for the treatment and facilities that they received (Kotler and Grey, 2014). The Price also depends on various circumstances (mentioned in Chapter 2) mostly based on Zeithaml (1988) four divers’ meanings of value. Amongst the constructs relevant items include reasonable fees, charge of essential laboratories tests, affordable hospital bills etc. The Cronbach alpha results confirmed that these constructs are highly reliable in this study.

4.7 DEVELOPMENT AND DESCRIPTIONS OF THE MEASUREMENT MODEL (CFA)

In this study the two-phase modelling (Anderson and Gerbing, 1988) was adopted because it is believed that they are compatible with SEM. The measurement model fitted the Structural Model (Byrne, 2010; Hair et al, 2010). To apply this method AMOS software was used to accomplish the Confirmatory Factor Analysis (CFA) on all the determining elements preserved by EFA. CFA is a very important instrument in detecting construct validity specifically the Convergent Validity and the Discriminant Validity (Bagozzi et al 1991).

It is discovered from LR that the Measurement Models were computed by a handful of academics (Bagozzi et al 1991; Kline, 2011; Mueller & Hancock, 2008); Byrne 2010; Hair et al 2010., Hair et al, 2010, Kline, 2011., and Awang, 2012) also supported this fact.

Some fit measurements were examined such as Goodness of Fit (GOF) indices, Chi-square χ^2 or degree of freedom (df) wishes less than 5, Comparative Fit Index (CFI) requires higher than 9, Root Means Square Error of Estimation (RMSEA) ought to be less than 0.08. This study explores the overall measurement model built with these measures.

4.7.1 Overall Measurement Model of Service Quality (First Order)

In this study the constructs of Service Quality were evaluated in the first phase as well as in the second phase. According to Hair et al (2010), pg. 730 the first phase analysis use 'covariance among determined items, illuminated with an individual underlying factors. Hair (2006) also stressed that with the assistance of the Confirmatory Factor Analysis (CFA) it could be measured to find the correlation among constructs and latent factors. Byrne (2010) referred to other researchers who agreed that relationship between the constructs should not exceed 0.85. The EFA results shown in the Rotated component Matrix Table 4.12 illustrate that a total of nine dimensions with 50 items were retained for additional evaluation.

CFA was done on the measurement model that complemented with the nine dimensions. Here for the first phase only Service Quality's five dimensions comprising of 20 items were analyzed via the First Order Model. The service quality dimension named AT_SS has six underlying items whereas P_H has four underlying items, F_ChT has three items, BG has four items and AT has three items for CFA. Total data from the 359 respondents were used to acquire higher customary and précised findings. In this study the applied maximum likelihood (ML) tool of AMOS 26.0 produced the initial measurement model results. It is measured with the faculties of the Confirmatory Factor Analysis (CFA) that employed the relationships between constructs and the underlying items. Figure 4.3 shows the Initial Measurement Model (First Order) computation.

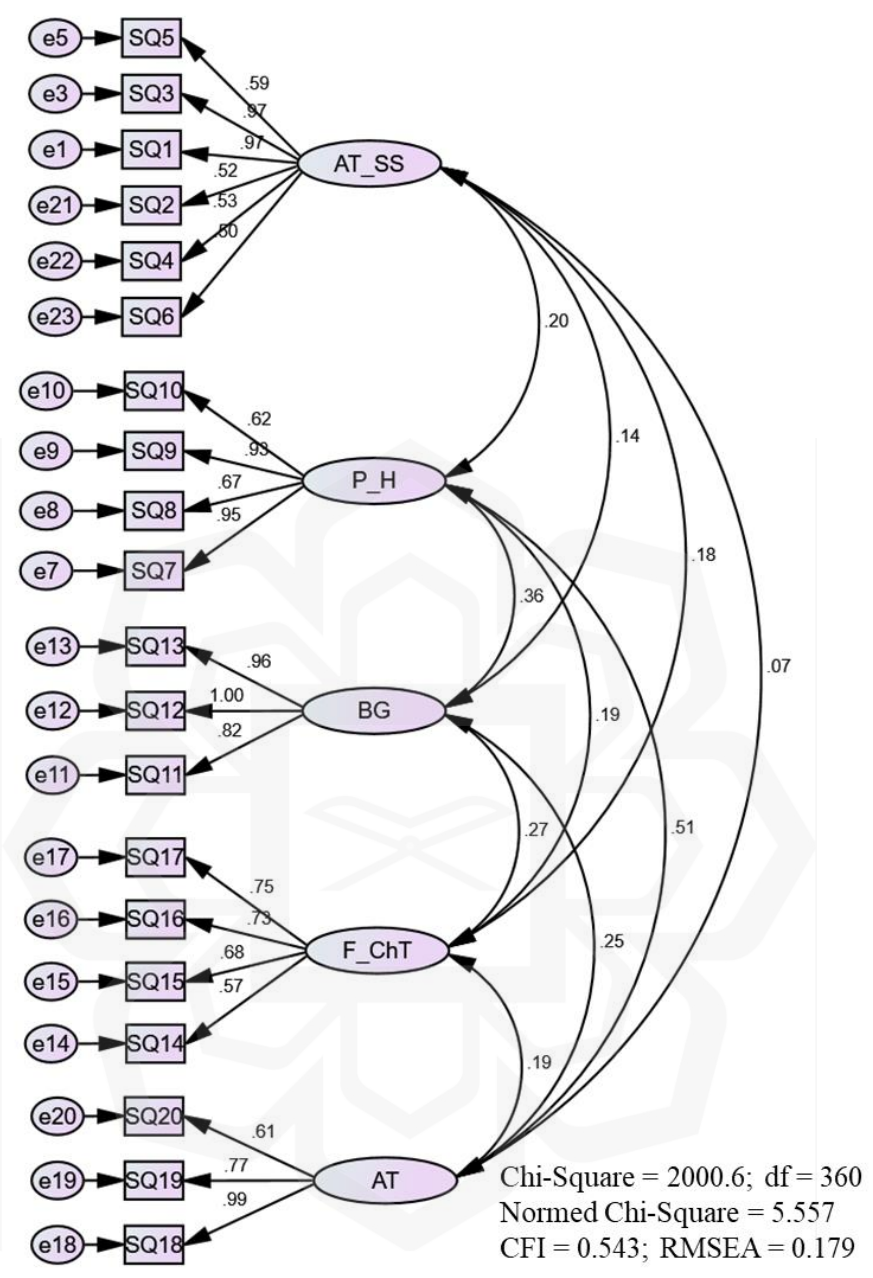


Figure 4.3 - The Initial Overall Measurement Model (CFA)

Figure 4.3 shows the Normed Chi square (χ^2) is 2000.6 that is below 5 in threshold value. Whatever some issues arrived in the model fit index results such as CFI is 0.543 is under 0.9 proved unsatisfactory where the convergent validity requirement was not fulfilled when the Average Variance Construct (AVE) values were under 0.5 This is called cut-off

criteria i.e. the value of AVE should be higher than 0.5 (Forner and Larcker, 1981) and RMSEA is 0.179.

For the Good Fit Model few weaknesses were found in the Initial Measurement Model where few item loadings were less than 0.5 and were removed as advised by Hair et al (2010) and then the CFA was performed again. Figure 4.4 portrays the revised Overall Measurement Model.



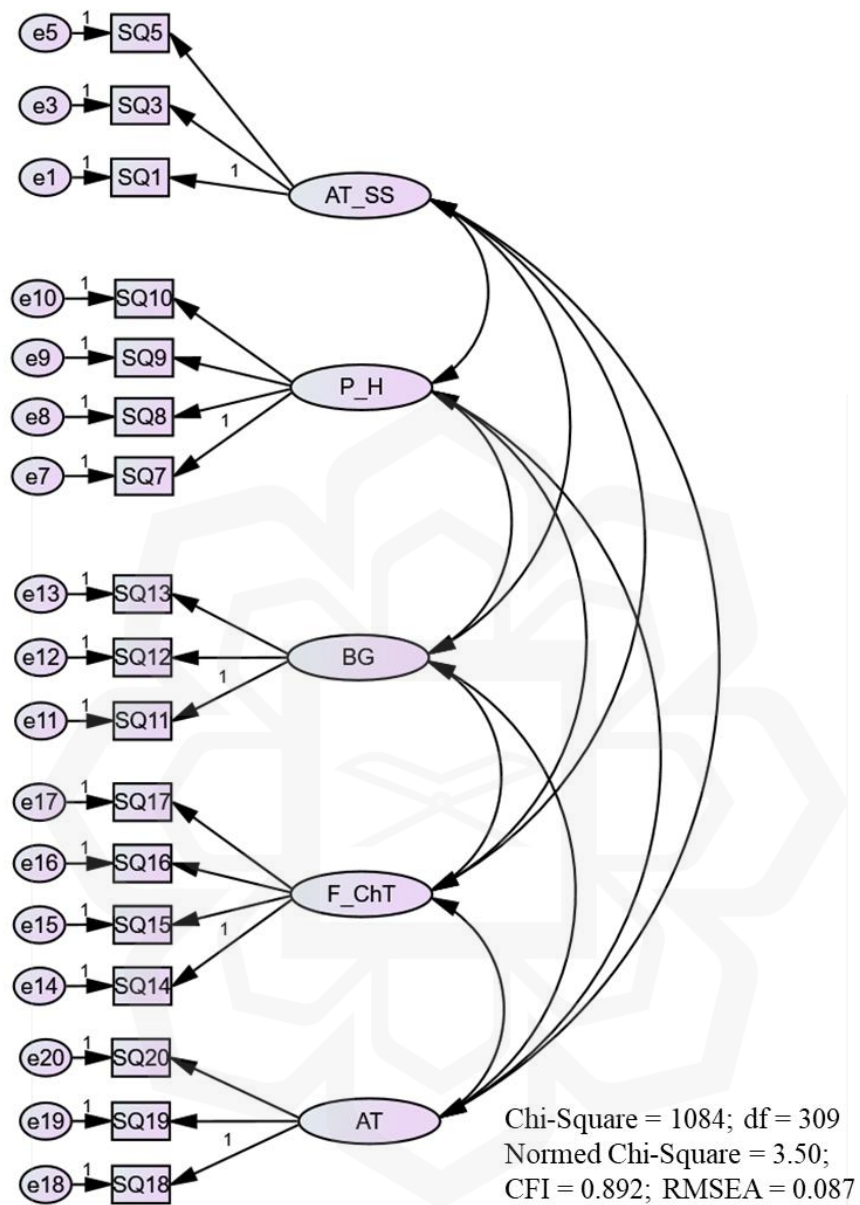


Figure 4.4 - The Modified Overall Measurement Model (CFA)

Thus, this study modified the Measurement Model following the suggestions of previous literatures as well as recommended by Hair et al (2010).

Table 4.14 helps to understand the CFA findings portraying the Initial and Modified Model Fit

Table 4.14 - CFA Results for Service Quality

Goodness of fit statistics	Initial model	Modified model	Threshold values for the Fit Indices	Comments
Normed Chi square	5.57	3.50	<5	Required level achieved in Modified Models
CFI	0.543	0.892	>0.8 ¹	Required level achieved in the Modified Model
RMSEA	0.179	0.087	<0.1 ¹	Required level achieved in the Modified Model

Table 4.14 above illustrates that in the Initial Model the Normed Chi Square was above <5 whereas the Modified Fit Model showed below <5. This is below the required level to satisfy the Modified Model. On the other hand, CFI was 0.543 less than 0.9 which should be at least higher than 0.8 (Kim 2016). Therefore, modified results at 0.892 CFI should be modified to be near to 0.9. Meanwhile, RMSEA was at 0.179 but its modified value of 0.087 achieved the required level (Kim, 2016) in the Modified Model. The findings of the CFA and the correlations among the SQ dimensions are as demonstrated in Table 4.15.

Table 4.15 - Correlations among the SQ Dimensions

Dimensions	Correlations	Dimensions	Estimate
AT_SS	<-->	P_H	.199
P_H	<-->	BG	.363
BG	<-->	F_ChT	.272
F_ChT	<-->	AT	.190
AT_SS	<-->	BG	.125
AT_SS	<-->	F_ChT	.158
AT_SS	<-->	AT	.053
P_H	<-->	F_ChT	.193
P_H	<-->	AT	.513
BG	<-->	AT	.249

4.7.2 Reliability and Validity of dimensions

Reliability and Validity test is very important to find the internal consistency and to investigate casual connection between the paradigms. Cronbach alpha α should range from 0.7 to 1 (Cronbach, 1951; Nunnally, 1978). Validity for measuring items was highly

recommended by Hair et al (2010). For this study, para 3.5.2 of Chapter Three on Methodology had discussed in detail about Reliability and Validity. Here, further analysis on Reliability and Validity was done to calculate causal relationship between the constructs.

Table 4.16 the shows the underlying variables of Service Quality in particular the Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared/Squared Variance (MSV) and Average Shared/Squared Variance (ASV) related to Validity Analysis were carried out as recommended by Hair et al (2010). It should be noted that the three types of Validity have already been discussed in the LR Chapter Three. They are Convergent Validity, Discriminant Validity and Content Validity where the computed Convergent/ Composite Reliability (CR) was greater than AVE and the AVE reached the above <5 range. Table 4.16 shows Reliability and Validity where all Five Service Quality (SQ) new dimensions i.e. AT_SS, P_H, BG, F_ChT and AT Composite Reliability (CR) were found with higher internal Reliability and steadiness at 0.755, 0.85, 0.878, 0.808 and 0.925 respectively.

Table 4.16 - Reliability and Validity

Latent variables	CR	AVE	MSV
AT_SS	0.755	0.743	0.0396
P_H	0.815	0.654	0.2632
BG	0.878	0.866	0.0620
F_ChT	0.808	0.470	0.0361
AT	0.925	0.647	0.0250

Statistics	Suggested
Composite Reliability (CR)	Above 0.7
Average Variance Extracted (AVE)	Above 0.5
Convergent Validity	CR>AVE
Discriminant validity	MSV<AVE

It was also found that the AVE was all above 0.5 except for F_ChT at 4.70 which is still very near the 0.5 threshold range. Discriminant MSV value can still be accepted when it is less than AVE. Here, in Table 4.16 all the MSV are less than AVE. In this case

the overall results of Reliability and Validity can be considered as highly stable and is suggested for further analysis.

4.7.3 Overall Initial Measurement Model of Service Quality (Second Order)

In Figure 4.5 the Second Order Measurement Model has been done for the first construct of Service Quality. According to Hair et al (2010) Second Order is not a big change from First Order Model. However, the research needs to consider First Order constructs measuring scales same as AT_SS, P_H, BG, F_ChT and AT of Service Quality (SQ). The Second Order Model considered the fit of the First Measurement Model. In the previous Modified Model of the First Order CFI was at 0.82 which is a bit less than 0.9? When it should be 0.9? and above. On the other hand, RMSEA should be less than 0.08 but it was a little bit higher than 0.08 at 0.087. Meanwhile, AVE should be above 0.5 where only one dimension of Service Quality i.e. F_ChT was 4.70 but still near 0.5. Therefore, to achieve a good model fit this study conducted CFA for the second round.

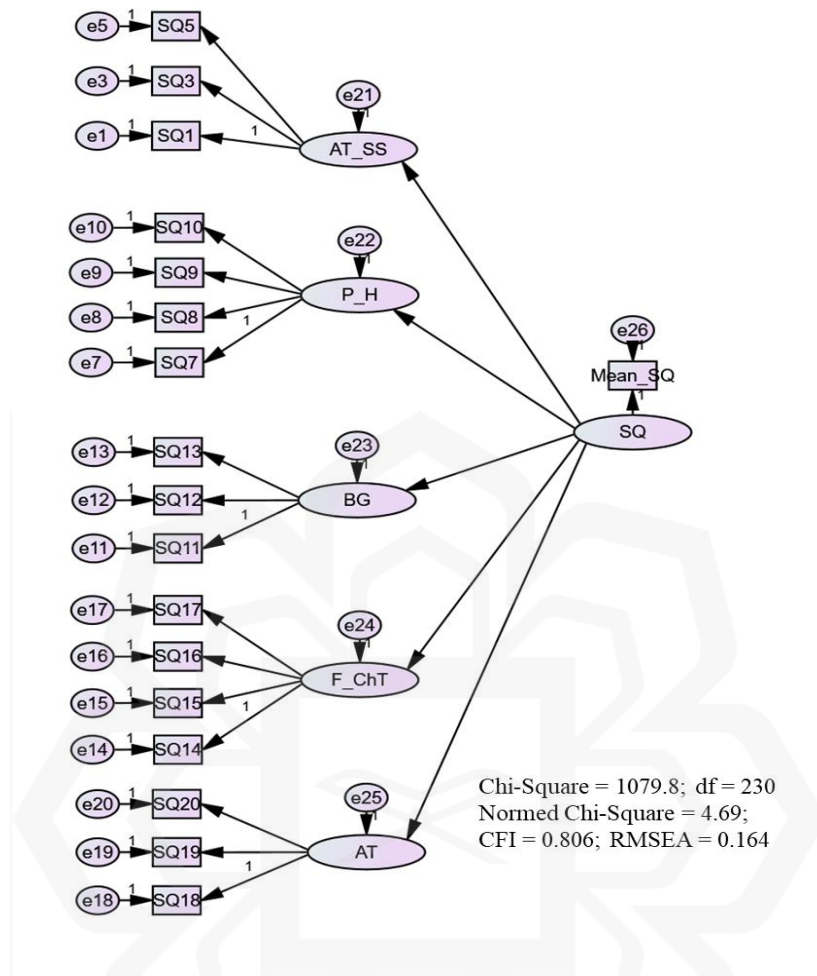


Figure 4.5 - The Initial Second-Order Model of SQ

Figure 4.5 illustrates that the chi Chi-Square is 1079.8; Normed Chi-Square is 4.69 which is less than <5 for a good fit. The CFI value 0.0806, which is less than 0.9 also do not reach the fit while RMSEA at 0.164 though higher than 0.08 is still not a good fit either. Thus, the CFA needs to be modified and run for the Second Order Measurement Model. The results are as shown in Figure 4.6 below.

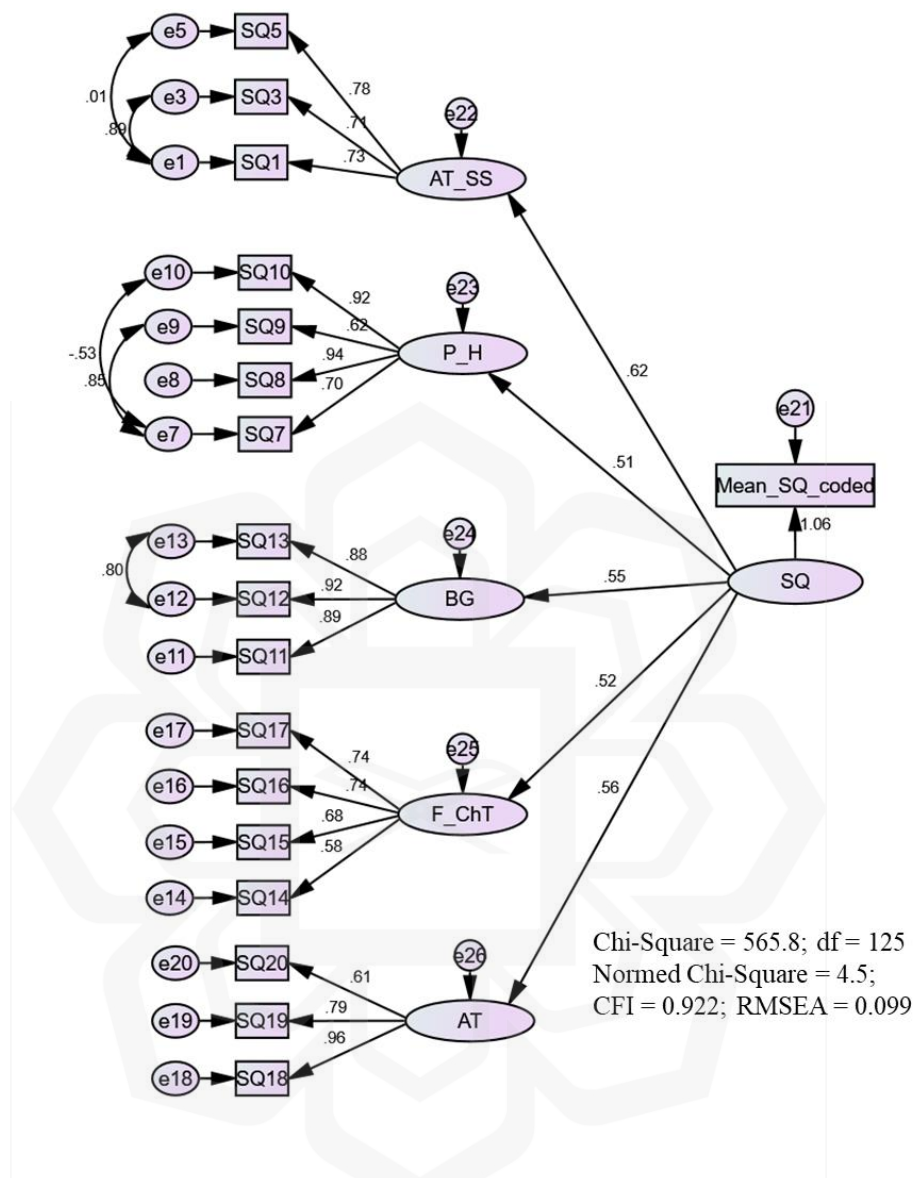


Figure 4.6 - The Modified Second-Order Model of SQ

Figure 4.6 shows that the Normed Chi-Square is at 4.5 which is less than 5.0? thus is now a Good Fit Model. Also, the CFI value at 0.922 is above 0.9, thus achieving the model fit. RMSEA is now 0.099 which is obviously higher than the required 0.08 requirement.

In this study, the first construct of Service Quality of Private Hospitals expanded with five new dimensions after conducting the Exploratory Factor Analysis (EFA) This is

as recommended by Suhr, (2006). The new constructs were detected in the first construct of the Theoretical Framework of Service Quality (SQ) as produced by the EFA. After the EFA was done the Confirmatory Factor Analysis (CFA) followed suit. In this study, the five new components directly related to SQ were named and they are: Service Quality of Advance Technology and Skilled Specialist (SQAT_SS), Service Quality of Precaution & Hygienic (SQP_H), Service Quality of Building Guarantee (SQBG), Service Quality of Facilities & Convenience hour for Treatment (SQF_ ChT) and Service Quality of awaiting for Treatments (SQAT).

Another four new dimensions also need to be evaluated. Results of all nine new components showed that the highest variance shown for Service Quality was (SQAT_SS), second highest variance was (SQP_H), (BI) was the third highest, the fourth was (SQBG), the fifth was Cost/Charge (C), the sixth (SQF_ ChT), the seventh (SQAT), the eighth was Patient Satisfaction (PS) and lastly (SQF_ ChT). Among all the nine components of Service Quality, Waiting for Treatments (SQAT) was the seventh highest. On the other hand, Brand Image (BI) was third highest, Brand Trust the fifth highest, Cost/Charge (C) was the eighth and finally Patient Satisfaction (PS) resulted as having the least variance in this study.

Again, in the Reliability Table, the third component i.e. Service Quality of Building Guarantee (SQBG) achieved the highest Reliability at 0.947 while Service Quality of Facilities & Convenience Hour for Treatment (SQF_ ChT) at 0.777 also showed high internal consistency. Several items were reduced in the EFA tests because of lower factor loadings. Nevertheless, CFA has accomplished the First Order Initial and Modified Model as well as the Second Order Initial and the Modified Measurement Model resulted in a Good Fit. To get higher accuracy some of the lower loading factors were removed. Finally, the Modified Model Indices Good Fit was done because it can minimize error to get more accurate results and decrease influence of any measurement too (Kline, 2011).

Many studies that have been done by previous researchers found that the Model apply to certain country and population (Aaker, 1997; lee &Kang, 2013). Since Bangladesh is a densely Muslim populated country with low GDP and living cost (Shafiqur et al. 2010, UN, 2020), less adequate hospital facilities and high ratio of patients to treatment facilities

(Mohiuddin, 2021) therefore it is only natural that new dimensions pertaining to Service Quality which relate to what Bangladeshis really look for in the Health Care services is quite different from other countries. For example, in Spain the new dimension is Passion, in Japan people value Peace and for Korea they emphasized on 'Cute' (Aker et al., 2001).

Meanwhile, Darzi et al. (2023) found 41 different dimensions in healthcare sector and can be grouped into four main categories. They are 'service scape', 'personnel', 'hospital administration' and 'patients. These are recommended to be further used as the SERVQUAL dimension. Previous research succeeded in justifying those new dimensions and confirmed their addition to existing dimensions. So, in this study the new dimensions recognized as 'Advance Technology and Skilled Specialist', 'Service Quality of Precaution & Hygienic' 'Building Guarantee', 'Facilities & Convenience Hour for Treatment' and finally 'Awaiting for Treatments' are justified and can be used for further research measurement scales and dimension.

4.8 MEASUREMENT MODEL (CFA) OF OTHER CONSTRUCTS

For this study, the First and Second Order Model conducted CFA for Service Quality and its dimensions. The CFA also operated on the other constructs of the Theoretical Framework. These constructs included the remaining four dimensions namely Brand Trust (BT), Brand Image (BI), Price (PR) and Patients' Satisfaction (PS). Again the 359 data source was utilized for CFA for other contracts. Figure 4.7 shows the overall Default Measurement Model.

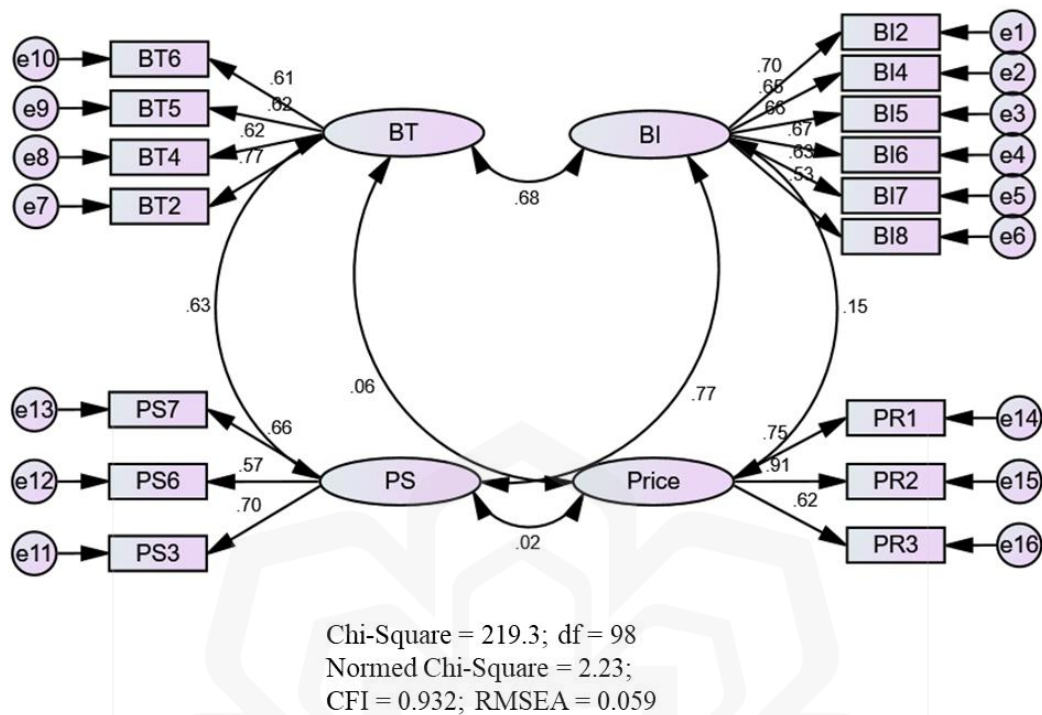


Figure 4.7 - Default Overall Measurement Model (CFA)

After performing the CFA, the results and the findings show that value of the Chi-Square resulting with CFI was at 0.932. The value of the Normed Chi-Square was 2.23 which was below 5, thus is a good fit. The CFI value at 0.932 is also a very good fit as it is higher than 0.9. RMSEA at 0.059 is also a good fit for the Model. Therefore, the Default Overall Measurement Model is satisfactory. Table 4.17 gives a summary of the Initial and the Modified measurements of all the constructs.

Table 4.17 - Summary of Results of all Measurement Model Constructs (CFA)

Constructs	Model	χ^2	df	χ^2/df	CFI	NFI	RMSEA
BT	Initial	105.3	14	7.521	0.843	0.825	0.135
	Modified	8.5	2	4.25	0.979	0.974	0.095
BI	Initial	64.6	20	3.23	0.936	0.911	0.079
	Modified	17	9	1.88	0.986	0.971	0.050
PR	Initial	91.1	5	18.22	0.848	0.842	0.219
	Modified	37.9	8	4.73	0.922	0.918	0.224
PS	Initial	137.4	35	3.92	0.828	0.785	0.090
	Modified	43.9	9	4.87	0.894	0.873	0.098
SQ	Initial	1079.8	230	4.69	0.806	0.790	0.164
	Modified	565.8	125	4.5	0.922	0.903	0.099

Table 4.17 shows the results of all the constructs for this study. In this study Exogenous Variables are Service Quality (SQ), Brand Image (BI) and Brand Trust (BT). The Endogenous Variable is Patient Satisfaction (PS) while Cost (C) is the Moderating Variable. Subsequently, results show that the Normed Chi-Square was (χ^2/df) which is less than >5 thus is a good fit while the other constructs i.e. Service Quality (SQ), Brand Image (BI) and Brand Trust (BT) had CFI values of 9 and above are also very good except Patients Satisfaction was at 0.0894. rounding to 0.9. is also acceptable as a good fit value (Kim, 2016). On the other hand, RMSEA of SQ, PS and BT were above 0.9 thus, is not a very good fit but some renown scholars are of the opinion that less than 1 can still be accepted (Kim, 2016).

All in all, it can be concluded that this research's thorough analyses which gave Good Fit results as compiled in Tables 4.4 - 4.17 shows that all the Reliability and Validity tests have been done completely and the Cronbach alpha α above 0.7 shows higher consistency among the measurement items. Secondly, all the Composite Reliability (CR) that ranged between 0.7- 0.9 demonstrates a high CR. Finally, the AVE, MSV and ASV results also reached satisfactory levels.

4.9 STRUCTURAL MODEL EVALUATION

According to Henseler (2017) Structural Model shows the connections among constructs. It is a Model that covers multiple levels of underlying constructs (Hair et al. 2006, 2010). This study executed the two phases of modelling steps (Anderson and Gerbing, 1998) while to acquire the Measurement Model the study employed the CFA analysis to heed the Reliability and Validity Test requirement.

Now, the AMOS techniques will be conducted to get the relationship among the constructs while attempting to get the highest chances of estimate. This study adopts the higher order of the full-fledged Model that contains multiple latent variables (Haire et al. 2006; 2010). Figure 4.8 shows the Structural Model for analysis. Then, Table 4.18 confirms the encompassing model involving the five main constructs proposed in the Theoretical Framework often referred to as Service Quality (SQ), Brand Image (BI), Brand Trust (BT), Cost (C), and Patients' Satisfaction (PS). In fact, these constructs can also be called Latent Variables. In the diagram, they are linked by single arrows and the overall pattern also shows their general relationship i.e. among the Dependent and Independent Variables (Ahmad, 2016).

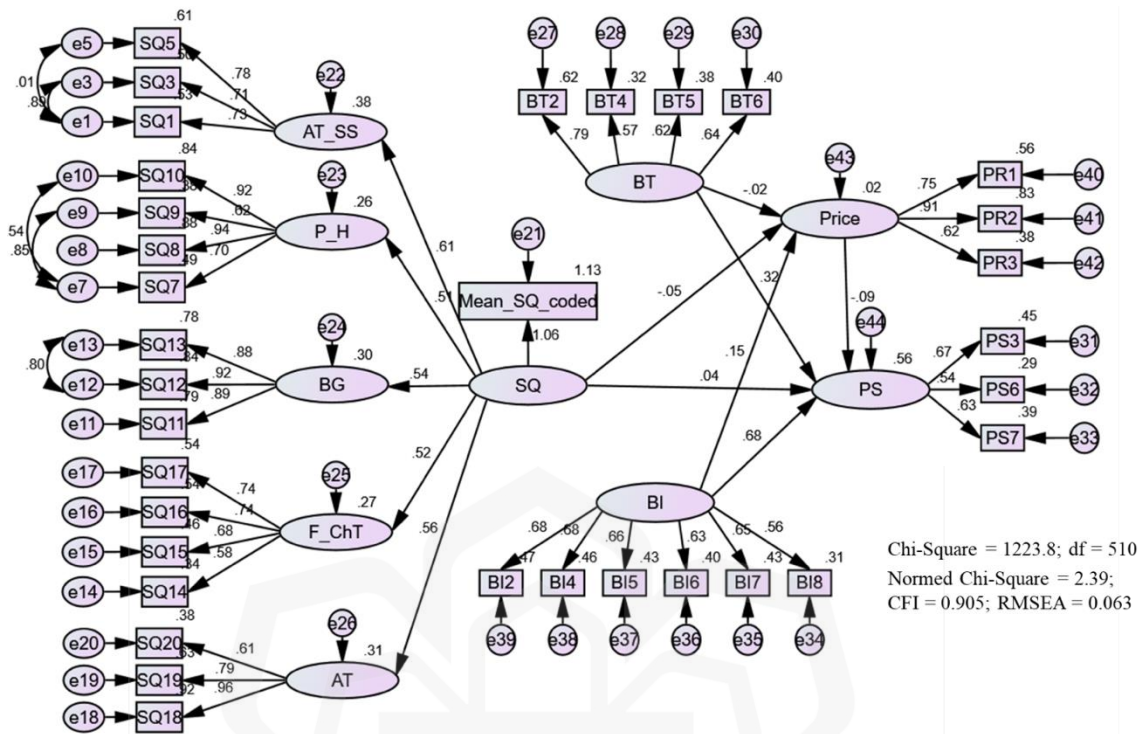


Figure 4.8 - The Structural Model

Additionally, Service Quality for this study comes with new sub-constructs in the Exploratory Factor Analysis (EFA) named as ‘Advance Technology and Skilled Specialist (AT_SS)’, ‘Precaution & Hygienic (P_H)’, ‘Building Guarantee (BG)’, ‘Facilities & Convenience Hour for Treatment (F_ChT)’ and ‘Awaiting for Treatments (AT)’. They are also shown in the Structural Model diagram. The small square frames in the diagram indicate the measured items.

4.10 ANALYSIS OF THE BASELINE STRUCTURAL MODEL

Figure 4.8 results indicate a hypothesized model fit comprising highly acceptable goodness-of-fit index. The Chi-Square χ^2 was 2.39 i.e. below >5 the threshold value, thus is satisfactory. The CFI was 0.905 and verified above 0.9 and RMSEA was 0.063 thus confirmed lesser than 0.08 which is a highly good fit structural model. Thus, the final structural model turns out to be a good model fit for this study (Hiar et al. 2010 and Kline,

2011). Overall, the findings confirm that the hypothesized structural model delivered a good fit to the data.

In this study the hypothesized model was evaluated based on some fit methods specifically Normed Chi-Square, Comparative Fit Index (CFI) and Root Mean Square (RMS). Many renowned scholars like Byrne (2010), Hair et al. (2020) and Kline, (2011) recommended these assessments. Because of the sensitivity of the sample size, the Chi-Square and the Normed Chi-Square were taken into consideration. Path Coefficient displays the casual relationship followed by justification as the statistical significance was at $p < .05$. In this study, there are six underlying pathways and from these six paths two Hypotheses were found ‘significant’ while four others were found ‘not significant’ i.e. not supported.

4.11 HYPOTHESES TESTING

Hypotheses testing was done for all the Six Hypotheses of this research. The gathered data was used to find out the relationship between the Independent Variable and the Dependent Variables. However, another factor (if) could also be employed to ensure that the formulated Hypotheses are significant or not significant (Quoquab, 2018).

In this study, all Six Hypotheses were tested comprising the Independent Variable and the Dependent Variables as well as the Moderator Factor. Table 4.18 presents the output of estimates of the Hypothesized Model (SEM) that was applied to investigate the relationship between Service Quality (SQ), Brand Image (BI) and Brand Trust (BT) on Patients’ Satisfaction (PS).

Table 4.18 - Estimates of the Hypothesized Model

Structural Path	Std. Reg. weight	S.E.	C.R.	P	Decision
PS ← SQ	.037	.042	.719	.472	Rejected
PS ← BT	.323	.033	4.741	***	Accepted
PS ← BI	.682	.159	7.253	***	Accepted

Note: Std. Reg. Weight = Standardized Regression weight
 S. E. = Standardized Error of Regression weight
 C. R. = Critical Ratio of Regression weight
 P = Level of significance for Regression weight

From the results, it is proven that the Good Fit Model and the Structural Path were taken into consideration when doing the Hypotheses Testing. The results show that impacts of SQ to PS is ‘not significant’ while impacts of both BI to PS and BT to PS are ‘significant’. To understand better these situations the following paragraphs will explain the relationships clearly and the results of the Tests.

4.11.1 Hypothesis 1: Hospital Service Quality has a significant impact on Patients’ Satisfaction.

Table 4.18 exhibits that Service Quality and Patients’ Satisfaction is ‘not significant’. In other words, Service Quality has ‘no significant impact’ on Patients’ Satisfaction. The findings from the Structural Path resulted in the Standardized Regression at .037, Standard Error at .042, Critical Ratio at .719 and the Significance Level at .472. Thus, the path between Service Quality and Patients’ Satisfaction was ‘not significant’. This implies that there could be other reasons or because there are other more important factors that the patients were thinking of while doing the Questionnaire. Therefore, Hypothesis 1 is rejected, and it could also be concluded that for patients in the Private Hospitals of Dhaka, Service Quality has ‘no significant impact’ on Patients’ Satisfaction. Interestingly, the results seem to be like prior studies done by Zeithaml (1996), Liuser et al (2001) and Cronin and Taylor (1992).

4.11.2 Hypothesis 2: Hospital Brand Image has a significant impact on Patients' Satisfaction.

The second hypothesis is between Brand Image (BI) and Patients' Satisfaction (PS). Significant results by the Structural Model were that the Standardized Regression was at .682, Standard Error was at .159, Critical Ratio was at 7.253 while the Path Significance was $p < 0.05$ from B1 to PS thus, it is 'significant'. The line between brand image and patients' satisfaction was positive. The result indicates that further improvements to Brand Image can benefit the organization and appeal for Patients' Satisfaction. The above results are in line with prior research by Khan et al (2020), Farhana (2017), Wu (2011), Anderson and Lind (1998). Thus, the outcome of the test is that Brand Image has 'significant impact' on Patients' Satisfaction. Hypothesis 2 is thereby "Accepted".

4.11.3 Hypothesis 3: Hospital Brand Trust has a significant impact on Patients' Satisfaction.

Figure 4 shows the substantial outcome of the Structural Path between Brand Trust and Patients' Satisfaction. in the Results were as follows: Standardized Regression .323, Standard Error .033, and Critical Ratio 4.741. Therefore, the significance level shows it is 'significant' as CR is 1.96 i.e. greater than $p < 0.05$. Hence, it can be concluded that CR for the path from Brand Trust to Patients' Satisfaction is 'Significant' simply because its value at 4.741 is greater than the critical factor. In other words, this indicates the 'highly significant' impact of both variables. Brand Trust relationship with Patients' Satisfaction shows mutual influence and continuous confidence of Brand Trust will be promising for Patients' Satisfaction. Previous research by Lytle (1995), Mahmud et al (2018), Farhana (2017) also confirmed this outcome. So, the results concluded that Brand Trust has 'significant impact' on Patients' Satisfaction therefore, this hypothesis is 'Accepted'.

So, in this study the SEM for Independent Variables (IV) and Dependent Variable (DV) recommended that Brand Image and Brand Trust have 'significant impacts' on Patients' Satisfaction while Service Quality have 'no significant impacts' on Patients'

Satisfaction. In the context of Bangladesh, it proved that patients are more concerned about the Private Hospitals' Image and Trust (Begum, 2019). Lack of Trust and poor Brand Image compelled patients to seek treatment in neighboring countries (Farhana, 2017). Therefore, Hospital Management in Dhaka should focus on reinforcing their hospitals' Brand Trust and Brand Image.

4.11.3.1 Hypotheses Testing on the Moderator Variable – Price

The Moderator Variable is the Independent Variable that can impact on the Structural Path (Holmback, 1997 and Quoquab, 2018). According to Quoquab (2018) the Moderator Variable, also known as the Constant Variable, can trigger either positive effects or negative effects on other variables. In this study 'price' has been recognized in the three remaining Hypotheses as the Moderator Variable for the relationships between all IV and DV on Service Quality (SQ), Brand Image (BI), Brand Trust (BT) and Patients' Satisfaction (PS). In Figure 4.9 the Structural Model describes the Moderating effects of Price. Surprisingly, the Structural Path shows that there is 'no significant' impacts between price, service quality, brand image, brand trust and patients' satisfaction.

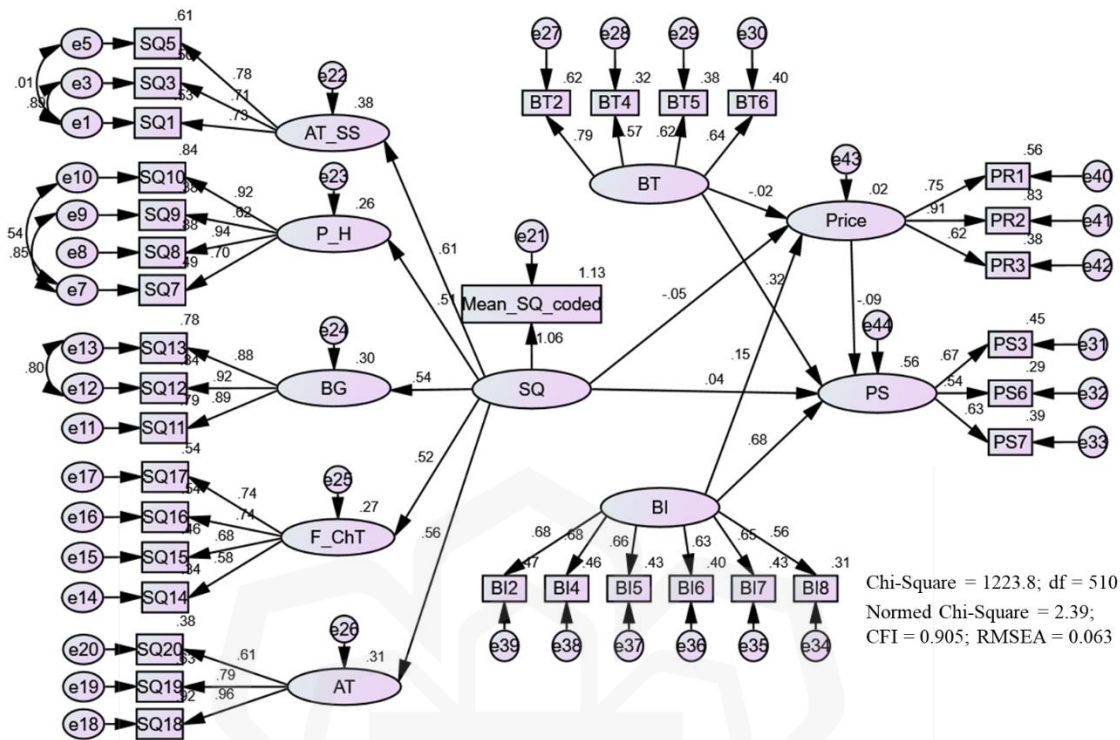


Figure 4.9 - Structural Model (Impacts of the Moderator Variable)

Table 4.19 also clearly illustrates the results between the Moderator Variable and the four Variables i.e. SQ, BI, BT and PS. The situations for Hypothesis 4, Hypothesis 5 and Hypothesis 6 are explained more in the following sub-sections.

Table 4.19 - Moderator Variable Results

No.	Hypothesis	Structural Path	Structural Path	Direct Path	P	Hypothesis Testing
H4	Price moderates the relationship between SQ and PS	-0.05 (SQ ---> Cost)	0.004 (Cost ---> PS)	0.048	0.516	Not supported (Not significant moderator)
H5	Price moderates the relationship between BI and PS	0.15 (BI ---> Cost)	-0.014 (Cost ---> PS)	0.68	0.983	Not supported (Not significant moderator)
H6	Price moderates the relationship between BT and PS	-0.02 (BT ---> Cost)	0.002 (Cost ---> PS)	0.32	0.973	Not supported (Not significant moderator)

4.11.4 Hypothesis 4: Price has a moderating impact on Service Quality and on Patients' Satisfaction.

The fourth hypothesis of this study was tested against the Moderator Variable i.e. Cost. Figure 4.9 and Table 4.19 demonstrate the findings were 'not significant' by the Cost Moderator on SQ and PS. This is because the summary Structural Path -0.05 is (SQ ---> Cost) and 0.004, (Cost ---> PS where direct path is 0.048 and p values is 0.516. Thus, the moderating relationship between Cost, SQ and PS resulted as 'Not supported'. However, previous research occasionally mentioned the importance of Cost. Perhaps this is due the different Country context. Nevertheless, Hypothesis 4 of this study concluded that Cost has 'no impact' on SQ and PS. Thus, Hypothesis 4 is 'Rejected'.

4.11.5 Hypothesis 5: Price has a moderating impact on Brand Image and on Patients' Satisfaction.

The Fifth hypothesis tested the Moderator Variable against Brand Image (BI) and Patients' Satisfaction (PS).

Figure 4.9 and Table 4.19 demonstrate the results that price (PR) is 'not significant' in the relationship between BI and PS. The results show that the structural path 0.15 are (BI ---> Price) and 0.014 is (Price ---> PS) where direct path is 0.68 and p values is 0.983.

Thus, the relationship between Price, BI and PS were 'Not supported' and Price is 'Not a significant moderator'. Perhaps there can be other reasons like 'time' 'place' 'hour' which patients of the Private Hospitals were more concerned about. Again, previous research occasionally mentioned the importance of price on BI and PS. Therefore, Hypothesis 5 concludes that it was 'Not Supported' and that Price has 'No Significant' impact on BI and PS. Hypothesis 5 is 'Rejected'.

4.11.6 Hypothesis 6: Price has a moderating impact on Brand Trust and on Patients' Satisfaction.

The sixth and last hypothesis of this study was tested to see whether Hospital Prices as the Moderator variable really impacted Brand Trust (BT) and Patients' Satisfaction (PS). Detailed findings show that there was 'no significant' relationship between the price moderator variable on BT and PS. The structural path -0.02 was (BT--> Price and 0.004 for (Price --> PS) where direct path is 0.32 and p values is 0.973 . Thus, the moderating relationship between Price, BT and PS was clearly 'not supported' hence Hypothesis six is also 'Rejected'. Nonetheless, Hypothesis six confirmed that price (PR) has 'no positive impact' on BT and PS. However, as a moderator price has no impact among variables, this rejection could be due to patients' emphasis on other things like Advanced Technology, loyalty etc. or some other factors.

4.12 SUMMARY OF HYPOTHESES TESTING

Table 4.20 summarizes the Six Hypotheses Testing Results. The Direct Structural Model and the Moderating Model also checked the results. Results show that Hypothesis 1 was ‘not supported’, Hypothesis 2 and Hypothesis 3 were ‘supported’ whereas Hypothesis 4, Hypothesis 5 and Hypothesis 6 showed weak impact as the Moderator, therefore they were ‘not supported’. It turned out that Price clearly did not impact significantly on BI, BT and PS hence the Moderator Variable has been ‘Rejected’.

Table 4.20 - Summary of Hypotheses Testing

No. of Hypothesis	Result
HP1: Hospital Service Quality has a significant impact on Patients’ Satisfaction	Not Supported
HP2: Hospital Brand Image has a significant impact on Patients’ Satisfaction	Supported
HP3: Hospital Brand Trust has a significant impact on Patients’ Satisfaction	Supported
HP4: Price has a moderating impact on Service Quality and Patients’ Satisfaction	Not a moderator
HP5: Price has a moderating impact on Brand Image and Patients’ Satisfaction	Not a moderator
HP6: Price has a moderating impact on Brand Trust and Patients’ Satisfaction	Not a moderator

Overall, in this study among the three direct variables resulted in HP1 was ‘Not Supported’ while HP2 and HP 3 were ‘Supported’. The rest of the Hypotheses were ‘Not Supported’ and do not hold true.

As a conclusion this research finds that Brand Trust and Brand Image have a significant impact on Patients' Satisfactions. In contrast, surprisingly Service Quality and Price did not have significant impacts on Patients' Satisfactions at all. Therefore, this study strongly recommends that all Private Hospitals in Dhaka in particular and all Public Hospitals in Bangladesh in general should focus on building Trust and enhancing positive Brand Image to improve Patients' Satisfactions. Furthermore, they should also take note that indeed Price is not necessarily the prime factor that influence people in choosing the

Hospitals for treatment. The Hypotheses relating to this were clearly ‘Rejected’ and proven wrong.

On the other hand, this scenario need not be the final indicator. The researcher admits that perhaps there are several other factors causing this landscape. Firstly, the research chose only top-class Private Hospitals among the 25 Private Hospitals in Dhaka. Thus, people are aware before taking the healthcare service that Costs or Hospital Charges would be high. Where A previous study already found that people are willing to pay for treatments no matter what (Farhana, 2017) and that they more concerned about Hospitals’ Brand Image and Trust. So, patients are well prepared regarding price. That is why this study found that the Price factor is ‘Not Significant’.

The second reason could be related to different Price rates amongst Private Hospitals. For example, Evercare and Ibn Sina and a few others while providing high standard buildings, bed facilities and other accessories while on the other hand Islami Bank hospitals and Ad Deen Hospital try to focus more on treatment with lower costs. That is a known fact to all Bangladeshis (IBBL, 2016). In fact, generally patients’ perception on hospital charges for healthcare services are ‘not very significant’. That is why patients’ regard impacts of Price is not so influential on their satisfaction levels. Nevertheless, this study found that Price may have indirect effects on brand image, brand trust and service quality on Patients’ Satisfaction.

The third reason could be that before deciding on which hospital to go, they already have pre-conceived ideas about the prospective Hospital. Price is of course a very important factor that they weighed but still they are willing to pay once they are confident that they will get proper treatment. This set of prior decision-making factor c explains the indirect effects of price on Patients’ Satisfaction.

The fourth reason could be the Trust factor in Private Hospitals. In healthcare, patients are more concerned about trust and image in their overall assessment which was proven by the two hypotheses of this study. Basically, hospitals’ image and trust dominate the indirect influences of brand image, brand trust and service quality via price on their satisfaction levels.

Besides those likely reasons there could be other reasons too that might cause the Moderator Factor not to support the Hypotheses. Therefore, it is fair to consider other potential causes or justifications for the 'Rejected Hypotheses' to better understand the specific context of patients of top-class Hospitals in Dhaka. Overwhelmingly, future research should concentrate on improvements in Brand Image and Brand Trust to provide exemplary healthcare services of Private Hospitals.

4.13 CHAPTER SUMMARY

Initially this chapter exhausted about the summary of findings of the research. Data analysis is found proficient by SPSS and AMOS software to produce all the required findings. To undertake complete demographic analysis all the respondents' profiles had to be examined. Hence, demographic characteristics like gender, age, occupation, monthly income, educational qualification, income level of respondents were examined. Later, the EFA analyses mainly KMO, communities, PCA and varimax rotation were also used in the evaluations. Henceforth, the structural model and measurement model testing were performed.

The Measurement Model Testing followed the two specified steps recommended by earlier studies to determine the Model Fit. Weighing Model Fit and Hypotheses Testing were executed via the Structural Model approach. As a result, Hypotheses 2 and 3 were 'supported' while Hypothesis 1 was 'not supported' in the statistical process. Indirect impacts concerning Price basically involving Hypothesis 4, Hypothesis 5 and Hypothesis 6 were 'not supported' therefore 'rejected'.

Indeed, the overall comprehensive findings proved that this study is very useful and can facilitate future research. Besides that, the findings also proved that the average population of a country could also enjoy the benefits from services provided by Private Hospitals and that Private Hospitals are not reserved only for the rich. This is because actually Price and Service Quality are found not to be the outstanding factors instead Brand and Trust are the determining factors for Patients' Satisfactions. Results and real findings

of this study will “open the eyes” of all Private Hospitals not only for Dhaka but for Private Hospitals throughout the world. Indeed, in the long run, the Health Care Industry will succeed in its two-prong marketing strategies where their management body will not only generate profits by leaps and bounds by fulfilling Patients’ Satisfaction but simultaneously fulfilling their noble Corporate Social Responsibility (CSR) in augmenting healthy communities, world population and mankind.



CHAPTER FIVE: CONCLUSION AND RESEARCH IMPLICATIONS

5.1 INTRODUCTION

Indeed, Patients' Satisfactions have long been sidelined in the Healthcare or Wellness Industry. Because it has become a lucrative Industry, Hospital Management indiscriminately cared more about Profit-making instead of taking care of the "soft" or humane component of the industry. This has alarmed many academicians and many researchers have started to focus on how to overcome this predicament (Ferreira et al. 2023). Asamrew et al. (2020) highlight that patients are the real "purchasers" of healthcare services of Private Hospitals and that it is only fair that they benefit commensurately from the industry.

This study is one of such efforts and hopefully its thesis contributes to the scarce body of knowledge on what impact Patients' Satisfactions on healthcare services from Private Hospitals. For this context the previous chapters of this thesis encompassed an introduction, literature review, research method, data analysis and discussion. At this point this chapter pronounces significant contribution to this Industry and the "way forward". Discussions of this Chapter start with evaluations of the four Research Objectives (ROs) of the study specifically relating to Private Hospitals in Dhaka and on impacts of the constructs that have been identified. Then, results of the Hypotheses relationship that have been formulated and were tested against relevant Theories, Methodologies and Practices are again highlighted in this chapter. Finally, this chapter underscores the contributions and limitations of the study. Meaningful suggestions for future research are also outlined here.

5.2 RESEARCH OBJECTIVES ADDRESSED.

According to recent literature many studies have been done on hospitals' business around the world. But in the context of Bangladesh there were only a few studies and literatures found. Nevertheless, Chapter Two of this study succeeded in identifying the research gap

subsequently Chapter Four had recognized pertinent factors that really affect Patient's Satisfaction. This Chapter highlights the accomplishment of this research whereby the Research Questions (RQs), Research Objectives (ROs), Theoretical Framework, and Hypotheses linked to Patients' Satisfaction have all been put in place which determines the successes and failures of Private Hospitals in Dhaka, Bangladesh. As the previous chapter discussed details about the overall findings and results of the data analyses, this concluding Chapter stresses on the outcomes of the data analyses that answer the RQs and ROs of this research. In essence, the Overriding Objective of the study is to find out the actual reasons that impact Patients' Satisfaction. Nonetheless, it is better to refresh and reiterate the ROs of this study and they are as follows:

1. To examine the impact of Service Quality on Patients' Satisfaction
2. To examine the impact of Brand Image on Patients' Satisfaction
3. To examine the impact of Brand Trust on Patients' Satisfaction and
4. To investigate the moderating role of Price in the relation to Service Quality, Brand Image, Brand Trust, and Patients' Satisfaction.

5.2.1 Research Objective One (RO 1)

The first objective of this study is 'to examine the impact of Service Quality on Patients' Satisfaction.

It has been discovered that tremendous research had been done on Service Quality to find the Customers'-cum-Patients' Satisfaction level of many kinds of organizations all over the world. The famous measurement model known as Parasuraman's (1988) SERVQUAL, RATER is widely used in most of the different kind of organizations of which some of them are on healthcare. The Healthcare industry's primary concern is basically to improve Service Quality and to retain patients (Aagja and Garg, 2010) so proper measuring items should be used to get the ideal data. As Patients' Satisfaction of Hospitals is quite different from other organizations' Customers' Satisfaction therefore it would be better to measure data by different items (Maqsood et. al.2017). For example,

items like Service Quality pertaining to ‘waiting time for laboratory test’, ‘to take medicine’, ‘availability of specialist doctors’, ‘hygienic environment’ etc. are specifically referring to Patients’ Satisfaction of Hospitals.

Because of the peculiar nature of hospitals and the need to match the cultural context of Bangladesh, customized measurement data had to be taken from various studies to find actual Service Quality dimensions that influence Patients’ Satisfaction level. So, this study had taken 20 items in a single factor to examine Service Quality as suggested by many scholars especially Otani and Kurz (2004), Maqsood et al (2017), Amin and Nasiruddin (2013) and others.

The major finding of this study is that there were five additional dimensions arising from the Service Quality constructs in the EFA analysis. The first dimension was named Advanced Technology and Skilled Specialist SQ (AT_SS) and expanded with 6 items i.e. ‘quick attendance’, ‘sympathetic to patients and ‘able to handle problem’, ‘able to handle emergency situation’, ‘modern equipment for treatments’, ‘knowledgeable doctors’ and ‘knowledgeable nurse’. The second dimension named as Service Quality of Precaution & Hygienic SQ(P_H) expanded with four items are i.e. ‘knowledgeable and experienced staff’, ‘necessary medical fields are available’, ‘take quick precaution to prevent danger’, ‘neat and clean environment ex: words??., washroom’. The third dimension identified as Service Quality of Building Guarantee SQ (BG) expanded with three items i.e. ‘maintain error free or accurate records’, ‘behaviors of employee build confidence’ and ‘sincere and willing to help patients. The fourth dimension named as Service Quality of Facilities & Convenience Hour for Treatment SQ(F_ChT) in Service Quality expanded with four items i.e. ‘employees are well dressed, neat and clean’, ‘medication apply which are up to the standards’, ‘give patients individual attention’, ‘convenient operating hours for patients’ and finally the Fifth dimension of Service Quality named Service Quality of Awaiting for Treatments SQ(AT) expanded with three items i.e. ‘wait for long time to consult doctor, ‘wait for long time to get medicine from hospital pharmacy’ ‘wait for long time for laboratory tests’. In summary, this study extended the hospital’s Service Quality via introducing five new dimensions as follows:

1. Advanced Technology and Skilled Specialist - SQ (AT_SS)
2. Precaution & Hygienic - SQ (P_H)
3. Building Guarantee - SQ (BG)
4. Facilities & Convenience Hour for Treatment - SQ (F_ ChT)
5. Waiting for Treatments - SQ (AT)

Thus, these new additions to the hospital's Service Quality Measurement Model are proposed to be adopted by future healthcare study.

Meanwhile, it should be disclosed that the first Hypothesis of this study showed that there is 'no significant' impact of Service Quality on Patients' Satisfaction in the Private Hospitals of Dhaka, Bangladesh. The above finding however is 'not supported' by several similar research even though their studies did not really focus on Private Hospitals (Farhana, 2017., Shafique, 2019., Mohiuddin, 2020). So, statistically the result salvaged from this study cannot be considered 'significant' enough. Probably, patients of the Private Hospitals of Dhaka were more concerned about other branding, loyalty etc.

5.2.2 Research Objective Two (RO 2)

The second objective of this research is 'to examine the impact of Brand Image on Patients' Satisfaction. The research intended to see whether there is any impact of Private Hospitals' Brand Image to satisfy patients. Hospitals' Brand Image is a very important concern in current business because it relates to patients' choice (Hosgor & Sevim, 2022, Sukuwati, 2021, Wu, 2011 and O'Connor et al. 1994). Positive Brand Image also enhances the continuous improvement of hospitals' Service Quality. Ultimately Brand Image reflects Service Quality and patients' Values (Rajagopal, 2007). A previous study emphasized that Brand Image is a valuable intangible asset (Roberts Ans Dowling (2002)0 where Patients' Satisfaction happen to concentrate on brand service advancement (Bramah and Ofori, 2020).

This research found that Brand image had a significant impact on Patients' Satisfaction. This study supports the line of arguments of previous researchers (Sukuwati,

2021, Kim et al 2008, Wu 2011) that there is a relationship between Brand Image and Patients' Satisfaction. Therefore, the top private hospitals in Dhaka should focus on continuous advancement to keep building Patients' Satisfaction and maintaining patients' choice.

5.2.3 Research Objective Three (RO 3)

The third objective of this research is 'to examine the impact of Brand Trust on Patients' Satisfaction. In the hospital's context Brand Trust (BT) is very important to patients as it is a matter of life and death. The patient's Trust about hospitals is an emotional and subjective term based on the perceived benefits that a patient will enjoy (Sudirman, 2022).

From arguments of previous researchers (Poerwadi et al. 2019, Fatema, 2019, Hosseini & Behboudi, 2017) and even in the Al-Quran (Surah al-Imran verse 159) Allah's swt. Command and the Prophet Muhammad's saw. Hadith (Sahih al Bukhari) it is confirmed that Trust is important. Allah swat. loves those who kept their promises and will punish those who provide their services with dishonesty.

As regards the second objective of this study, the finding is that there is an impact or relationship between Brand Trust and Patients' Satisfaction. To build Trust is one of the prerequisites in business marketing and it is one of the recognition and approval indicators from patients (Sudirman, 2022: A successful hospital always relate to its high level of Trust and superior level of Patients' Satisfaction.

Hence Private Hospitals of Dhaka should focus on constant Trust strategies such as enhancing Trust levels through the media, advertisement, online seminar, and other promotions. Friendly-patient policies will also increase Trust levels and ensure Patients' Satisfaction.

5.2.4 Research Objective Four (RO 4)

The Fourth and final objective of this research is 'to investigate the moderating role of price in relation to Service Quality, Brand Image, Brand Trust, and Patients' Satisfaction. In this study the Independent Variables (IV) are Service Quality, Brand Image, and Brand Trust

while the Dependent Variables (DV) are Patients' Satisfaction and Cost. The overall Moderator i.e. 'price/charge' has been taken to examine the relationship between all the IV and the DV.

In line with previous studies on Bangladesh hospitals (Begum et al 2021, Mohiuddin, 2020., Farhana, 2017, Shafiq, 2017., and Andaleeb 2007, 2011) this study wanted to further examine the 'price and charge' factor in the context of Bangladesh's lower income level patients and impacts of Bangladeshi's culture on Patients' Satisfaction of hospital services.

Haryanto and Sitio (2020), Afsar (2014), Prasana (2000), Dodds et al (1991) revealed that Price/Hospital Charge had marked influence on Patients' Satisfaction. On the contrary, this study discovered that Price had no relationship at all with Service Quality, Brand Image, and Brand Trust on Patients' Satisfaction in Private Hospitals.

Strangely, this discovery is like a study by Sudirman (2022) who also found that 'Price/Charge' had 'no significant impact' and that price is not a major issue if Hospital Brand Image and Trust are available. The above relationship between Price, Brand Image and Brand Trust reiterates the 'not significant' impact on Patients' Satisfaction proved these findings are valid. In other words, patients are more concerned about hospitals' Image and Trust so the Moderator factor i.e. Price is 'not supported'. This has also been found in this study.

Although a previous study (Begum et al 2021) found that Private Hospitals' price is very high as compared to cost of Public Hospitals, this study found that there is 'no significant' effects of cost on Service Quality, Brand Image, and Brand Trust on Patients' Satisfaction. Meanwhile, Farhana (2017), revealed the reason why patients fly to other countries for treatment even though it incurred high flight cost and other expenses on them. Looks like this study and Farhana's (2017) study confirm that patients are willing to pay a lot of money to get treatment due to Brand and Trust. Another study also stressed that if patients are guaranteed that the hospital is reputed to have good Brand Image and Brand Trust, they are also willing to bear the Cost (Sheikh et al.2022).

So, this study recommends that Private Hospitals' Policy Makers of Dhaka focus more on creating and promoting Brand Image (BI) and Brand Trust (BT) to ensure Patients' Satisfaction.

5.3 RESEARCH IMPLICATIONS ON ACADEMIA, PRIVATE HOSPITALS AND POLICY MAKERS

In the accordance of with the Research Objective “to identify the relationship between Service Quality, Brand Image, Brand Trust and Price impacts on Patients' Satisfaction” the following are explanations as regards the Theories, Methodologies, and Implications of this research to Policy Makers, Academia, and Private Hospitals.

5.3.1 Theoretical Implications

Globally, patients' 'demands' on the Healthcare Industry have become 'commands' as people are more concerned about health and to ascertain their 'Satisfaction'. Hence, Patients' Satisfaction deserves attention and should be concentrated upon by researchers, academicians, and industry players. In fact, Patients' Satisfaction in the context of Private Hospitals' performance in Bangladesh is an almost 'untouched area' of research. Since there is an insufficient literature regarding Patients' Satisfaction on Private Hospitals in Dhaka, the present study complements the existing lack of knowledge in this field. The knowledge regarding impacts of marketing concerning on Service Quality, Brand Image, Brand Trust, and Cost towards Patients' Satisfaction is almost inaccessible especially for Private Hospitals in Bangladesh (Begum et al. 2021, Andaleeb 2011).

Quick attendance, error free, hygienic environment, availability of specialist doctors, nurses etc. are dimensions of Service Quality that really influence Patients' Satisfaction. These dimensions relate directly to hospitals, but research done on them is few. This study not only focuses on Service Quality per se but expanded and identified new dimensions of Service Quality that affect Patients' Satisfaction. Therefore, this constitutes

a new finding for Hospitals' Service Quality Theory in literature. The study contributes in enriching the Hospital Service Quality Theory. Hence, future research can be grounded with these new Service Quality Dimensions to measure hospital Patients' Satisfaction.

Meanwhile, it is recognized that for general Brand Image there are numerous studies done such as Aaker's (1991) Brand Equity Model, Keller, (1993), Arnould et al (2005), Davis (2000) and many more but for Private Hospital's Brand Image of Dhaka, it is scarcely done. This led to suggestions by researchers such as Farhana, (2017), Zubayer, (2017) Andaleeb (2007, 2011) that more studies should investigate Brand Image and Patients' Satisfaction relationship in Dhaka's Private Hospitals.

Hence, this study attempts to pursue this specific field on Brand Image relationship towards Patients' Satisfaction in Dhaka's Private Hospitals. Consequently, the study identified Brand Image as an Independent Variable (IV) affecting Patients' Satisfaction. Therefore, this qualifies as a new finding of the research field on Patients' Satisfaction. Furthermore, this study drew attention to the significance of Brand Image to generate Patients' Satisfaction in Dhaka's Private Hospitals and impressed upon the marketing sectors, academicians, and hospital managers to focus and strengthen hospital's Brand Image to sustain Patients' Satisfaction.

Another outstanding finding of this study is that Brand Trust also has impact on Patients' Satisfaction in the Private Hospitals of Bangladesh.

As literature grounded that Brand Trust is very important for the general marketing fields, the Healthcare Industry too should recognize this fact. Previous research had undoubtedly connected Brand Trust to Patients' Satisfaction in Private Hospitals (Begum, 2017), Jamil et al. (2016), Sciulli & Missioen (2015, 2011) and Shabbir et al. 2013). So, this study's finding that Brand Trust is directly related to Patients' Satisfaction in Dhaka's Private Hospitals hold water and could, fill the research gap. Hence, this study should be acknowledged as having contributed significantly to the theoretical field for academic purposes.

In addition, the study also deliberately delved into whether the Price Factor is the Moderator Variable impacting Service Quality, Brand Image, and Brand Trust towards Patients' Satisfaction in the Private Hospitals of Dhaka. Interestingly, it appears that there is 'no significant impact' of the Price factor to play as the moderator role between Service Quality, Brand Image, Brand Trust, and Patients' Satisfaction. This finding confirms that Brand Image and Brand Trust are the major concerns of private hospitals' patients to get the highest level of satisfaction. Patients are willing to pay, and they have no qualms about cost if they perceived that the hospital Brand Image is praiseworthy, and they Trust the hospital. Therefore, in theoretical and academic sense the power of Brand Image and Brand Trust are irrefutable determinant factors that impact Patients' Satisfaction of Private Hospitals.

5.3.2 Managerial Implications

Globally the Generally, Patients' Satisfaction of Private Hospitals has attracted great attention in terms of Hospitals' marketing strategies. Managers or policy makers of hospitals are now aware that Patients' Satisfaction is very important to be taken care of for industrial survival and prosperity. The present study conveys the real factors behind Patients' Satisfaction i.e. Brand Image and Brand Trust.

Henceforth, policy makers of hospitals should take stock and execute appropriate Branding and Image strategies to improve their market share in the industry.

In terms of methodology of analyses, previous studies used various variables especially SERVQUAL model, RATER variables, Aker Brand Equity Model etc. to measure customer satisfaction. But for this study to get customer or 'Patients' Satisfaction direct/sensible variables such as Service Quality, Brand Image, Brand Trust, and Cost were analyzed to understand Patient's Satisfaction of Private Hospitals.

While previous studies found that many patients spent higher costs for better hospitals overseas, this research revealed that patients in Bangladesh recognized that there are many top-class Private Hospitals in Dhaka (Farhana, 2017). This means these hospitals have already established themselves with a certain Brand Image and Brand Trust. So,

further studies need to be undertaken to identify what are the real factors that made Bangladeshi patients resort to overseas hospitals for treatment. Perhaps, the Hospital's Management and Policy Makers failed to enhance the Brand Image and Brand Trust already in-built in the so-called Top-Class Hospitals of Dhaka.

In fact, this is a great message for managers and policy makers of hospitals to intensify their Brand Image and Brand Trust. On the other hand, even though there was 'no significant' impact of Price, this factor could be one of the hidden deterrent reasons why Bangladeshi patients would rather seek treatment overseas. May be, even though going overseas price them more relatively but the charges imposed by local Private hospitals could be too exorbitant. This warrants another investigation that future research could undertake.

However, as far as this study is concerned, the findings should be very beneficial to policy makers of Private Hospitals in Dhaka. Enrichment of the hospital's Image and Trust is crucial to retain existing patients as well as to keep on appealing to new patients. In the long run, who knows Bangladesh could turn itself into a sort-after Wellness destination for other patients of the world to seek treatment.

5.4 LIMITATIONS OF THE STUDY

In terms of the researcher's experience in data collection, the process was done very smoothly. Most of the hospital's directors or executives gave good cooperation and support. Even some hospital managers, doctors and nurses helped in convincing patients in the Wards to fill up the Questionnaires.

But the data collection of this research was confined only to Private Hospitals in Dhaka only. This is in fact the first limitation that this study encountered. It would be more meaningful to involve patients outside of Dhaka, to represent the views of the country's overall populace. Hence, the study's outcome would be somewhat different.

The second limitation of this study is that data collection was very time consuming and had delayed the study substantially. Some managerial procedures were very bureaucratic and took a lengthy time.

The third set back is that even though some hospital's executive director had given permission, the branch director stalled the data collection process supposedly due to ethical and privacy reasons of the patients.

The fourth limitation of this study is that even though most of the patients were very prompt in filling up the Questionnaire, some critical patients and their care givers were stressful, easily got annoyed and finally were not ready to entertain and not able to answer the Questionnaires.

The fifth limitation is that there were many old, senior patients who were not highly educated. So, they had to spend much time to understand and fill up the Questionnaires.

Finally, the last limitation is that outdoor out-patients were in a rush to go back. Because of that many of them left the Questionnaires incomplete and deny had no time to fill ing up the whole Questionnaires. Therefore, much data was unusable. That is why this study ended up with only 395 usable Questionnaires that could be analyzed.

Nevertheless, despite the limitations above, the researcher is glad that the data collection process had been done successfully from the top-listed Private Hospitals in Dhaka.

5.5. SUGGESTIONS FOR FUTURE RESEARCH

The study used data collected from patients of only the top-listed Private Hospitals of Dhaka, so it is strongly suggested that further studies involve all kinds of Private Hospitals' Quality and Trust. In addition, the data were collected only from Private Hospitals' patients and Caregivers but to get a wider picture, data model can be tested on government hospitals' patients and Caregivers as well.

Also, future studies should not investigate hospitals only but examine other institutions, universities, foundations, and private companies. In fact, many incompetencies have been highlighted through ‘word and mouth’ and viral through the social mass media regarding Brand and Trust issues of various important companies that are crucial for Bangladesh’s economy. So, future research needs to investigate to find the reason for various inadequacies of various sectors.

5.6. CONCLUDING REMARKS

In conclusion, this research offers the key features for ultimate success of hospitals in terms of their economic prowess and social obligations. Also, this study proved that contrary to general beliefs, Service Quality and Cost are not really the ‘real-time’ factors influencing Patients’ Satisfaction of Private Hospitals’ Health care services. Another salient contribution of this study is that it also reveals five new dimensions related to Service Quality. They are Advanced Technology and Skilled Specialist, Precaution & Hygienic environment, Service Quality of Building Guarantee, Facilities & Convenience, Hour for Treatment and Awaiting for Treatments. Most outstandingly, the study exposed that Brand Image and Brand Trust have ‘significant impacts’ on Patients’ Satisfaction. Therefore, Hospitals’ Executives/Managers need to reinforce their Hospitals’ Brand Image and Brand Trust to attract new patients and at the same time retain existing customers/patients. This study emphasized that hospitals must pay attention towards marketing Brand Image and Brand Trust to secure their competitive advantage or niche in the health care Industry.

Unexpectedly, the Moderator role of Price/Hospital Charge was found to have ‘no significant impacts’ on Service Quality, Brand Image, Brand Trust, and Patients’ Satisfaction of Private Hospitals. This means that people give high value to the hospital’s Image and Trust not so much on Price/Hospital Charge. So, hospital management should comprehend patients’ recognition and give more attention to Brand Image and Brand Trust instead of the Price determinants. Future researchers, marketers and Policy Makers should take heed of these two selling points in the health care Marketing Strategy of Private Hospitals i.e. Brand Image and Brand Trust.



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APPENDIX A: SURVEY COVER LETTER



Dear Valued Patients (Customer),
Assalamualaikum wrt.

I, Fahima Khanom, am a PhD candidate in the Department of Business Administration at the Kulliyah of Economics and Management Sciences, International Islamic University of Malaysia.

As a part of PhD dissertation, we are conducting a survey on the private hospitals in the city of Dhaka, Bangladesh to explore how to improve hospital service quality and the patient's satisfaction.

In contemporary time, the hospital industry as a profitable business is emerging rapidly day by day in which the company is concern about people's health and well-being trying to provide a better facility for patents' satisfaction. The purpose of this survey is to improve quality hospitals services, brand image and brand trust with patents' satisfaction.

We, therefore, sincerely request you to fill-up the enclosed questionnaires and highly appreciate your time and effort in this regard.

Thanking you in advance for your co-operation and assistance to provide your valuable time and feedback by filling up the provided forms.

Best regards
Ma'assalam

Fahima Khanom
Department of Business Administration
Kulliyah of Economics and Management Science
International Islamic University of Malaysia.

APPENDIX B: SURVEY QUESTIONNAIRE



ইন্টারন্যাশনাল ইসলামিক ইউনিভার্সিটি মালয়শিয়া

The Impact of Service Quality, Brand Image, and Brand Trust on Patient's Satisfaction of Private Hospitals in Dhaka City of Bangladesh: The Moderator Role is Price

ঢাকায় অবস্থিত প্রাইভেট হসপিটালসমূহের প্রদত্ত সেবার গুণগত মান, ভাবমূর্তি ও বিশ্বস্ততা উপর একটি জরিপ

SECTION A

প্রথম ভাগ-এ

Demographic Profile (Personal Information) / ব্যক্তিগত তথ্য

Please tick (✓) in the appropriate space for your response / উপযুক্ত স্থানে টীক (✓) চিহ্ন দিন

1. Gender/ লিঙ্গ Male/ পুরুষ
Female/ মহিলা

2. Age Group
/ বয়সসীমা Below (<) years / ৩০ এর নিচে
31 Years/ ৩১- ৪০ বছর
41-50 Years / ৪১ – ৫০ বছর
51 Years and above/ ৫১ এবং তা পর

3. Religion/ ধর্ম Islam/ইসলাম Other (Please specify/ অন্য হলে দয়া করে লিখুন) ...

4. Occupation/পেশা Student/ ছাত্র Government Service/সরকারি চাকুরীরত

Business/ ব্যবসা Private Service/বেসরকারি প্রতিষ্ঠানে

চাকুরীরত

Others (Please Specify) /অন্যান্য হলে উল্লেখ করুন.....

5. Level of Education/ শিক্ষাগত যোগ্যতা

Prim/প্রাইমারী

Mas/ মাস্টার্স

SSC এস সি

PhD এইচ ডি

HSC এইচ এস সি

Oth (Please specify) / অন্যান্য হলে লিখুন....

6. Level of Income (Monthly)/ মাসিক আয়

Le than 5000 Taka / ৫০০০ এর নিচে

5000 Taka – 10,000 Taka/ ৫০০০ – ১০০০০ টাকা

11, taka - 20,000 Taka/ ১১০০০ – ২০০০০ টাকা

2 00 Taka – 45,000 Taka/ ২০০০০ – ৪৫০০০ টাকা

45,000 Taka – 100,000 Taka / ৪৫০০০- ১ লক্ষ টাকা

10 0 Taka – Above / ১ লক্ষ – ১ লক্ষ বা এর উপর

7. If you have gone for treatment other hospital then in which Private hospital you have got maximum treatment, please specify? / এটা ছাড়া অন্য কোন হসপিটালে যান নাম লিখুন
.....

8. Please specify this hospital name/ দয়া করে এই হসপিটালটির নাম লিখুন

.....

9. What kind of treatment you do in this hospital/ কোন ধরনের চিকিৎসার জন্য এখানে আসেন ?

General/ সাধারন যেকোন রোগ

Acute / কঠিন রোগ

Chronic / দীর্ঘস্থায়ী রোগ

10. How long you visited in this Hospital/ কতদিন ধরে এই হসপিটালে আসা-যাওয়া করেন?

Below 1 Years/১ বছরের নিচে

Above 1-2 Years / ১-২ বছর

2-5 Years/ ২- ৫ বছর

5 Years and above/ ৫ বা এর বেশি

প্রথম অংশ এখানেই শেষ...

SECTION: B /দ্বিতীয় অংশ- বি

Patient Satisfaction of Private Hospitals

The purpose of this section is to assess patients' satisfaction of Private hospitals' performance what they have given on following items, according to the patients view. Please tick (✓) in the box how aggregable you are in the following statements on a scale of 1 (**Strongly Disagree**), 2 (**Disagree**), 3 (**Neutral**), 4 (**Agree**) and 5 (**strongly Agree**).

আপনার গ্রহনকৃত সেবার বিষয়ে আপনার অভিজ্ঞতা/ অনুভূতি। এই অংশে আমরা নিম্নলিখিত বিষয়ে এ হসপিটালের সেবা সম্পর্কে আপনার মতামত জানতে চাইবো। দয়াকরে আপনার মতামতকে প্রকাশ করে এমন নম্বরটি চিহ্নিত করুন।

প্রতিটি নাম্বার যে যে অর্থবহন করে তা নিম্নে দেয়া হল: কোনভাবেই একমত নই (১), একমত নই (২), নিরপেক্ষ (৩), একমত (৪), ও দৃঢ় ভাবে একমত (৫)।

11. Service Quality of the Hospital / হসপিটালের সেবার মান-সংক্রান্ত

No/ ক্রমিকনং	Survey Description মতামত	Strongly disagree (1)/ কোনভাবেই একমত নই (১)	Disagree (2) / একমত নই(২)	Neutral (3)/ নিরপেক্ষ (৩)	Agree (4) /একমত (8)	Strongly Agree (5)/ দৃঢ় ভাবে একমত(৫)
1	The hospital has quick service for the patients/ এ হসপিটাল দ্রুত সময়ের মধ্যে রোগীদের সেবা দান করে থাকে।	১	২	৩	৪	৫
2	The hospital has modern equipment for treatment of patients / এ হসপিটাল এ আধুনিক মানের চিকিতসার যন্ত্রপাতি রয়েছে/	১	২	৩	৪	৫
3	The Hospital employees are sympathetic and able to handle patients' problems / এ হসপিটালে কর্মরত ব্যক্তিবর্গ রোগীকে আন্তরিকভাবে সহযোগিতা করতে পারে এবং সর্বদা রোগীর সমস্যা সহজেই ধরতে পারে।	১	২	৩	৪	৫
4	The hospital handle emergency situations well / এ হসপিটাল রোগীর জরুরী মুহূর্তের যেকোন সমস্যা সমাধানে সামর্থ্য রাখে।	১	২	৩	৪	৫

5	The hospital has knowledgeable doctors / এ হসপিটালের ডাক্তারগন দক্ষ ও অভিজ্ঞতা সম্পন্ন।	১	২	৩	৪	৫
6	The hospital has knowledgeable nurses / এ হসপিটালের নার্সগন দক্ষ ও অভিজ্ঞতা সম্পন্ন।	১	২	৩	৪	৫
7	The hospital has knowledgeable and experienced staff members/ এ হসপিটালে প্রশাসনিক কর্মকর্তাগন দক্ষ ও অভিজ্ঞতা সমপন্ন।	১	২	৩	৪	৫
8	The hospital takes immediate precautions to prevent danger to patients / এ হসপিটালে রোগীকে বুকিমুক্ত রাখতে দ্রুত প্রাথমিক সতর্কতামূলক ব্যবস্থা নিয়ে থাকে।	১	২	৩	৪	৫
9	All the necessary medical specialities are available at the hospital/ এখানে সকল জরুরী সেবা প্রদানকারী চিকিৎসা বিশেষজ্ঞ রয়েছে।	১	২	৩	৪	৫
10	The hospital has neat and clean environment (rooms, wards, and washrooms etc). / এ হসপিটালের পরিবেশ পরিষ্কার ও পরিচ্ছন্ন (যেমন; রুম, ওয়ার্ড ও বাথরুম ইত্যাদি)	১	২	৩	৪	৫
11	When patients have problems, the hospital staff are sincere and	১	২	৩	৪	৫

	willing to help patients / এখানে রোগী কোন সমস্যায় পড়লে হসপিটাল তা সমাধান করতে আন্তরিক সহজোগীতা করে থাকে।					
12	The hospitals maintain error-free/ keep accurate records of documents / এ হসপিটালে সকল খাতাপত্র ও তথ্যাবলী নির্ভুল ভাবে রেকর্ড রাখে।	১	২	৩	৪	৫
13	The behaviour of employees in this hospital build confidence in patients/ এ হসপিটালে কর্মকর্তাদের ব্যবহারে রোগির মধ্যে আত্মবিশ্বাস তৈরী হয়।	১	২	৩	৪	৫
14	The hospital has convenient operating hours for all patients/ এ হসপিটালে রোগীদের অনুকূলে সুবিধামত সময়ে রোগী দেখার সুযোগ রয়েছে।	১	২	৩	৪	৫
15	The hospital gives patients individual attention/ এ হসপিটাল প্রত্যেকে রোগীকে আলাদাভাবে যথাযথ মূল্যায়ন করে থাকে।	১	২	৩	৪	৫
16	The hospital's medications are up to the standards of healthcare services/ এ হসপিটালের যেসকল	১	২	৩	৪	৫

	ঔষধপত্র দেয় তা বর্তমান বাজারে সর্বাধিক মানসম্মত।					
17	Employees of the hospital are well-dressed and neat and tidy/ এ হসপিটালের সকল কর্মরত ব্যক্তিগণ পরিচ্ছন্ন এবং মানসম্মত পোষাক পরিধান করে থাকে।	১	২	৩	৪	৫
18	Patient's waits for long time to see the doctors for this hospital/ এ হসপিটালে ডাক্তার দেখানোর জন্য লম্বা সময় অপেক্ষা করতে হয়	১	২	৩	৪	৫
19	Patients' waits for long time to get medicine from this hospital/এ হসপিটালে ঔষধপত্র নেয়ার জন্য লম্বা সময় অপেক্ষা করতে হয়।	১	২	৩	৪	৫
20	Patients wait for long time for laboratory test in this hospital/ এ হসপিটালে পরিক্ষা নিরিক্ষার জন্য ল্যাব এ লম্বা সময় অপেক্ষা করতে হয়।	১	২	৩	৪	৫

12. Brand Image of the Hospital / হসপিটালের ভাবমূর্তি-সংক্রান্ত

No/ ক্রমিক কনং	Survey Description মতামত	Strongly Disagree (1)/কোনভা	Disagree (2)/ একমত নই (২)	Neutral (3)/ নিরপেক্ষ (৩)	Agree (4)/ একমত (৪)	Strongly Agree (5) /দৃঢ় ভাবে একমত (৫)
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		বেই একমত নই (১)				
13.	The hospital's location is convenient and easily accessible. / এ হসপিটালটি সুবিধাজনক স্থানে অবস্থিত এবং সহজেই ঢুকার ব্যবস্থা রয়েছে।	১	২	৩	৪	৫
14.	The physical facilities of hospital are visually attractive এ হসপিটালের প্রয়োজনীয় আসবাবপত্র ও যন্ত্রপাতি ভালমানের ও দেখতে আকর্ষণীয়।	১	২	৩	৪	৫
15.	The hospital has advanced equipment and excellent facilities / এ হসপিটাল এ অত্যাধুনিক মানের চিকিতসার যন্ত্রপাতি রয়েছে।	১	২	৩	৪	৫
16.	The hospital has comfortable environment from other hospitals / এ হসপিটালে পরিবেশ অন্যান্য হসপিটালের চেয়ে আরামদায়ক।	১	২	৩	৪	৫
17.	The hospital has a good reputation / এ হসপিটালের ভাল সুনাম রয়েছে।	১	২	৩	৪	৫
18.	The hospital is involved with communities and social activities/ এ হসপিটাল বিভিন্ন	১	২	৩	৪	৫

	সামাজিক ও সমাজ সেবাকার্যক্রমের সাথে জড়িত।					
19.	The hospital has competent staff/ এ হসপিটালে দক্ষ কর্মকর্তা ও কর্মিরা রয়েছে।	১	২	৩	৪	৫
20.	The hospital doctors have good attitude/ এ হসপিটালের ডাক্তারদের ব্যবহার সন্তোষজনক	১	২	৩	৪	৫

21. Brand Trust of the Hospital / হসপিটালের বিশ্বস্ততা-সংক্রান্ত

No / ক্রমিকনং	Survey Description মতামত	Strongly Disagree (1)/কোনভাবেই একমত নই (১)	Disagree (2) /একমত নই (২)	Neutral (3) /নিরপেক্ষ (৩)	Agree (4) একমত	Strongly Agree (5)/দৃঢ় ভাবে একমত (৫)
1.	I rely on this hospital's treatment /আমি এ হসপিটালের চিকিৎসার উপর ভরসা করি।	১	২	৩	৪	৫
2.	I am dependable on this hospital/ আমি এ হসপিটালের উপর নির্ভরশীল।	১	২	৩	৪	৫
3.	I trust (faith) this hospital / আমি এ হসপিটালকে বিশ্বাস করি।	১	২	৩	৪	৫
4.	I believe this hospital does not take advantage of the patients. / এ	১	২	৩	৪	৫

	হসপিটাল রোগীদের থেকে কোন সুবিধা ভোগ করে না এটা দৃঢ়ভাবে বিশ্বাস করি					
5.	I believe this hospital's management is trustworthy. / এ হসপিটালের পরিচালকগন রোগীদের সকল প্রকার আমানত রক্ষাকারি।	১	২	৩	৪	৫
6.	I am happy to revisit in this hospital / আমি এ হসপিটালে বার বার আসতে আনন্দবোধ করি।	১	২	৩	৪	৫
7.	I feel safe to do treatment of this hospitals / আমি এখানে চিকিৎসা নিতে নিরাপদ বোধ করি	১	২	৩	৪	৫

8. Price of the Hospital/ হসপিটালের খরচ-সংক্রান্ত

No/ ক্রমিকনং	Survey Description মতামত	Strongly Disagree (1)/কোনভাবেই একমত নই (১)	Disagree (2) একমত নই (২)	Neutral (3) / নিরপেক্ষ (৩)	Agree (4) /একমত (৪)	Strongly Agree (5)/ দৃঢ় ভাবে একমত (৫)
1	The hospital price is not expensive / এ হসপিটালের খরচ খুব বেশি নয়।	১	২	৩	৪	৫
2	The price charge of laboratory test is affordable. /এ হসপিটালের	১	২	৩	৪	৫

	পরিক্ষানিরিক্ষার খরচ সামর্থেৰ ভেতৰ নিৰ্ধাৰিত।					
3	Doctor's fee is cheap compared to other hospitals. এখানে ডাক্তারের ভিজিট অন্যান্য হসপিটালের থেকে তুলনামূলক কম।	১	২	৩	৪	৫
4	The hospital gives good service quality at reasonable price/ এখানে ভাল মানের চিকিতসা দেয়া হয় খরচ অনুপাতে।	১	২	৩	৪	৫
5	The overall price of this hospital is affordable /সবদিক মিলিয়ে এ হসপিটালের খরচ সামর্থেৰ ভেতৰ নিৰ্ধাৰিত।	১	২	৩	৪	৫

9. Patient Satisfaction of the Hospital / রোগীদের সন্তোষ্টির পরিমাপ-সংক্রান্ত

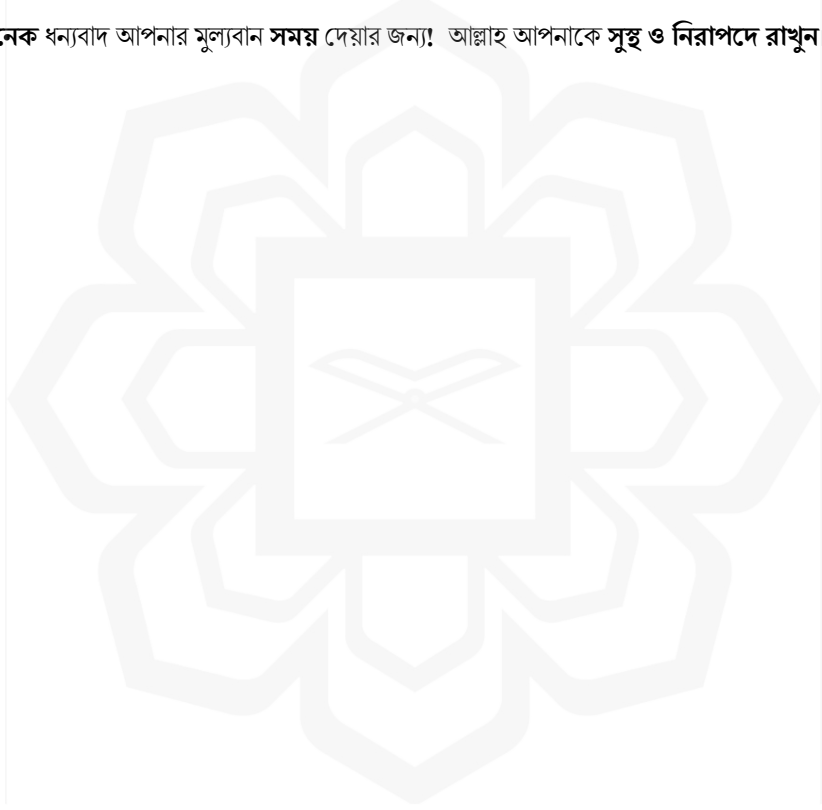
No / ক্রমিক কনং	Survey Description মতামত	Strongly Disagree (1)/কোন ভাবেই একমত নই (১)	Disagree (2) /একমত নই (২)	Neutral (3) / নিরপেক্ষ (৩)	Agree (4) একমত (৪)	Strongly Agree (5)/দৃঢ় ভাবে একমত
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1	The Hospital indoor service are satisfactory / এ হসপিটালের ভেতরের সেবা মানসম্মত।	১	২	৩	৪	৫
2	The hospital is willing to listen patients' problems /এ হসপিটালে রোগীদের সমস্যা সুন্দরভাবে মূল্যায়ন করা হয়	১	২	৩	৪	৫
3	Advance health techniques are well maintained / অত্যাধুনিক যন্ত্রপাতিগুলো সুন্দরভাবে যত্ন করে রাখা হয়।	১	২	৩	৪	৫
4	Doctors are available on their duty / নির্ধারিত রোগি দেখার সময়গুলোতে ডাক্তারগণকে ডিউটিরত অবস্থায় পাওয়া যায়।	১	২	৩	৪	৫
5	Nurses are available on their duty/ নার্সগণকেও ডিউটিরত সময়ে উপস্থিত পাওয়া যায়।	১	২	৩	৪	৫
6	Overall supportive facilities are excellent / সবদিক মিলিয়ে হসপিটালের সুযোগ সুবিধা খুব ভাল।	১	২	৩	৪	৫
7	The laboratory facilities are good (blood bank, lab, medicine etc.) / এ হসপিটালের পরিক্ষন যন্ত্রপাতিগুলো ভাল মানের (যেমন, রক্তদান, পরিক্ষন মেশিন, ঔষধপত্রাদি) ।	১	২	৩	৪	৫
8	Staffs (doctor, nurse and administrative) attitudes are good/ এখানে সকলের বযাভার খুব ভাল	১	২	৩	৪	৫


9	I come to this hospital for all types of treatments / আমি এখানে যেকোন ধরনের রোগের চিকিৎসা নিতে আসতে পারি	১	২	৩	৪	৫
10	Hospital charges are satisfactory / এ হসপিটালের খরচপাতি সন্তোষজনক	১	২	৩	৪	৫

Thank you for your Kind cooperation! May Allah bless you with good health!

অনেক ধন্যবাদ আপনার মূল্যবান সময় দেয়ার জন্য! আল্লাহ আপনাকে সুস্থ ও নিরাপদে রাখুন।



APPENDIX C: APPROVAL DOCUMENTS OF HOSPITALS


LEADING THE WAY | SUSTAINABILITY INSTITUTION OF THE YEAR
INNOVATION, INTEGRITY, INSPIRE | KUALA LUMPUR, MALAYSIA
KULLIYAH OF ECONOMICS AND MANAGEMENT SCIENCES

IUM/302/12/14/1/G1613858
31 January 2023

TO WHOM IT MAY CONCERN

Director of the Hospital

Dear Sir,

REQUEST FOR A PERMISSION TO COLLECT DATA
NAME OF STUDENT : KHANOM FAHIMA
MATRIC NO. : G1613858
NATIONALITY : BANGLADESH

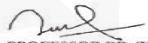
We wish to inform you that the above named student is pursuing her Doctor of Philosophy (Business Administration) at Kulliyah of Economics and Management Sciences (KENMS), International Islamic University Malaysia (IUM).


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Your kind assistance rendered to her is highly appreciated.


Thank you.


ASSOCIATE PROFESSOR DR. ZULKUFLY RAMLY
 Deputy Dean (Postgraduate and Responsible Research)
 Kulliyah of Economics and Management Sciences
 c.c Student's File

OK Through cc Dept.

Dr. Mohd. Tahir Jan
 Director Hospital
 UGMCH



Kulliyah of Economics and Management Sciences
 International Islamic University Malaysia
 53100 Kuala Lumpur, Malaysia
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INNOVATION, INTEGRITY, INSPIRE | KUALA LUMPUR, MALAYSIA
KULLIYAH OF ECONOMICS AND MANAGEMENT SCIENCES

IUM/302/12/14/1/G1613858
31 January 2023

TO WHOM IT MAY CONCERN

Director of the Hospital

Dear Sir,

REQUEST FOR A PERMISSION TO COLLECT DATA
NAME OF STUDENT : KHANOM FAHIMA
MATRIC NO. : G1613858
NATIONALITY : BANGLADESH


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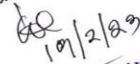
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 Deputy Dean (Postgraduate and Responsible Research)
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Approved

Prof. Dr. Sabbir Ahmed Khan
 MBBS, FCRS (Surgery), MS (Urology)
 Principal
 Utara Adhunik Medical Colleg.



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Deputy Dean (Postgraduate and Responsible Research)
Kulliyah of Economics and Management Sciences
c.c Student's File

Ariza Fatma Hossain is responsible to take data from patients (30 patients). Please cooperate her. nabilah 13.2.23

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International Islamic University Malaysia
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*Dr. Shiqdar Rahman
from Dept. Business Admin.*

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The End





FAHIMA KHANOM

PhD

2024

IIUM