MEASURING SERVICE QUALITY DIMENSIONS AND PATIENT SATISFACTION OF PUBLIC HEALTHCARE IN BRUNEI DARUSSALAM

BY

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A dissertation submitted in fulfilment of the requirement for the degree of Master of Science in Marketing

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ABSTRACT

The Ministry of Health Brunei Darussalam is devoted to constantly improve the health condition of the citizens in the country. One of the five strategic goals of the Ministry of Health is to pursue high quality in healthcare. Thus, in order to achieve this, patient satisfaction has become an essential health outcome. Hence, this research is conducted to examine the overall patient satisfaction of public healthcare service in Brunei Darussalam. Based on the SERVPERF model, five factors were proposed which are tangibles, responsiveness, reliability, empathy and assurance. However, the model has a limited evaluation of service quality from religious perspectives, thus another factor which is *Shariah* compliance was added. A five-point Likert scale was used to measure patient satisfaction of healthcare centres. Two hundred and seventy-seven questionnaires were analysed using multiple regression analysis via SPSS. The study discovers that tangibles, reliability, responsiveness and *Shariah* compliance had positive significant relationships with patient satisfaction. However, assurance and empathy were not statistically significant. The findings nonetheless have widened the understanding of patient satisfaction and its dimensions in regards to public healthcare in Brunei Darussalam.

خلاصة البحث

فيما يخص بتطوير وزارة الصحة في مملكة بروناي دار السلام، واستمرارية الحالة الصحية للمواطنين في البلاد. تُعد متابعة الجودة العالية في مجال الرعاية الصحية أحد الأهداف الإستراتيجية الخمسة لوزارة الصحة. من أجل تحقيق هذا الهدف، وإرضاء المرضى التي هي النتيجة الصحية الأساسية تمَّ إجراء هذا البحث، وهي: دراسة مدى رضى أو قبولية المرضى العام للخدمات الرعاية الصحية العامة في بروناي دار السلام. استناداً إلى النموذج (SERVPERF)، أُقترحت خمسة عوامل، وهي: الملموسات، والاستجابة، والموثوقية، والتعاطف، والاطمئنان. ومع ذلك، كان إنموذج التقييم محدوداً من جودة الخدمة، ومن وجهة النظر الديني، إضافة إلى ذلك هناك عامل آخر أضيف وهو ما يعرف بالامتثال أو المطابقة للشريعة الإسلامية. وقد تم استخدام مقياس ليكرت من خمس نقاط لقياس رضى المرضى عن المراكز الصحية. وقد تمَّ تحليل مائتين سبعة وسبعين استبياناً باستخدام تحليل الانحدار المتعدد عن طريق (SPSS). أوضحت الدراسة أن الملموسة، والموثوقية، والاستجابة والامتثال للشريعة الإسلامية لها علاقة إيجابيةكبيرة مع رضى المرضى. ومع ذلك، كان الضمان، والتعاطف لا يعتد به إحصائياً. نتائج الدراسة على الرغم من ذلك فقد اتسع فهم رضى المرضى وأبعاده في ما يخص بالرعاية الصحية العامة في بروناي دار السلام.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science in Marketing

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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.

Durriiyah binti Haji Moddin

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATION

MOH	Ministry of Health
RIPAS	Raja Isteri Pengiran Anak Saleha Hospital
SERVPERF	Service Performance
SERVQUAL	Service Quality
TANG	Tangibles
REL	Reliability
RESP	Responsiveness
ASSUR	Assurance
EMP	Empathy
COMP	*Shariah* compliance
p.b.u.h	Peace be upon him

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

Chapter one provides an overview of the study, which includes a brief explanation on the background of study, problem statement, research objectives, research questions, and the significance of the study. This chapter also highlights the definition of key terms and the organisation of chapters.

1.2 BACKGROUND OF THE STUDY

Brunei has a total population of 414,400 people, by which approximately 66 per cent of them are Muslims (BEDB, 2016). Based on the worldwide health service assessment in 2007, Brunei Darussalam was positioned 40th out of 190 countries, second in ASEAN region and fourth within the Western Pacific region for quality of health services (WHO, 2006).

The Ministry of Health Brunei Darussalam (MOH) is committed to constantly develop the health conditions of the citizens and acknowledges allocation of healthcare funding as part of the major public investment in human development. In the financial year 2015-2016, the Brunei government had allocated a budget of B$385 million which is approximately US$288 million for the Ministry of Health (Kamit, 2015). This is a 3.2 per cent increase from the previous year. This huge budget did not only account for the fact that Bruneians receive free healthcare with a token of one dollar per hospital/clinic visit, but is also used for the total operation costs of its healthcare centres, maintenance repairs, striving for international accreditation in healthcare and also budget for research and development.

Furthermore, MOH's 'National Healthcare plan 2000-2010' stated that the vision of the ministry is to become a health service organisation with a high reputation, tantamount to the best in the region and which will allow people within the country to achieve premium quality of life by being economically, socially and psychologically productive during their lifetime. In this regard, the ministry aims to fulfil some strategic objectives. These objectives are obtained from detailed investigations of strategic concerns and subjects. The five strategic goals are to encourage selected areas of excellence within health services, to obtain better allocation of funds for various health services and to explore into different supply of healthcare funding, to pursue high quality in healthcare, to concentrate on managing priority chronic illnesses and to promote primary healthcare.

In Brunei, there are four public hospital centres in each of its four districts, namely Raja Isteri Pengiran Anak Saleha Hospital in Brunei Muara, Suri Seri Begawan Hospital in Belait, Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah Hospital in Tutong, and Pengiran Isteri Hajjah Mariam Hospital in Temburong. However, the main hospital referred to in the country is Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital which is located in the capital city Bandar Seri Begawan. It was opened to the public on 28 August, 1984.

To be a highly reputable health service organisation, patient satisfaction had emerged as an increasingly important health outcome. Satisfaction is an emotional reaction due to the discrepancy between what is expected by the consumers and what they eventually receive. Satisfaction is also thought to be an attitudinal reaction to evaluations which patients made about their medical confrontations (Kane, MacIejewski, & Finch, 1997). In a theory of patient satisfaction, it had been presumed that patient satisfaction is an attitude that can be calculated by adding personal

evaluations of various aspects linked to the service experience (Linder-Pelz, 1982). Brennan (1995) defined patient satisfaction as the evaluation of the degree by which the care given had met the person's expectations and requirements.

In the past, various organisations such as private institutions viewed patients as passive receivers of services or goods (Murgatroyd & Morgan, 1993). Senior managements saw themselves at the top of the organisation pyramid due to their expertise, whilst consumers or patients were at the lowest. On the contrary, organisations who are oriented towards their consumers ranked patients at the highest position. In a patient oriented healthcare, every step in preparation, execution and appraisal of service delivery puts patients and their satisfaction as the top priority (Edmunds, Strachan, & Vriesendorp, 1987).

Patients are very knowledgeable in their own personal conditions and needs (Murgatroyd & Morgan, 1993). Patient preferences should direct each phases of service delivery such as opening hours for medical centres, consultation methods and deciding on contraception issues. Patient satisfaction is a holistic result of responding to patients' needs and wants, constant upgrades of healthcare services and constant development of doctors and patient relationship holistically.

Several concepts of healthcare assessments have been proposed and designed to measure patient satisfaction. Most researchers used the concept of service quality with SERVQUAL as its main construct. Originally developed by Parasuraman, Zeithaml, Berry and Parasuraman (1985), the scale consisted of ten variables used by customers to assess company services, which was later categorised into five major dimensions (Parasuraman, Zeithaml, & Berry, 1988): tangibles, responsiveness, reliability, empathy and assurance. Some researchers also used the instrument devised by Grönroos (1982), by which service quality is measured based on two attributes

which are the technical quality and functional quality. Technical quality measures the quality of service such as what the consumers buy and whether it performs its technical designs and requirements. Functional quality illustrates the method in which the service is being delivered and the nature of the relation between the corporations and their consumers.

In this research, performance-based instrument known as SERVPERF is used in measuring service quality. It is an instrument developed by Cronin and Taylor (1992) which had been adapted from the widely used SERVQUAL instrument (Parasuraman et al., 1988). The difference between these two instruments is that SERVPERF only measures how the customers perceive the service quality to be, contrary to SERVQUAL which uses the disconfirmation theory of the differential gap between perceptions and expectations. SERVPERF is chosen due to its higher validity and reliability compared to SERVQUAL and also to avoid respondents from being bored or confused in evaluating their perceptions and expectations.

1.3 PROBLEM STATEMENT

The assessment of patient satisfaction needs to be associated with the initiative in developing the services provided by the government healthcare centres. The Ministry of Health (MOH) is seen as the pioneer in enforcing quality improvement initiatives among government ministries in Brunei. Since the implementation of the 'National Health Care Plan' in June 2004, various efforts intended to enhance consumer satisfaction have been extensively implemented. This includes MOH's aim to offer premium healthcare by fulfilling the expectations and preferences of clients through care and professionalism for the benefit of the society.

With the prominent importance of patient satisfaction, thus it is essential to evaluate the patients' perceived service quality towards Brunei healthcare centres. Service quality is seen as an antecedent of patient satisfaction whereby patients can only assess their satisfaction after the service are given (Lai & Chen, 2011). This will provide feedback on how patients perceive the quality of service delivered. Furthermore, majority of the citizens of Brunei Darussalam are Muslims which accounts for 66 per cent of the total population. Hence, there should be an investigation regarding to which degree the healthcare centres in Brunei Darussalam are providing services which are in line with the *Shariah* law.

Since MOH has been involved in improving service delivery for a period of time, a higher satisfaction is expected which should positively reflect the efficiency of its efforts. Patient satisfaction is also positioned among the most essential performance measures for healthcare service delivery (Zabada, Singh, & Munchus, 2013). Therefore, the results of this study should also help the Brunei government in evaluating the performance of healthcare centres and therefore help the ministry in deciding future course of action.

1.4 OBJECTIVES

Based on the problem statement, the objectives of the study are:

1. To assess the overall patient satisfaction towards public healthcare in Brunei Darussalam.

2. To identify the service quality dimensions that influence patient satisfaction towards public healthcare in Brunei Darussalam.

3. To determine the most influential service quality dimension that influences patient satisfaction. course of action.

1.5 RESEARCH QUESTIONS

In relation to the objectives, the research questions which need to be answered in this study are:

1. What is the overall patient satisfaction towards public healthcare in Brunei Darussalam?

2. What are the service quality dimensions that influence patient satisfaction towards public healthcare in Brunei Darussalam?

3. Which is the most influential service quality dimension that influences patient satisfaction?

1.6 SIGNIFICANCE OF THE STUDY

Although there are numerous research regarding service quality of healthcare centres in general, there are not much research has been done to date which concentrates specifically on Brunei Darussalam.

From the academic viewpoint, this thesis will use SERVPERF as an instrument to measure patient satisfaction of public healthcare within a sultanate country, whereby citizens receive free healthcare. SERVPERF is criticised by some authors (Malhotra, Ulgado, Agarwal, & Baalbaki, 1994; Smith & Reynolds, 2002) for having limited evaluation of service quality from the cultural and religious perspectives. Thus, a new independent variable which is ʻ*Shariah* complianceʼ will be added in hope to fill this gap. The term ʻcomplianceʼ is derived from a study done by Othman and Owen (2001) whereby the CARTER model was used in measuring service quality of Islamic banks. A similar concept is applied, but with adjustments of factor items to suit the healthcare environment.

From the managerial perspective, the findings of this study would be able to give a clear assessment from patients in regards to the current service quality level of Brunei Darussalam's healthcare system. By categorizing service quality into several dimensions, it is hoped that the findings will highlight the areas which patients are most dissatisfied with. Thus, these findings shall be able to assist MOH in developing and improving the quality of its service from where it is found to be lacking. Additionally, by focusing on certain areas of improvement, budget expenditures can be allocated optimally.

By looking into the contributions stated above, it is essential for the study to be undertaken as it would contribute to the benefit of not only the government, but also the citizens. It will provide further understanding of patients' perception regarding healthcare services and the current level of service quality given by the healthcare centres.

1.7 DEFINITION OF TERMS

Based on the literatures from various authors, there are several key terms developed that would be used in this study, which are defined as follows:

Patient Satisfaction:

The emotional and attitudinal responses to evaluations that patients make about their medical confrontation whether the service given has met their expectations and preferences (Brennan, 1995).

Service Quality:

A cognitive judgment or evaluation relating to the superiority of the service based on its technical dimension which is 'what' service is given and functional dimension which is 'how' the service is given (Brady & Cronin, 2001; Gronroos, 2000).

SERVPERF:

Performance-based instrument in measuring service quality comprising of five dimensions which are tangibles, responsiveness, reliability, empathy and assurance. (Cronin & Taylor, 1992).

Tangibles:

Physical facilities, equipment and presentation of staff (Karassavidou, Glaveli, & Papadopoulos, 2009; Parasuraman, Berry, & Zeithaml, 1991; Ramez, 2012).

Reliability:

The capability of healthcare employees to deliver the promised services in a dependable and accurate manner (Aliman & Mohamad, 2013; Parasuraman et al., 1988).

Responsiveness:

Willingness of healthcare employees to give assistance to patients and to deliver punctual services (Parasuraman et al., 1985).

Assurance:

Ability of healthcare employees to instil trust and confidence to patients by being competent, courteous, credible and knowledgeable (Karassavidou et al., 2009; Parasuraman et al., 1985).

Empathy:

Ability of healthcare employees to understand patients' needs, being considerate, thoughtful and providing personal attention (Parasuraman et al., 1985).

Shariah compliance:

The ability to adhere to Islamic laws and principles and operate under the principles of Islamic ethics (Othman & Owen, 2001).

1.8 THESIS STRUCTURE

Further discussions of this study are organized in a structured form according to the chapters. There are a total of five chapters, summarised as below:

Chapter 1 (Introduction): This chapter explains the background of the study, problem statement, objective of terms and research questions.

Chapter 2 (Literature Review): This chapter provides an in-depth review of Brunei healthcare system and the concept of service quality in relation to patient satisfaction in the healthcare industry based on previous literatures. Hypothesis will also be given based on the literatures, and thus a conceptual framework is developed.

Chapter 3 (Research Methodology): This chapter describes the method of research such as the quantitative method used, sampling procedures and brief explanation of methods of data analysis which were undertaken.

Chapter 4 (Data Analysis and Findings): This chapter provides the explanation on statistical findings of data analysis.

Chapter 5 (Discussions, Implications, and Conclusions): This chapter discusses on the findings that answer the research questions and objectives. Limitations and implications of this study are further elaborated to provide ways for future research. The chapter ends with conclusion of the thesis.

1.9 CONCLUSION

This chapter explains the background of the study, underlying problems that motivate the study and also objectives and research questions that need to be highlighted. Further, the significance of this study and the key terms have been discussed. The chapter ends with an explanation of the thesis structure. The next chapter discusses previous literatures and research related to various aspects of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Continuing from the previous chapter, this chapter discusses each element of the study by exploring past literatures written in this area. The topic includes the healthcare system in Brunei Darussalam, patient satisfaction, service quality, SERVPERF model, related variables underlying the study and its application within the hospital environment.

2.2 COUNTRY PROFILE

Brunei Darussalam is an independent Islamic monarchy which is ruled based on the constitution written in 1959, which is adjusted recently in 2004. In the past millennium, it had existed as a Hindu Buddha nation in 414. It became a powerful Muslim country in the region during the 14th century, with the first Islamic king named Sultan Muhammad Shah.

In the country's constitution, the king, who is His Majesty the Sultan Yang Di Pertuan Negara Brunei Darussalam is the Head of the government. The current ruler is the 29th Sultan who is His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah Ibni Al-Marhum Sultan Haji Omar Ali Saifuddien Sa'adul Khairi Waddien. The Sultan administrates and rules through the consultation of a private council for royal custom matters and by a cabinet on other issues. With the Sultan's leadership, Brunei remains a prosperous and peaceful country in the region.