

ANTECEDENTS OF SERVICE OUTCOME AMONG MALAYSIAN PRIVATE  
MEDICAL CLINICS

NORZAIDAHWATI BINTI Z Aidin

A thesis submitted in fulfilment of the  
requirements for the award of the degree of  
Doctor of Philosophy (Management)

Faculty of Management  
Universiti Teknologi Malaysia

FEBRUARY 2017

To my loved ones

## **ACKNOWLEDGEMENT**

In preparing this thesis, I was in contact with many people, researchers, academicians, and practitioners. They have contributed towards my understanding and thoughts. In particular, I wish to express my sincere appreciation to my main thesis supervisor, Prof. Dr. Rohaizat Bin Baharun, for encouragement, guidance, critics and friendship. Without him continuous support and interest, this thesis would not have been the same as presented here. Thank you to Dr. Md Fauzi Bin Ahmad for his supports and personal tutorial.

## ABSTRACT

In health care services, achieving high performance is of utmost importance as it relates to human life. The main purpose of this research is to extend and consolidate knowledge about the outcome of customer's experience of consuming the attributes of services and the impact on business performance. Previous researchers investigated the health care services from social medical services perspective, in hospital and inpatient setting. Outpatient and private medical clinic setting was not the focus. Furthermore the researchers measured the performance of the services isolatedly and did not relate them to the business outcomes. Therefore this research aims to measure the service outcome from services marketing perspective, at the private medical clinic setting. This research fills the empirical gap through the measuring process of the service attributes of the private medical clinic by the customers. Private medical clinic is a business entity that provides services to customers who are the patients in an open market. Competition is part of the game and satisfying customers is an important agenda. The importance of this research relates to the nature of the private medical clinic itself that is a profit making entity, which reputation and customer loyalty are among the important measures. The whole framework was developed based on the marketing theory and marketing mix model that specifically tailored to services business. The conceptual framework was adapted into the private health care business. The service attributes were constrained to the extended Ps of the marketing mix strategies for services business, i.e. the physical evidence of the clinic (consultation and treatment) and people (physician). Patient satisfaction and enablement were treated as the outcome measures that mediate the relationship and the impact was measured on two performance traits that are relevant to the nature of the case, that are patient loyalty and patient appraisal on reputation. Two moderation variables: the categorical factor; patient category and the psychometric factor; patient health consciousness were tested on their effect towards the relationship. In the data collection process, questionnaire was used as the instrument. Data were collected at the private medical clinics on patients who went through the consultation before they consumed the medicine. 500 questionnaires were distributed, 358 were collected, and 201 were treated as completed questionnaire. The data were analyzed on the measurement model and the structural model namely the confirmatory factor analysis, composite reliability and discriminant reliability. Hypotheses bootstrapping test was done using SmartPLS 2. The key finding shows that doctor professionalism is the most critical factor that contributes to the performance. In addition satisfaction partially mediates the relationship but does not enablement. All paths tested were significant except enablement to performance, but health consciousness and patient category show insignificant effect on the relationship. Theoretically, this research proven that the extended 'P' that is People in services marketing is significant and the importance is obvious. In practical perspective, this research contributes to the development of 'people' and 'product' strategy in the marketing mix model in professional service business. It is recommended that in professional service business, the element of 'People' and 'Product' to be integrated since the 'product' in professional services business is reliant to the knowledge, skills and ability of the 'people' who deliver the service. Therefore all aspects of 'product' including brand, packaging and guarantee are to be developed in 'people' element itself.

## ABSTRAK

Dalam perkhidmatan penjagaan kesihatan, mencapai prestasi tinggi adalah paling penting kerana ianya berhubungkait dengan kehidupan manusia. Tujuan utama kajian ini adalah untuk melanjut dan menyatukan pengetahuan tentang hasil pengalaman pelanggan dalam penggunaan atribut perkhidmatan dan kesannya terhadap prestasi perniagaan. Pengkaji-pengkaji terdahulu mengkaji perkhidmatan penjagaan kesihatan dari perspektif perkhidmatan perubatan sosial di hospital dan pesakit dalam. Pesakit luar dan klinik perubatan swasta tidak difokus. Tambahan pula pengkaji-pengkaji mengukur prestasi perkhidmatan secara berasingan dan tidak menghubungkan kaitkannya dengan hasil perniagaan. Justeru, kajian ini bertujuan untuk mengukur hasil perkhidmatan dari perspektif perkhidmatan pemasaran dalam ruang lingkup klinik perubatan swasta. Kajian ini mengisi jurang empirikal dengan mengukur proses atribut perkhidmatan klinik perubatan swasta oleh pelanggan. Klinik perubatan swasta adalah sebuah entiti perniagaan yang menyediakan perkhidmatan berkaitan penjagaan kesihatan kepada pelanggan yang merupakan pesakit di dalam pasaran yang terbuka. Persaingan adalah sebahagian daripada percaturan dan memuaskan pelanggan adalah agenda yang penting. Kepentingan kajian ini berhubung kait dengan ciri semulajadi klinik perubatan swasta itu sendiri iaitu sebuah entiti yang membuat keuntungan di mana reputasi dan kesetiaan pelanggan adalah antara pengukur yang penting. Keseluruhan kerangka telah dibangunkan berasaskan kepada teori pemasaran dan model campuran pemasaran khusus untuk pemasaran perkhidmatan. Kerangka konseptual telah diadaptasikan ke dalam perniagaan penjagaan kesihatan swasta. Atribut perkhidmatan terhadap kepada tambahan P daripada strategi campuran pemasaran perkhidmatan iaitu bukti fizikal klinik (perundingan dan rawatan) dan manusia (dokter). Kepuasan pesakit dan kebolehpayaan dijadikan sebagai hasil pengukur menjadi pengantara hubungan dan kesannya diukur terhadap dua tret prestasi yang bersesuaian dengan ciri semulajadi kes iaitu kesetiaan pelanggan dan penilaian prestasi pesakit terhadap reputasi. Dua faktor penyederhana: iaitu faktor kategori; kategori pesakit dan faktor psikometrik; kesedaran kesihatan pesakit telah diuji ke atas kesan mereka terhadap perhubungan itu. Dalam proses pengumpulan data, soal selidik telah digunakan sebagai instrumen. Data dikumpul di klinik perubatan swasta ke atas pesakit yang telah menjalani konsultasi sebelum mereka mengambil ubat. Sebanyak 500 borang soal selidik diedarkan, 358 borang dikutip semula dan 201 diambil sebagai borang yang lengkap. Data dianalisis ke atas model pengukuran dan model struktur iaitu analisis faktor penentuan, kebolehppercayaan komposit dan kebolehppercayaan diskriminan. Ujian hipotesis 'bootstrapping' dilakukan dengan menggunakan SmartPLS 2. Dapatan utama kajian menunjukkan profesionalisma doktor adalah faktor paling kritikal yang menyumbang kepada prestasi. Tambahan pula kepuasan adalah pengantara separa kepada perhubungan tersebut tetapi tidak memberi kesan. Kesemua cara yang telah diuji adalah signifikan kecuali kesan terhadap prestasi, tetapi kesedaran kesihatan dan kategori pesakit menunjukkan kesan yang tidak signifikan terhadap hubungan tersebut. Secara teorinya, kajian ini membuktikan bahawa lanjutan 'p' iaitu manusia dalam perkhidmatan pemasaran adalah signifikan dan kepentingannya adalah jelas. Dari sudut praktis, kajian ini menyumbang kepada pembangunan 'manusia' dan strategi 'produk' dalam model campuran pemasaran bagi perniagaan perkhidmatan profesional. Dicaadangkan bahawa dalam perniagaan perkhidmatan profesional, elemen 'manusia' dan 'produk' diintegrasikan kerana 'produk' dalam perniagaan perkhidmatan profesional adalah bergantung kepada pengetahuan, kemahiran dan keupayaan 'manusia' yang menyampaikan perkhidmatan itu. Oleh itu semua aspek 'produk' termasuk jenama, pembungkusan dan jaminan perlu dibangunkan dalam elemen 'manusia' itu sendiri.

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	<b>DECLARATION</b>	ii
	<b>DEDICATION</b>	iii
	<b>ACKNOWLEDGEMENT</b>	iv
	<b>ABSTRACT</b>	v
	<b>ABSTRAK</b>	vi
	<b>TABLE OF CONTENTS</b>	vii
	<b>LIST OF TABLES</b>	xiv
	<b>LIST OF FIGURES</b>	xviii
	<b>LIST OF ABBREVIATIONS</b>	xix
	<b>LIST OF APPENDICES</b>	xx
<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 Research Background	1
	1.2 Methods of Measuring Performance	4
	1.2.1 Measuring Performance from the Customer's Perspectives	5
	1.2.2 Performance Measurement in Health Care Services Industry	6
	1.3 Problem Statement	7
	1.4 Research Questions	11
	1.5 Research Objectives	12
	1.6 Scope of Research	13

1.7	Exclusion	14
1.8	Research Contribution	16
1.10	Definition of Terms	16
1.11	Structure of the Thesis	19
<b>2</b>	<b>LITERATURE REVIEW</b>	<b>21</b>
2.1	Introduction	21
2.2	The Health Care Facilities in Malaysia	21
2.2.1	Consumer Medical Expenses in Malaysia	23
2.2.2	Private Health Care Services	24
2.2.3	The Private Medical Clinic Services	28
2.3	Performance Measurement	31
2.3.1	Performance Measurement: The Definition and Concept	33
2.3.2	Performance Measurement: Perspectives and Approaches	36
2.3.3	Performance Measurement Framework	37
2.3.4	Performance Measurement in Small Service-Based Business	41
2.3.5	Health Care Service Performance Measurement	43
2.3.6	Marketing Performance Measurement	44
2.3.7	Private Health Care Service Provider: Services Marketing Concept.	46
2.4	Service Quality	46
2.4.1	Service Quality Concepts	47
2.4.2	Health Care Service Attributes Quality	48
2.4.2.1	Consultation-Related Attributes	50
2.5	Patient Enablement	61
2.6	Customer Satisfaction	62
2.6.1	Customer Satisfaction as a Performance Measure	62
2.6.2	Customer Satisfaction in Health Care Service Setting	63
2.7	Customer Loyalty	65
2.7.1	Customer Loyalty as a Performance Measure	67

2.8	Reputation	68
2.8.1	Reputation as a Performance Measure	70
2.8.2	Reputation in Health Care Service Setting	70
2.9	Health Consciousness	71
2.10	The Marketing Theory	72
2.11	The Conceptual Framework	74
2.12	Summary	75
<b>3</b>	<b>DEVELOPMENT OF RESEARCH MODEL AND THE HYPOTHESES</b>	<b>76</b>
3.1	Introduction	76
3.2	The Research Model	76
3.3	The Development of Hypotheses	78
3.4	The Constructs	79
3.4.1	Independent Variable: The Attributes of the Services of the Private Medical Clinic (Consultation and Treatment Related)	80
3.4.2	The Mediation Variables: Patient Satisfaction and Patient Enablement Satisfaction	82
3.4.3	Dependent Variables: Patient Loyalty and Appraisal on Reputation Patient Loyalty	84
3.4.4	Past Research Findings on the Relationship Between Satisfaction and Performance Traits	86
3.5	The Main Constructs of the Research	86
3.6	Summary	87
<b>4</b>	<b>METHODOLOGY</b>	<b>88</b>
4.1	Introduction	88
4.2	Research Design	88
4.3	The Sample	89
4.4	Response Rate	92
4.5	Pilot Tests	95
4.5.1	Reliability Test	96
4.5.1.1	Validity Test	97



	4.5.2	Communalities	97
	4.5.3	Total Variance Explained and Component Matrix	101
4.6		Data Collection Procedures	106
	4.6.1	The Instrument	107
	4.6.2	The Questions	109
4.7		Validity and Reliability Analysis	112
	4.7.1	Validity	112
	4.7.2	Reliability	113
4.8		Data Analysis	113
	4.8.1	Primary Statistical Analyses Technique	113
	4.8.2	The 2-Steps Modeling Approach	115
		4.8.2.1 The Measurement Model – PMCSA PERF, SAT and ENB	115
		4.8.2.2 The Structural Model	117
4.9		Summary	118
<b>5</b>		<b>DATA ANALYSIS AND THE RESULT</b>	<b>119</b>
	5.1	Introduction	119
	5.2	Preliminary Data Analysis	119
		5.2.1 Data Editing and Coding	120
		5.2.2 Data Screening	121
		5.2.2.1 Treatment of Missing Data	121
	5.3	Nonresponse Bias	122
	5.4	Common Method Bias	123
	5.5	Response Bias	125
	5.6	Respondents' General Profile	126
	5.7	Measurement Model: First Order Confirmatory Factor Analysis (CFA)	130
		5.7.1 Exogenous Variable: Private Medical Clinic Service Attributes (PMCSA)	131
		5.7.1.1 Unidimensionality of PMC Service Attributes (PMCSA)	132

5.7.1.2	Construct Validity of PMCSA	136
5.7.1.3	Convergent Validity & Composite Reliability (CR) of PMCSA	139
5.7.1.4	Discriminant Validity of PMCSA	140
5.7.1.5	Final measurement Model for PMCSA	141
5.7.2	Endogenous Variable: Performance (PERF)	142
5.7.2.1	Unidimensionality of PERF	143
5.7.2.2	Convergent Validity and Composite Reliability (CR) of PERF	143
5.7.2.3	Discriminant Validity of PERF	144
5.7.2.4	Final Measurement Model for PERF	145
5.7.3	Mediator1: SATISFACTION (SAT)	146
5.3.1.1	Unidimensionality of SAT	146
5.7.3.2	Convergent Validity & Composite Reliability (CR) of SAT	146
5.7.3.3	Discriminant Validity of SAT	147
5.7.3.4	Final Measurement Model for SAT	147
5.7.4	Moderator 2: ENABLEMENT (ENB)	148
5.7.4.1	Unidimensionality of ENB	148
5.7.4.2	Convergent Validity & Composite Reliability (CR) of ENB	149
5.7.4.3	Discriminant Validity of ENB	149
5.7.4.4	Final Measurement Model for ENB	149
5.8	Analysis and Result of Structural Model	150
5.8.1.	Checking Structural Path Significance in Bootstrapping	152
5.8.2	Hypotheses Testing	155
5.8.3	Mediation Effects in the Structure Model	158
5.8.3.1	Indirect effect of the mediation Variables	159

	5.8.4	Moderating Effects in the Structure Model	162
	5.9	Summary	164
<b>6</b>		<b>DISCUSSION AND CONCLUSION</b>	<b>166</b>
	6.1	Introduction	166
	6.2	Highlight of the Contributions	167
	6.2.1	The Integral Utilization of the Health Care Outcome Measures Instruments	169
	6.2.2	The Significance of Patient Enablement (ENB) as the Mediation Variable in the Performance Measurement Relationship	171
	6.2.3	The Intervention of Psychometric Measure (Health Consciousness) as the Moderator In The Performance Measurement Relationship	171
	6.2.4	The Evidence of Reputation as the Performance Traits in Private Medical Clinic Services Setting	172
	6.3	The Finding of the Measurement Model	172
	6.3.1	Private Medical Clinic Service Attribute (PMCSA) Construct Measurement Model	173
	6.3.2	Performance (PERF) Construct Measurement Model	174
	6.3.3	Satisfaction (SAT) Construct Measurement	174
	6.3.4	Enablement (ENB) Construct Measurement	175
	6.4	The Finding of the Structural Model	175
	6.5	The Achievements of Research Objectives	177
	6.5.1	To identify the PMC's service attributes (physician) constructs that influence the clinic's performance.	178
	6.5.2	To investigate the relationships between the PMC's service attributes (physician) and performance traits.	183

6.5.3	To identify whether patient satisfaction acts as the mediator in the relationship between PMC's service attributes (physician) and performance traits.	186
6.5.4	To identify whether patient enablement acts as the mediator in the relationship between PMC's service attributes (physician) and the performance traits	188
6.5.5	To Assess Whether The Health Consciousness Moderate The Relationship Between Service Attributes (Physician) And Performance Traits.	190
6.5.6	To Assess Whether The Two Different Categories of Patients (Self-Pay Versus Paid-For) on Payment Types Moderate The Relationship Between Service Attributes (Physician) And Performance Traits.	191
6.6	Implications of the Study	192
6.6.1	Managerial Implications	193
6.6.1.1	The Position of Primary Care Service in the Whole Health Care Services	193
6.6.1.2	The Importance of Emitting an Excellent Primary Care Services	194
6.6.2	Theoretical Implications	196
6.6.3	Knowledge Dissemination	198
6.7	Limitation	198
6.8	Recommendations for Future Research	198
6.9	Conclusion	200

**REFERENCES****202**

Appendices A- B

252- 257

## LIST OF TABLES

<b>TABLE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
2.1	The Primary Health Care Facilities in Malaysia (as per 2008)	28
2.2	Summary of Previous Research on Health Care Service Quality Attributes	54
2.3	Health Care Attributes and Explanation	58
3.1	The hypotheses	78
3.2	The Items of the 4 Dimensions of Service Attributes	81
3.3	The Items of the Mediation Variables: Satisfaction and Enablement	83
3.4	The Items of Performance Measures: Loyalty and Reputation	85
4.1	Formula For Calculation a Sample for Proportions	91
4.2	Respondents Response Rate	93
4.3	Adjusted Sample Size	93
4.4	The Population and the Statistics of the Sample (Population and the Private Primary Medical Clinics) by Administrative Districts of Johor State	94
4.5	Category of the Private Primary Medical Clinic	95
4.6	The Reliability Test - Pilot Test	96
4.7	KMO and Bartlett's Test Results	97
4.8a	Communalities for IV	98
4.8b	Communalities for DV	99
4.8c	Communalities for MV	99
4.8d	Communalities for Moderator	100
4.9	Total Variance Explained - IV (PMCSA)	101
4.10	Component Matrix IV (PMCSA)	101

4.11	Total Variance Explained - DV (PERF)	102
4.12	Component Matrix DV – PERF	103
4.13	Total Variance Explained MV1 – (SAT)	103
4.14	Component Matrix MV1 – SAT	104
4.15	Total Variance Explained – MV2 – ENB	104
4.16	Component Matrix ENB	104
4.17	Total Variance Explained Moderator – HC	105
4.18	Component Matrix Moderator – HC	105
4.19	The Six Instruments Used in Different Countries for Getting Feedback From Patients	110
4.20	Health Consciousness Instrument	111
4.21	Three Measurements Analysis for the Measurement Models	116
5.1	Summary of the Questionnaire Rate of Return (Final Survey)	122
5.2	Common method Bias	124
5.3	Summary of Rate of Questionnaire Return	125
5.4	Patient Category - Self Pay vs. Paneled	127
5.5a	Respondent’s Profile by Location Category and Districts	128
5.5b	Respondent’s Length of Service Usage with the Clinic	128
5.5c	Respondent’s Profile By Patient Demographic Attributes	129
5.5d	Respondent’s Profile By Patient Education and Profession Attributes	130
5.6	Dimensions of PMCSA and the No of Items	132
5.7	Evaluating Construct Collinearity	135
5.8	Modification indices for PSMSA – Construct Validity	136
5.9a	The Items of the IV Constructs of the Final Model	138
5.9b	The Items of the Med V Constructs of the Final Model	138
5.9c	The Items of the DV Constructs of the Final Model	138

5.9d	The Items of the Moderating V Constructs of the Final Model	139
5.10	CFA Results for PMCSA Measurement Model	140
5.11	Discriminant Validity for PMCSA	141
5.12	Final measurement Model for PMC SA	142
5.13	Items for PERF After Modifications	143
5.14	Convergent Validity and Composite Reliability (CR) of PERF	144
5.15	CFA Results for PERF Measurement Model	144
5.16	Discriminant Validity of PERF	145
5.17	Final measurement Model for PERF	145
5.18	CFA Results for Moderator 1 – Satisfaction Measurement Model	147
5.19	Final measurement Model for SAT	148
5.20	CFA Results for Moderator 2 – Enablement Measurement Model	149
5.21	Final measurement Model for ENB	150
5.22	Variance Accounted for $R^2$ for Dependent Variables	151
5.23	T-Statistics of Path Coefficients (Inner Model)	153
5.24	T-Statistics of Outer Loadings	154
5.25	The Research Hypotheses	155
5.26	Hypotheses H1-H6 – The Structural Model	157
5.27	The Total Effect Analyses (For Mediation Effects)	159
5.28	Result Result of Hypotheses Testing H7 and H8	160
5.29	Result of Hypotheses Testing H9 and H10	163
5.30	Summary of the hypothesis testing results	165
6.1	The Independent Variable (PMC Service Attributes)	170
6.2	The Hypotheses Testing Results	176
6.3	Variance Accounted for $R^2$ for Dependent Variables	182
6.4	The Items and Mean Score that Explain the Predictor Attributes	182
6.5	The Hypotheses Testing Results PMCSA->PERF	184
6.6	The Items and Mean Score that Explain the Predictor Attributes	184

6.7	The Hypotheses Testing Results PMCSA->SAT->PERF	187
6.8	The Items and mean Score that Explain the Mediation (SAT) Attributes	188
6.9	The Hypotheses Testing Results PMCSA->ENB->PERF	189
6.10	The Items and Mean Score that Explain the Mediation (ENB) Attributes.	190
6.11	The Hypotheses Testing Results Health Consciousness as the Moderator Towards the PMCSA -> PERF	191
6.12	The Hypotheses Testing Results Patient Categories as the Moderator Towards the PMCSA -> PERF	192



## LIST OF FIGURES

<b>FIGURE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
3.1	The initial model of the research in SmartPLS	77
3.2	Hypothesized Path	79
5.1	The Procedure of Getting the Respondent in Data Collection Process at 76 Private Medical Clinics in Johore State	126
5.2	Confirmatory Factor Analysis on The Initial Model	133
5.3	Predictor Constructs	134
5.4	The Final Model	137
5.5	Structure Model Indicated the Variance Accounted for R <sup>2</sup> for Dependent Variables	152
5.6	The Structure Model Indicating the Path (Hypotheses)	156
5.7	Result from PLS Path Analyses	157
5.8	H7- The Indirect Effect of Mediator SAT	161
5.9	H8- The Indirect Effect of Mediator ENB	161
5.10	The Moldering Path (Hypotheses)	162
5.11	The structural Model with Moderating Effects of Patient health Consciousness and Patient Category.	164

**LIST OF ABBREVIATIONS**

PM	-	Performance Measurement
PMC	-	Private medical Clinic
PMCSA	-	Private medical Clinic Service Attributes
PERF	-	Performance
SAT	-	Satisfaction
ENB	-	Enablement
DIS	-	Doctor Interpersonal Skills
DPRS	-	Doctor-Patient Relationship
DPRO	-	Doctor professionalism
CPE	-	Clinic Physical Evidence
CFA	-	Confirmatory Factor Analysis
EFA	-	Exploratory Factor Analysis
MOH	-	Ministry of Health (Malaysia)
WHO	-	World Health Organization
L	-	Loyalty
R	-	Reputation
HC	-	Health Consciousness
CKAPS	-	Cawangan Kawalan Amalan Perubatan Swasta

**LIST OF APPENDICES**

<b>APPENDIX</b>	<b>TITLE</b>	<b>PAGE</b>
A	The Characteristics of The Private Medical Clinic	252
B	Questionnaire	254

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Research Background**

In health care services regardless of whether in public or private sector, achieving high performance is at utmost importance as it relates to human life. There should not be any trial and error exercises; neither can there be any mistakes to happen throughout the process, because any errors will cause fatal damage. The question is, how to ensure that there is no errors and mistakes took place?

Many previous researchers suggested monitoring practices. One of the monitoring methods is by measuring the performance of the health care practices. Measuring the performance of a health care practice is not a new agenda at all. Loeb (2004) claimed that health care quality measurement existed since 250 years ago. Until today it is still significant (Saver et al., 2015; Basu, et al, 2012; Berendes, et al, 2011). While the names and faces of the measures have changed, the intent of such measurement, i.e. obtaining data and information upholding medical outcomes, remains over the years, so do the challenges associated with the measurement of quality in health care.

According to Loeb (2004), the measurement of health care quality is a seemingly simple endeavor, beginning with a decision on what to measure, identifying the proper measures along with their respective data sources, and culminating in the analysis, aggregation, understanding, and dissemination of the

results. In the same tone, Saver et al. (2015) restated it by mentioning that the measures are often based on easily measured, intermediate endpoints such as risk-factor control or care processes, not on meaningful, patient-centered outcomes; their use interferes with individualized approaches to clinical complexity and may lead to gaming, over-testing, and overtreatment.

However, measuring the performance for a health care organization could never be simple exercises. Saver et al. (2015) proposed a set of core principles for the implementation of quality measures with greater validity and utility. On top, health care is a complex system (Best, et al., 2012; Blendon, Minah and Benson, 2001) and according to Wan Edura and Kamaruzaman (2009), service quality in health care is very complex as compared to other services because this sector has high involvement in risk. The complexities are due to high integration between departments and units; large number of parties involves and engages with many process and procedures, which are all linked. Another factor that causes complexity is the target object of the health care practice, i.e. human. Each and every one of human being has a different body system and anatomy. Therefore healthcare practitioners have to deal with individual patients exclusively.

The global standard treatment for many kinds of illness (for instance diabetes) (American Diabetes Association, 2014; pulmonary disease: Pauwels, 2014) is available, but the result may vary from one patient to another, those varieties will result in differences of the outcome. The difference may be due to case mix, setting differences, data collection method, chances and quality (Bridgewater, 2013; Boom, Lee and Tu, 2012; Westway et al., 2003; Mant, 2001), and it will result in inefficiencies and ineffectiveness. Due to these varieties, therefore the implementation of quality measures is challenging.

Monitoring the quality of care is a relevant approach to manage the efficiency and effectiveness of the health care system. Most importantly if it involves money making business. Therefore, measuring performance of health care service institution that is running on profit is necessary. Performance will ensure the sustainability of ones business in the market. The important aspect in measuring

performance is ‘managing and measuring it right’. This is the area that this research aims to investigate further.

Past researchers have investigated the performance measurement subject in the health care industry. According to researchers (Ndubisi, 2012; Singer, 2011; Westway et al., 2003; Campbell, Roland and Buetow, 2000; Donabedian, 1996; Rakich et al., 1985), performance in health care services is viewed from several perspectives, which earlier researchers have categorized them into three main aspects, i.e. the structure, process and outcome. Outcome measures (Deng, et al., 2013; Mant, 2001) are an indicator of health and valid performance indicators. On the other hand, process measures (Rebuge and Ferreira, 2012) are a direct measure of the quality of health care. It relates to outcome measure too, provided there is a link is demonstrated between a given process and outcome (Black, 2013; Doyle, Lennox and Bell, 2013; Westway, 2003). Furthermore, process measures are more sensitive to differences in quality of care (Donabedian, 1996). The third element is the structure measures. The measurement of structure quality includes the examine of overall health care organization, the types of the services offered, category and quantity of the staff that involve in the service delivery, equipments that consists of medical and non-medical as well as medicines. Conversely, process measures examine the process quality that includes the process of delivering the treatment services, which includes both, the technical and non-technical processes. Then again the outcome measures examine the outcome quality that consists of the changes of the health status (Zhong, et al., 2012; Boyce, 1996) of a patient due to the health care services been delivered (Manary, et al, 2012; Aiken et al., 2012), patients’ satisfaction (Lyu, et al, 2013; Michaud, et al., 2012; Donabedian 1996, 1988) and economic performance (Fenton, et al., 2012; Boyce, 1996). Patient satisfaction specifically had been used since 1980s as a way to include patients’ perceptions and preferences when evaluating the success of both medical treatments and systems of healthcare delivery (Hassali et al., 2014; Gattellari, et al., 2001; Wright, 2000; Turnbull and Luther, 1996; Brody, et al., 1989).

Since long time ago, health care institutions in the developed nation had recognized the importance of delivering patient satisfaction as a strategic variable and a crucial determinant of long-term viability and success (Polese and Capunzo,

2013; Chand, Pant and Joshi, 2012; Royal Pharmaceutical Society 1997; Makoul et al. 1995; Davies and Ware 1988). In fact, patient satisfaction had been considered as one of the desired outcomes of care throughout the 19<sup>th</sup> to 21<sup>st</sup> century (Bjertnaes et al., 2012; Nathorst-Böös, Munck and Eckerlund, 2001; Donabedian, 1988). It has been exploited as the determining factors for the effectiveness of services provided by health care provider (Rahmqvist and Bara, 2010; Carr-Hill, 1992; Fitzpatrick, 1991). There were some suggestions on the information about patient satisfaction to be as indispensable for assessments of quality purposes. It will be useful for the designing and managing the health care systems. Correspondingly, Rahmqvist and Bara (2010) and Sitzia and Wood (1997) confirmed that the measurement of patient satisfaction fulfills three distinct functions, identifying patients' experiences of health care, identifying problems in health care and evaluation of health care. According to the authors, the evaluation function is regarded as the most important dimensions. A more latest studies in the developing world have shown a clear link between patient satisfaction and a variety of explanatory factors, among which service quality has been prominent (Basu, et al, 2010; Rao et al. 2006; Zineldin 2006).

## **1.2 Methods of Measuring Performance**

There are several approaches been employed in the effort of measuring performance for business. The most and widely utilized is the traditional financial measure. Financial measures tell the story of past events, which adequate for industrial age companies (Perrini, et al., 2011; Proctor and Campbell, 1999). However, today's age firms require a more advanced strategy, where investment in long-term capabilities and customer relationships are critical for success (Sachdeva, et al., 2014; Kaplan and Norton, 1996). Additionally, there was a notable and welcome shift away from narrow focus on efficiency of cost towards a broader definition of performance (Proctor and Campbell, 1999). In line with that, another management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business (Homburg, Arts and Wieseke, 2012; Roberts and Grover, 2012; Smith, 2000). These were the leading indicators, in which if customers are not satisfied, they will eventually find other

suppliers that will meet their needs. Poor performance from this perspective is thus a leading indicator of future decline, even though the current financial picture may look good (Smith, 2000).

A more balanced performance measurement method is available (Grigoroudis, Orfanoudaki, and Zopounidis, 2012) and is called the Balanced Scorecard (BSC), which was originated by Drs. Robert Kaplan (Harvard Business School) and David Norton in the early 1990s. It is a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give a more 'balanced' view of organization performance. Nevertheless, BSC method retains the traditional financial measures and at the same time focuses on the future value of the business through investment in customers, suppliers, employees, processes, technology and innovation. The method model suggested four perspectives of performance, which are financial, customer, internal, and innovation and learning.

As for this research, the performance that is to be measured is the customer perspective. According to Kaplan and Norton (1996), the generic measures for customer's perspectives are: satisfaction, retention, market and account share. This research looks into retention and intent to extend the measures by including the customer's appraisal on the reputation of the business organization measure. Nonetheless, satisfaction is measured but is treated as the outcome measure of the service attributes. Thus, this research is measuring the performance from the customers' perspective in two measures, i.e. retention and loyalty, and appraisal on the reputation.

### **1.2.1 Measuring Performance from the Customer's Perspectives**

Customer's perspective simply means 'how customer see the firm', which in this research's context, is how patients (customers and consumers) see the private medical clinic as the health care service provider. The word 'see' refers to: the degree of their satisfaction and the processes used to deliver the service. As



suggested by Kaplan (2005), among the areas of the focus are: customer service, new product, new market, customer retention, customer satisfaction and what does the firm needs to do to remain the customer's valued supplier. The potential goal for the customer perspective includes: customer satisfaction, new customer acquisition, customer retention, customer loyalty, fast response, responsiveness, efficiency, reliability and image. In developing metrics for satisfaction, customers should be analyzed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups (Kaplan, 2005). The general metrics used to measure success in relation to the customer perspective are: customer satisfaction index, repeat purchases, market share, on time deliveries, number of complaints and average time to process orders, return orders, response time, reliability, new customer acquisitions and perceived value for money (Frösén et al., 2008; Payne and Frow, 2005).

### **1.2.2 Performance Measurement in Health Care Services Industry**

Past researches on health care performance were mostly focused on the hospital setting (Raduan et al., 2004; Hasin, 2001; Walter and Jones, 2001; Ovretveit, 2000; Carman, 2000; Camilleri and O'Callaghan, 1998; Gross and Nirel, 1998; Andaleeb, 1998; Tomes and Ng, 1995; William et al., 1995; Cunningham, 1991; Reidenbach and Sandifer-Smallwood, 1990; Parasuraman, et al., 1988). Primary health care setting has been investigated as well, but limited to public sector's primary care or general practitioners' services.

In term of sector, many researches been done for private health care, nevertheless the focus was more on the hospital (Andaleeb et al., 2007). Private medical clinic has been ignored for a while. Even though there were several researches been carried out on private medical clinic, the focus of the research was on the demographic, establishment and structure of the practices (Al-Junid and Zwi, 1996; Al-Junid, 1995). Few researchers (Pitaloka and Rizal, 2006; Haliza, et al., 2003; Raja Jamaluddin, 1998;) investigated the quality issues of the private primary

medical practices, however the focuses were shallow, just concentrating on the satisfaction issue but do not exactly examining the performance of the practices.

### **1.3 Problem Statement**

The idea of this research is led by the following findings of the past researches. First, the literatures indicated that service-based business organizations and academic researchers see service quality as a key driver of profit (Buyukozkan, Cifci and Guleryuz, 2011; Mukherjee et al., 2003). Accordingly, service quality could result in customer satisfaction (Izogo and Ogba, 2014; Ryu, Lee and Kim, 2010; Caruana, 2002; MacAlexander et al., 1994), and higher customer satisfaction leads to better financial returns (Zhang and Pan, 2009; Hallowell 1996; Anderson et al., 1994; Nelson et al., 1992). Furthermore, performance measurement and customer satisfaction have been endorsed as an established concept (Willians and Naumann (2011); Page and Prescott, 2005).

Second, in the health care service-based businesses world widely, health care services users (or consumers or patients) are increasingly being highlighted as the key to driving improvements to private provision of care. Their role has, however, been little evaluated in developing countries (Smith, Brugha and Zwi, 2001).

Third, in term of private health care practices, delivering high quality service is important, as they are in business arena and serving the customers. Several past researchers claimed that the quality of care offered by many private providers was poor (Kamat, 2001; Swan and Zwi, 1997; Aljunid, 1995).

Fourth, there has been some research identifying the dimensions on which healthcare quality and inpatient satisfaction should be measured (Andaleeb, 2007; Radhuan et al., 2004; Taylor et al., 2001) and the confirmation of constructs and indicators that constitute an overall care quality and satisfaction.

Having those four messages in mind, this research attempts to assess the patients of private medical clinics (outpatient services) on their satisfaction, loyalty and discernment on the clinic's reputation towards the service attributes. These three aspects are treated as the performance traits and will be measured based on the private medical clinic's service attributes quality. The assessment exercise takes patients as the measurer, and what measured are patients' satisfaction, their loyalty and their appraisal on the reputation of the clinic based on their experience with the services. These three traits are regarded as the performance.

The investigation on secondary data found there is no reports been published on the performance of the private primary medical practices in Malaysia. The only performance report that available is the financial report and this document is treated as private and confidential and is kept as an internal document. It seems that the assessment of the performance is not an agenda in the practices. On that account, this research attempts to suggest the establishment of the assessment culture in the practices, so that the national health mission is achieved.

In the performance measurement exercises, past investigations found that smaller firms tend to rely primarily on financial indicators. Thus, managers should be aware of the risk of being discriminatory. Therefore they have to capitalize their close-market contact by better utilize the customer feedback (Coviello, Brodie and Munro, 2000). Responding to those findings, this research is utilizing the patient's feedback as the source of information for assessment. It is relevant because private medical clinics are mostly operate in small scale as compared to private hospital. However, the feedback from the patients is not voluntarily forwarded, but it is investigated and stimulated through a set of questions that ask their immediate true feelings and experiences on the medical services they have just consumed.

Theoretically and practice wise, the performance measurement is an ever-practical evaluation concept that applicable in business regardless of sizes. The outcome of the performance measurement is information that is useful for quality improvement, quality corrective actions as well as for future quality goal setting. The importance of quality to business outcomes is well established in the academic literature. It has been demonstrated that higher quality results in higher stock prices

(Aaker and Jacobson, 1994), higher corporate performance (Easton and Jarrell, 1998), and higher market value of the firm (Hendricks and Singhal, 1997). On that account, the performance measurement is a relevant subject and aligns with this research's aim. The rationale behind the private medical clinic services being chosen as the case of the research is that, the service is considered as one of the prevalence but yet is a high credence services in this country and is available everywhere and for everyone. This is due to the fact that the public healthcare system that available in this country is inadequate to cater the populations' need. For instance, in 2007, there were only 806 public health care clinics serving the whole country, and the ratio between doctors and patients is about 1:1145. This scenario shows supply insufficiencies far behind the standard. According to international standards, the 'Doctor to patient' ratio should be around 1: 250 (Maitreyi, 2005). Nevertheless, the shortage of services boosts the opportunity for private medical practices.

As mentioned in earlier section, private medical clinic's services are highly utilized in Malaysia. Due to the high usage rate, Raja Jamaluddin (1998) makes it imperative for the authority bodies to monitor the operation of the private medical clinics to ensure the service quality. The reason is to ensure the outcome is as what is expected and contributes to the country's health mission. Most importantly, the consumers get the services effectively and efficiently.

Second, this service is unlike other services business, which the authority bodies closely control the business and all the operations have to comply with the rules and regulations. Therefore they could not exercise the marketing strategy freely to gain the competitive advantage even though the market is highly promising. Having the performance measured will contribute to the improvement effort; in which is it believed that the service provider will pay effort to make their service agreeable to the consumers' (in this research context is patient) requirement. Delivering the service according to what the patients regard as quality will result as satisfactory service and could compensate the power of formal promotional activities, which in this case it means the service, is self-promoted.

High demand would encourage high supply, and this scenario is evidently apparent in the private health care sector, which makes the competition getting more

on edge. Strategically, the service provider could adopt the retention and loyalty concept to sustain and enhance the business and the market. Thus, it is important to identify what service attributes of the private medical clinic's business could retain the patients and make them loyal to a service provider. According to an earlier research's finding; satisfied patients is more likely to utilize health service and comply with the medical treatment, and continue with the health provider (Baker, 1990).

Further issue is about retaining the loyalty behavior. As mentioned in earlier section, the market of private medical clinic is promising and this encourages more and more new medical clinic entering the market. This is proven by the statistic at CKAPS (2009) that indicated the multiplication of the numbers of new applications annually. The impact goes to both, threat to the existing private medical clinics and opportunity to the customers (patients). Private medical clinic will have more competition, but patients have more choices of medical services; good for patients but not for private medical clinics. Then, reputation will have a great influence and play a significant role in retaining the loyal behaviors. It is believed that the private medical clinics that are positioned as a high reputation service provider will be able to retain the loyal behavior among the patients.

There were numbers of research been carried out in Malaysia with regard to patient satisfaction, however mostly were focusing on the public health care services e.g. Patient Satisfaction as an Indicator of Service Quality in Malaysian Public Hospitals (Noor Hazilah and Phang, 2009); Patients' Satisfaction in Antenatal Clinic, Hospital Universiti Kebangsaan Malaysia (Pitaloka and Rizal, 2006); The Utilization of Outpatient Health Services Among Adult and Factors Affecting it in Bachok District, Kelantan (February 1996- Mac 1996) (Abu Bakar and Mohd Hatta, 1996); Study on the outpatient satisfaction at the Maternal and Child Health Clinic, Muar Johor, 1995; Outpatient Clinic, Hospital Dungun, 1994; and Maternal and Child Health Clinic in Bachok, Kelantan, 1993 (the above mentioned researches were not published, the reports are only available for internal usages. However they were mentioned in Haliza et al. 2005 as the evidence of quality assurance efforts of the public primary health care services. The findings were not disclosed).

The findings from some of the previous researches on the public health care service attributes are presented in this section. The satisfaction assessment showed that respondents were satisfied with: interpersonal aspects from the staff, technical quality of the doctors, efficacy, availability, and the financial aspect. Meanwhile, the respondents were not satisfied with several aspects i.e. accessibility, convenience and continuity of care in Pitaloka and Rizal (2006); and doctor's explanation and waiting time in Haliza et al. (2003). Prior to Pitaloka and Haliza's findings, a research on the services of the private primary medical clinic in Lembah Kelang showed high overall satisfaction rate, but low on doctor's explanation on health and long waiting time as well as the follow-up treatment (Raja Jamaluddin et al., 1998).

#### **1.4 Research Questions**

This research aims to investigate the following seven issues.

- RQ1: What is the critical factor of service attributes (physician) of PMC that influence patient's evaluation on the performance of the clinic services?
- RQ2: What are the relationships like between the PMC's service attributes (physician) and performance traits?
- RQ3: Does patient satisfaction acts as the mediator in the relationship between PMC's service attributes and performance traits?
- RQ4: Does patient enablement acts as the mediator in the relationship between PMC's service attributes and the performance traits?
- RQ5: Does patient categories on payment types moderate the relationship between service attributes and performance traits?
- RQ6: Does patient health consciousness moderate the relationship between service attributes and performance traits?

## 1.5 Research Objectives

The main objective for this research is to identify and evaluate instruments designed to assess patients' experiences with practicing physicians, and to provide performance feedback at the individual level. Given the fact that there has been lack of research on an extensive performance measurement of private primary medical clinic's services, this research therefore aims to accomplish the following seven objectives.

- i. To identify the PMC's service attributes (physician) constructs that influence patient's evaluation on clinic's performance.
- ii. To investigate the relationships between the PMC's service attributes (physician) and performance traits.
- iii. To identify whether patient satisfaction acts as the mediator in the relationship between PMC's service attributes (physician) and performance traits.
- iv. To identify whether patient enablement acts as the mediator in the relationship between PMC's service attributes (physician) and the performance traits.
- v. To identify whether the enablement mediate the relationship between PMC's service attributes (physician) and patient satisfaction.
- vi. To assess whether patient's health consciousness moderate the relationship between service attributes (physician) and performance traits.
- vii. To assess the two different group of patients (self-pay versus paid-for) on payment types moderate the relationship between service attributes (physician) and performance traits.

## 1.6 Scope of the Research

As to ensure the manageability and effectiveness of the research, the focuses are restricted to the following conditions.

The scope of the problem explored is restricted to the effect of the service quality attributes. The attributes are limited to doctor's related factors and the measurements are restricted to patients' satisfaction, loyalty and appraisal on reputation of the clinic.

Secondly, the service outcome constructs are restricted to two traits, i.e. loyalty of the patients and appraisal on reputation of the clinic. Third, the satisfaction, enablement and service outcome traits assessed in this research are based on visit specific satisfaction, not on episodes of care.

Fourth, measuring the service outcome of the private primary medical clinics from patients' (who consumed the service) perspective. Fifth, the object of the research is the private medical clinic that provides primary care services in Johor state (in eight districts) and officially operates the service business (for profit) and registered with CKAPS, Ministry of Health (Malaysia). Sixth, the population (subject of the research) is the patient who consumed the medical care services at the private medical clinic, which in this research play the role as the research unit analysis. The selection of the patients to be the respondents will be based on the following criteria: Must be aged 18 and above and living in Johor State (as the sampling design is specifically make a reference on Johor's population); Must be the patient of a specific private medical clinic; Must have consumed the medical care service as this research investigates the visit-specific experience; Must be patients who visited the specific clinic to get treatment from the clinic only. Patients whose part of the diagnoses and treatment are taken or sent to the third party (external laboratory for instance) will not be included in this research. Nevertheless, patients that fall under the following categories will be excluded from being the respondent of this research: Patients that have high visit frequency due to preventive treatment; pregnancy and other illness unrelated reason; Patients who have low frequency visit rate due to



limitation of medical expenses imposed by the employer or the third party payer; Acute and emergency cases.

Finally, the generalisability of the findings may be limited because the population observed represents just one clinical condition cared for.

## **1.7 Significance of the Research**

This research essentially examines the relationship between the Primate Medical Clinic's service attributes (specifically on the consultation aspects) and the performance traits (loyalty and appraisal on reputation) with patient satisfaction and enablement act as the mediators. The outcome of the research contributes to the theoretical and managerial knowledge of Service Quality in Primary Healthcare Service Provider Services industry in Malaysia particularly.

Past researchers were mostly looked into satisfaction as the service outcome (Noble, Conditt, Cook, Mathias, 2006) and mostly were done on inpatient setting (Boulding, Glickman, Manary and Schulman (2011) and on the hospital services (Leong, 2014, Aiken et al., 2012, Andaleeb, 2001) and were focusing on specific clinical services such (Robetsson et al., 2000). This research looks into two aspects of service outcomes, i.e. loyalty and appraisal on reputation, on private medical clinic (business entity), and looking at outcome of the doctor consultancy setting by outpatients. Satisfaction is examined as the mediator as well as patient enablement, which previously were treated as independent variable (Price, Mercer and MacPherson (2006).

The purpose of the study is to develop the PMC service performance model by connecting four theories; performance measurement theory, service quality theory marketing theory and customer satisfaction theory in examining the impact of patient satisfaction and enablement on the service attributes towards the performance.

The private medical service performance model was developed in a comprehensive extent by involving two mediators and two moderators that are relevant to Malaysian Private Medical Clinic Services. The model assessed the relationship between service attributes and two performance traits (loyalty and appraisal on reputation) by investigating the mediation effects of two mediators i.e. the patient satisfaction and patient enablement constructs. Two moderators were also included, i.e. the patient's level of health consciousness and patient categories according to the type of medical bill payments to suit the Malaysian Private Medical Clinics Services.

The structure of the health care services varies between countries. In Malaysia, services are mainly provided by the public health care providers, such as public hospitals, health care clinics, as well as alternative health care services. Nonetheless, there are vast rooms for private practices, as the current supplies could not fulfill the enormous demands. Hence, the private sector grew rapidly. When the market expands, monitoring is necessary to ensure the business is operated in an appropriate manner. Past research has highlighted the lack of regulatory infrastructure available in low-and middle-income countries to monitor the performance of private healthcare providers (Bloom, et al., 2014; Palmer, 2000). Further, Basu et.al (2012) had reviewed the findings of the past researches on the performance of private and public sector healthcare delivery in low-and middle-income countries. Through a systematic review, they found that there is no evidence that support the claim that the private sector is usually more efficient, accountable or medically effective. These three dimensions are the outcome measure of the performance. Based on that scenario, this research is significant as Malaysia is in the group of developing countries and the development of the private medical services are encouraging. Thus, measuring the performance of the private medical clinic services is relevant and significant, as the findings of the research will add the total knowledge of quality services particularly in Malaysia and other developing countries. Its main contribution is pertinent to the industry players, regulatory bodies (CKAPS, Kementerian Kesihatan Malaysia, Association of the Medical Practitioners to name a few of the main bodies).

## **1.8 Research Contribution**

This research aims to contribute to academicians, regulatory bodies and practitioners to understand the extent to which service quality relates to patient satisfaction, enablement, loyalty and appraisal on reputation in health care service environment. No doubt, there is abundance of references on the said aspect available. Nonetheless, this research contribution is rather specific to the regulated business environment where business strategy could not be exercised at freedom. Moreover, the health care service falls under emergency product category, therefore the decision to 'buy' this product is rather instantaneous, yet customer relationship strategies are still relevant. Therefore this research is hope able to contribute to service marketing literature on the relevance of customer strategies in a regulated service business environment; as well as the emergency product category.

The assessment of the most important service attributes of small-scale private health care practices setting can provide important cues, which may be used to review characteristics of the medical clinic as experienced by the patients. These cues can be used to improve patients (customers) satisfaction and loyalty that lead to further strengthen the image and reputation.

The findings are useful as an input to the assist the health care industry and the regulatory bodies to establish the checklist of service attribute quality dimensions and the minimum acceptable level of satisfaction, loyalty and reputation score. The checklist and the score should be treated as a quality-monitoring checklist. It therefore could serve as the guidelines for the practices to perform a continuous assessment.

## **1.10 Definition of Terms**

The subject in this research is the private medical clinics, and the research items are the patients of the private medical clinics who visit the clinic to get

treatment. This research utilizes the scope of the definition by Primary Care Doctor's organization Malaysia (PCDOM) for both of the above-mentioned subject and items.

#### Service outcome of the Private Medical Clinic

Service outcome from the customer's (patient) perspective; in this research is defined as the satisfaction of patients (Anhang, et al., 2014) on the services they have consumed, patients' intention to stay loyal (Cowing et al., 2009) to the same medical care service provider and intention to tell others, and judge of the reputation of the private medical clinic's services positively.

#### Service Outcomes

Patient Satisfaction (Zgierska Rabago and Miller, 2014); Patient Loyalty (Sumaedi, et al., 2014); and Patient Appraisal on the Reputation of the Clinic (Voon, et al., 2014; Nelson Helfrich and Sun, 2014).

#### Satisfaction

Satisfaction is defined in many different ways. This research refers to patients affective and judgment on the medical care services (Jubelt et al., 2014; Anhang, et al., 2014). Patients response on the experience of the service consumption are varies, the satisfaction that this research measures is on the time-specific point of determination and limited duration, directed to focal aspects of the medical care service they have consumed.

#### Loyalty

Loyalty in this research refers to patient's decision to stick to the same service provider (Sumaedi, et al., (2014) for any of the medical care they need. Loyalty in this research also refers to patient's willingness to recommend and give reference to others about the service provider.

#### Reputation

In this reputation refers to the impression that patient has on service provider (organization and physician)'s ability. Ability may consists of skills, honest, professionalism, level of expertise, knowledge and humanness Voon, et al., 2014; Nelson Helfrich and Sun, 2014).

### Private Medical Clinic's Service Attributes

Consist of doctor-patient relationship (Jani, Blane and mercer, 2012), doctor's interpersonal skills (that include communication) Greco, Browniea, and McGovern (2001), doctor's perceived professionalism (Winggins, Coker and Hicks, 2009) and physical evidence that relates to treatment.

In this research, it refers to the private medical clinic registered a separate entity (CKAPS) under section 30 of the Act. Offers primary medical care services to the patients.

### Patient

Refers to a person (the customer and consumer) (Hudak, McKeeven and Wright, 2003; Vogus & McClelland, 2016) who is in need of medical care service, receiving the medical care services and gets the treatment of an outpatient basis.

### Outpatient service

Outpatient (Zondag, Kooiman, Klok, Dekkers, & Huisman, 2013) service refers to a service that is organized to provide facilities, equipment and healthcare professionals who are qualified by training, experience and ability to care for individuals who come to a private medical clinic on an outpatient basis.

### Health Consciousness

In this research, the concept of health consciousness refers to individual patient's comprehensive orientations toward health (Gould, 1990; Hong, 2009; Mercer et al., 2012; Wong et al., 2016). There are five components of health consciousness; (1) integration of health behavior, (2) attention to one's health, (3) health information seeking and usage, (4) personal health responsibility, and (5) health motivation. All five components are blended and being asked in 11 items in the health consciousness construct. In this research health Consciousness is treated as the moderating variable

In this research, enablement refers to the extent to which patient is capable of understanding and coping with his or her health issue after seeing and having a consultation or treatment from the physician.

### Patient Categories

In this research, patients are categorized into two groups. Patients who pay the medical and services bill from their own pocket is categorized as ‘self-pay’ (Dover and Levitt, 2016) patient whereas the other group whose the bills are paid by the employer (self or spouse) are categorized as ‘paneled-patient’ or third party pay patient (Bremer, et al., 2015).

### Enablement

In this research, enablement refers to the extent to which patient is capable of understanding and coping with his or her health issue after seeing and having a consultation or treatment from the physician (Wong, et al., 2016; Pawlikowska, 2012; Howie, Heaney, Maxwell and Walker, 1998).

## **1.11 Structure of the Thesis**

This thesis is organized into six chapters:

### Chapter 1: The Introduction

This chapter highlights nine sub topics that discuss about the research background, the problem that urge this research to be executed, the objectives, research questions, rationale, scope, contributions and the operational definition of the concepts that this research covers.

### Chapter 2: Literature Review

This chapter discusses the previous researchers findings on the subject and the subject matters that this is are focusing on. Sub topics discusses are marketing performance, performance measure, service quality and service attributes, the clinic consultation-related attributes, the performance measures (loyalty and reputation),

the mediator and moderator constructs (patient satisfaction and patient enablement) and the psychometric construct. The moderator, health consciousness.

### Chapter 3: Model and Hypotheses Development

This chapter discusses how the model of the research is developed and the hypotheses that the research is predicted within the model.

### Chapter 4: Methodology

This chapter discusses on how the research is carried out, on research design, research plan and sampling, data collection, analyses and pilot study and questionnaire design.

### Chapter 5: Analyses

This chapter discusses the data analysis includes preliminary data analysis, respondents profile and inferential analysis using SPSS and SmartPLS.

### Chapter 6: Discussion and Conclusion

This chapter discusses the contribution of the research, the achievement of the objectives, the research implications, the recommendations for future research and finally the conclusion of the research based on the research questions.

## REFERENCES

- Aaker, D. A., and Jacobson R. (1994). The Financial Information Content of Perceived Quality. *Journal of Marketing Research*, 3(May), 191-201.
- Abadel, F. T., and Hattab, A. S. (2014). Patients' Assessment of Professionalism and Communication Skills of Medical Graduates. *BMC Medical Education*, 14(1), 28.
- Abdullah, M., Al-Nasser, A. D., and Husain, N. (2000). Evaluating Functional Relationship Between Image, Customer Satisfaction and Customer Loyalty Using General Maximum Entropy. *Total Quality Management*, 11, 826-829.
- Abraham, J., Sick, B., Anderson, J., Berg, A., Dehmer, C., and Tufano, A. (2011). Selecting a provider: what factors influence patients' decision making?. *Journal of Healthcare Management*. 56(2): 99.
- Abu Bakar, A. N., and Mohd Hatta, M. R. (1996). Utilization of Outpatient Health Services Among Adult and Factors Affecting it in Bachok District, Kelantan (February 1996- March 1996). *Malaysian Journal of Community Health*, 12(1).
- Abu Bakar, S. (2009). Doctor's Attire and Patient Safety. *Med. J. Malaysia*, 64(3), 185-186.
- Acharya, S. (2013), What Do Patients Value in Their Interactions with Doctors? From the Editor, 7(10), 10-13.
- Aelbrecht, K., Rimondini, M., Bensing, J., Moretti, F., Willems, S., Mazzi, M., and Deveugele, M. (2015). Quality of doctor-patient communication through the eyes of the patient: variation according to the patient's educational level. *Advances in Health Sciences Education*. 1-12.
- Ager, A., and Pepper, K. (2005). *Patterns Of Health Service Utilization And Perceptions of Needs And Services In Rural Orissa*. London: The London School of Hygiene and Tropical Medicine, Oxford University Press.



- Aharony, L., and Strasser, S. (1993). Patient Satisfaction: What We Know About and What We Still Need to Explore. *Med Care Review*, 50, 49-78.
- Ahmad, A. E. M. K., Al-Qarni, A. A., Alsharqi, O. Z., Qalai, D. A., & Kadi, N. (2013). The Impact of Marketing Mix Strategy on Hospitals Performance Measured by Patient Satisfaction: An Empirical Investigation on Jeddah Private Sector Hospital Senior Managers Perspective. *International Journal of Marketing Studies*, 5(6), p210.
- Aiken, L. H., Sermeus, W., Van den Heede, K., Sloane, D. M., Busse, R., McKee, M., and Kutney-Lee, A. (2012). Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *BMJ*. 344: e1717.
- Aksoy, L. (2013). How do you measure what you can't define? The current state of loyalty measurement and management. *Journal of Service Management*. 24(4): 356-381.
- Akin, J. S., Griffin, C. C. and Guilkey, D. K. (1986). The Demand for Adult Outpatient Services in the Bicol Region of the Philippines. *Social Science and Medicine*, 22(3), 321-328.
- Al-Eraky, M. M., Donkers, J., Wajid, G., and van Merrienboer, J. J. (2014). A Delphi study of medical professionalism in Arabian countries: The Four-Gates model. *Medical teacher*, 36(S1), S8-S16.
- Aljunid, S. M. and Zwi, A. B. (1996). Differences in Public and Private Health Services in Rural District of Malaysia. *Medical Journal Malaysia*, 51(4), 426-436.
- Aljunid, S. M. (1995). The Role of Private Medical Practitioners and Their Interactions with Public Health Services in Asian Countries. *Health Policy and Planning*, 10(4), 333-349.
- Amaratunga, D., Baldry, D., and Sarshar, M. (2001). *Process Improvement through Performance Measurement*. London: MCB University Press.
- Ambler, T. (2000). *Marketing and the Bottom Line: The New Metrics of Corporate Wealth*. London: Financial Times Prentice Hall.
- Ambler, T. and Riley, D. (2000). *Marketing Metrics: A Review of Performance Measures in Use in the U.K. and Spain - Draft paper*. London: London Business School.

- American Diabetes Association. (2014). Standards of Medical Care in Diabetes—2014. *Diabetes Care*. 37(Supplement 1): S14-S80.
- Andaleeb, S. S., & Kara, A. (2013). The Structure of Service Quality Perceptions for Multiple-Encounter Services. *Quality Management in Healthcare*, 22(4), 306-321.
- Andaleeb, S. S., Siddiqui, N., and Khandakar, S. (2007). Patient Satisfaction with Health Services in Bangladesh. *Health Policy and Planning*. 22, 263-273.
- Andaleeb, S. S. (2001). Service Quality Perceptions and Patient Satisfaction: A Study of Hospitals in a Developing Country, *Social Science and Medicine*. 52(8), 1359-1370.
- Andaleeb, S. S., (1998). Determinant of Customer Satisfaction with Hospitals: A Managerial Model. *International Journal of Health Care Quality Assurance*. 11 (6), 181-187.
- Andreassen, T. W. and Lindestad, B. (1998). Customer Loyalty and Complex Services. *International Journal of Service Industry Management*. 9(1), 7-23.
- Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*. 1, 5-17.
- Anderson, E. W. (1996). Customer Satisfaction and Price Tolerance. *Marketing Letters*. 7(3), 265-274.
- Anderson, E. W. (1995). Measuring Service Quality at University Health Clinic. *International Journal of Health Care Quality Assurance*. 8(2), 32-37.
- Anderson, E. W., Fornell, C., and Lehmann, D. R. (1994). Customer Satisfaction and Word of Mouth. *Journal of Service Marketing*. 1(1), 5-17.
- Anderson, E., Fornell, C., and Lehmann, D. R. (1994). Customer Satisfaction, Market Share, and Profitability: Findings from Sweden. *Journal of Marketing*. 58(July), 53-66.
- Anderson, E. W., and Sullivan, M. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. *Marketing Science*. 12(2), 125-143.
- Anderson, J., and Gerbing, W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two Stage Approach. *Psychological Bulletin*. 27(1), 5-24.
- Andrew J., and Newman, A. J. (2007). Uncovering Dimensionality in the Serviceescape: Towards Legibility. *The Service Industries Journal*. 27(January), 15-28.

- Andrews, M. (2008). Questions to Ask Before Choosing an Emergency Room. *U.S. News & World Report*. September 17.
- Anhang, P. R., Elliott, M. N., Zaslavsky, A. M., Hays, R. D., Lehrman, W. G., Rybowski, L. Cleary, P. D. (2014). Examining the Role of Patient Experience Surveys in Measuring Health Care Quality. *Medical Care Research and Review : MCRR*, 71(5), 522–554.
- Appiah-Adu, K. (1998). Market Orientation and Performance: Empirical Test in a Transition Economy. *Journal of Strategic Marketing*. 6: 665-679.
- Arora, N. (2003), Interacting With Cancer Patients: The Significance of Physician's Communication Behavior. *Soc. Sci. Med.* 57(5): 791-806.
- Arora, R. and Stoner, C. (1996). The Effect of Perceived Service Quality and Name Familiarity on the Service Selection Decision. *Journal of Services Marketing*. 10(1): 22-34.
- Ary, D., Jacobs, L. C. and Razavieh, A. (1996). Introduction to Research in Education. Harcourt Brace College Publishers: Fort Worth, Texas.
- Association of Private Hospital Malaysia (APHM) (Available at: <http://www.hospitals-malaysia.org/>) (Accessed on 25 Mei, 2008)
- <http://www.hfmmagazine.com/hfmmagazine/html>
- Atkinson, A. A. (1998). Strategic Performance Measurement and Incentive Compensation. *European Management Journal*. 16(5): 552-561.
- Babakus, E., and Mangold, W. G. (1992). Adapting the SERQUAL Scle to Hospital Service: Am Empirical Investigation. *Health Services Research*. 26(6).
- Babbie, E. (2004). The Practice of Social Research (10<sup>th</sup>. Ed.). Thomson Wardsworth:Belmont, Canada.
- Bacon, L. D. (1997). Using Amos for Structural Equation Modeling in Market Research. Lynd Bacon & Associates, Ltd. and SPSS Inc.: USA.
- Baker, J., and Lamb, C. (1993). Managing Architectural Design Service Quality. *Journal of Professional Services Marketing*. 10(1): 89-106.
- Baker, R. (1990). Development of a Questionnaire to Assess Patients' Satisfaction with Consultations in General Practice. *British Journal of General Practice*. 40: 487-490.
- Baker, R. (1990). Development of a Questionnaire to Assess Patients' Satisfaction with Consultations in General Practice. *British Journal General Practice*. 40: 487-490.

- Banahan, B. F. and Banahan, B. F. I. (1981). Continuity as an Attitudinal Contract. *Journal Family Practice*. 12: 767-768.
- Banerjee, A., and Sanyal, D. (2012). Dynamics of doctor–patient relationship: a cross-sectional study on concordance, trust, and patient enablement. *Journal of Family and Community Medicine*. 19(1): 12-19.
- Bansal, H. S., Irving, P. G., and Taylor, S. F. (2004). A Three-Component Model of Customer Commitment to Service Providers. *Journal of the Academy of Marketing Science*. 32(3): 234-250.
- Bansal, H. S., and Taylor, S. F. (2002). Investigating Interactive Effects in The Theory of Planned Behavior in a Service-Provider Switching Context. *Psychology Marketing*. 19: 407-425.
- Bansal, H. S., and Taylor, S. F. (1999). The Service Provider Switching Model (SPSM). *Journal of Service Research*. 2(2): 200-218.
- Bartlett, J. E., Kotrlik, J. W., and Higgins, C. (2001). Organizational Research: Determining appropriate sample size in survey research. *Information Technology, Learning and Performance Journal*. 19(1): 43-50.
- Basu, S., Andrews, J., Kishore, S., Panjabi, R., and Stuckler, D. (2012). Comparative Performance of Private and Public Healthcare Systems in Low- and Middle-Income Countries: A Systematic Review. *PLoS Medicine*. 9(6): e1001244.
- Basu, A. and Dutta, M. J. (2008). The Relationship Between Health Information Seeking and Community Participation: The Roles of Health Information Orientation and Efficacy. *Health Communication*. 23(1): 70-79.
- Baumgartner, H., and Homburg, C. (1996). Applications of Structural Equation Modeling in Marketing and Consumer Research: A Review. *International Journal of Research in Marketing*. 1(13): 139-161.
- Bayley, K. B., London, M. R., Grunkemeier, G. L., and Lanksy, D. J. (1995). Measuring the success of treatment in patient terms. *Medical Care*. 33(4): AS226-AS235.
- Bendall-Lyon, D. and Powers, T. L. (2002). The Impact of Gender Differences on Change In Satisfaction Over Time. *Journal of Consumer Marketing*. 19(1): 12-23.
- Bennett, S., McPake, B., and Mills, A. (1997). Private Health Providers in Developing Countries: Serving the Public Interest. Zed Press: London.

- Berendes, S., Heywood, P., Oliver, S., and Garner, P. (2011). Quality of Private and Public Ambulatory Health Care in Low and Middle Income Countries: Systematic Review of Comparative Studies. *PLoS Med.* 8.
- Berenson, R. A., Pronovost, P. J., & Krumholz, H. M. (2013). Achieving the potential of health care performance measures. *Robert Wood Johnson Foundation and Urban Institute*, 7.
- Berkman, N. D., Sheridan, S. L., Donahue, K. E., Halpern, D. J., Viera, A., Crotty, K., ... & Viswanathan, M. (2011). Health literacy interventions and outcomes: an updated systematic review (No. 19<sup>th</sup>). Agency for Healthcare Research and Quality (US): Rockville. (Available from: <http://www.ncbi.nlm.nih.gov/books/NBK82434/>)
- Berry, L. L., Zeithaml, V. A., and Parasuraman, A. (1985). Quality Counts in Services, Too. *Business Horizons*. May-June: 44-52.
- Best, A., Greenhalgh, T., Lewis, S., Saul, J. E., Carroll, S., and Bitz, J. (2012). Large-system transformation in health care: a realist review. *Milbank Quarterly*. 90(3): 421-456.
- Biggaard, J., Tjønneland, A., Thomsen, B. L., Overvad, K., and Heitmann, B. L. (2003). Waist Circumference, BMI, smoking, and Mortality in Middle-aged Men and Women. *Obes Res*. 11: 895-903.
- Bititci, U. S., Carrie, A. S., and McDevitt, L. (1997). Integrated Performance Measurement Systems: a Development Guide. *International Journal of Operations and Production Management*. 17(5): 522-534.
- Bititci, U. S., Turner, U. T., and Begemann, C. (2000). Dynamics of Performance Measurement Systems. *International Journal of Operations & Production Management*. 20(6): 692-704.
- Black, N. (2013). Patient reported outcome measures could help transform healthcare. *BMJ (Clinical research ed.)*. 346: f167.
- Blendon, R. J., Minah, K., and Benson, J. M. (2001). The Public Versus the World Health Organization on Health System Performance. *Health Affairs*. 20: 10-20.
- Bloemer, J., and de Ruyter, K. (1998). On the Relationship Between Store Image, Store Satisfaction and Store Loyalty. *European Journal of Marketing*. 32(5/6): 499-513.

- Bloemer, J. and Kasper, H. D. (1995). The Complex Relationship between Consumer Satisfaction and Brand Loyalty. *Journal of Economic Psychology*. 16(2): 311-329.
- Bloom, G., Wilkinson, A., Standing, H., and Lucas, H. (2014). Engaging with Health Markets in Low and Middle-Income Countries. *IDS Working Papers*. 443: 1-28.
- Bolton, R. (1998). A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction. *Marketing Science*. 17(1): 45-65.
- Bolton, R. and Drew, J. (1991). A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes. *Journal of Marketing*. 55(Winter): 1-9.
- Bolton, R. N. and Drew, J. H. (1991). A Multi-Stage Model Of Customers Assessments of Service Quality and Value. *Journal of Consumer Research*. 17: 375-384.
- Boom, N. K., Lee, D. S., and Tu, J. V. (2012). Comparison of processes of care and clinical outcomes for patients newly hospitalized for heart failure attended by different physician specialists. *American heart journal*. 163(2): 252-259.
- Boonthum, A. (2008). Multidimensional Indicators of Healthy Women in Reproductive Age. A Dissertation: Doctor of Philosophy (Population and Development). School of Applied Statistics: National Institute of Development Administration: Bangkok, Thailand.
- Boop, K. D. (1990). How Patients Evaluate the Quality of Ambulatory Medical Encounters: A Marketing Perspective. *Journal Health Care Mark*. 10: 6-15.
- Boulding, W., Kalra, A., Staelin, R., and Zeithaml, V. A. (1993). A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions. *Journal of Marketing Research*. 30: 77-27.
- Boulding, W., Glickman, S. W., Manary, M. P., Schulman, K. A., & Staelin, R. (2011). Relationship between patient satisfaction with inpatient care and hospital readmission within 30 days. *The American journal of managed care*, 17(1), 41-48.
- Bourne, M. C. S., Neely, A. D., Mills, J. F., and Platts, K. W. (2003). Implementing Performance Measurement Systems: A Literature Review. *International Journal of Business Performance Management*. 5(1): 1-24.

- Bourne, M., Neely, A., Platts, K., and Mills, J. (2002). The Success and Failure of Performance Measurement Initiatives – Perceptions of Participating Managers, *International Journal of Operations and Production Management*. 22(11): 1288-1310.
- Bourne, M., Mills, J., Wilcox, M., Neely, A., and Platts, K. (2000). Designing, Implementing and Updating Performance Measurement Systems. *International Journal of Operations and Production Management*. 20(7): 754-771.
- Bowen, J. T. and Chen, S. L. (2001). The Relationship Between Customer Loyalty and Customer Satisfaction. *International Journal of Contemporary Hospitality Management*. 13(5): 213-217.
- Bowen, M., Morara, M., & Mureithi, S. (2009). Management of business challenges among small and micro enterprises in Nairobi-Kenya. *KCA journal of business management*, 2(1), 16-31.
- Brady, M. K. and Robertson, C. J. (2001). Searching for a Consensus on the Antecedent Role of Service Quality and Satisfaction: an Exploratory Cross-Sectional Study. *Journal of Business Research*. 51(1): 53-60.
- Brédart A., Bouleuc C., and Dolbeault S. (2005). Doctor-patient communication and satisfaction with care in oncology. *Current Opinion in Oncology*. 17(14): 351–354.
- Bremer, R. W., Scholle, S. H., Donna Keyser, M. B. A., Houtsinger, J. V. K., & Harold Alan Pincus, M. D. (2015). Pay for performance in behavioral health. *Psychiatric Services*.
- Bridgewater, B., Hickey, G. L., Cooper, G., Deanfield, J., and Roxburgh, J. (2013). Publishing cardiac surgery mortality rates: lessons for other specialties. *Bmj*, 346.
- Brinkman W. B., Geraghty S. R., and Lanphear B. P. (2007). Effect of Multisource Feedback on Resident Communication Skills and Professionalism: A Randomized Controlled Trial. *Arch Pediatr Adolesc*. 161(1): 44–49.
- Brody, D., Miller, S., Lerman, C., Smith, D., and Caputo, G. (1989). Patient Perception of Involvement in Medical Care: Relationship to Illness Attitudes and Outcomes. *Journal of General Internal Medicine*. 4: 506-511.
- Broeckling, J. (2010). Performance Measurement: Theory and Practice. College of Professional Studies Professional Projects. Paper 3

- Brown, J. D. (1996). *Testing in Language Programs*. Prentice Hall Regents: Upper Saddle River, NJ.
- Brown, S. A. and Gulycz, M. (2001). *Customer Relationship Management: A Strategic Imperative in the World of E-Business*. Wiley: New York.
- Brown, P., Lai, J. C., and Mercer, R. (1991). *Aligning Sentences in Parallel Corpora*. In *Proceedings of ACL-91*. Berkeley CA.
- Bruin, J. (2006). *Newtest: command to compute new test*. UCLA: Statistical Consulting Group.
- Brugha, R. and Zwi, A. (1999). Sexually Transmitted Disease Control in Developing Countries: The Challenge of Involving the Private Sector. *Sex Trans Information*. 75: 283-285.
- Brusse, C. J., and Yen, L. E. (2013). Preferences, Predictions and Patient Enablement: A Preliminary Study. *BMC Family Practice*. 14(1): 116.
- Butt, M. M., and DeRun, E. C. (2010). Private Healthcare Quality: Applying a SERQUAL Model, *International Journal of Health Care Quality Assurance*. 23(7): 658-673.
- Büyükközkán, G., Çifçi, G., and Güleriyüz, S. (2011). Strategic Analysis of Healthcare Service Quality Using Fuzzy AHP Methodology. *Expert Systems with Applications*. 38(8): 9407-9424.
- Buzzell, R., and Gale, B. (1987). *The PIMS Principles: Linking Strategy to Performance*. The Free Press: New York.
- Cadotte, E. R., Woodruff, R. B. and Jenkins, R. L. (1987). Expectations and Norms in Models of Consumer Satisfaction. *Journal of Marketing Research*. 24(3): 305-314.
- Çaha, H. (2007). Service Quality In Private Hospitals In Turkey. *Journal of Economic and Social Research*. 9(1): 55-69.
- Camilleri, D., and O'Callaghan, M. (1998). Comparing Public and Private Hospital Care Service Quality. *International Journal of Health Care Quality Assurance*. 11(4): 127-133.
- Campbell, J., Narayanan, A., Burford, B., and Greco, M. (2010). Validation Of A Multi-Source Feedback Tool For Use In General Practice. *Education for Primary Care*. 21: 165-179.
- Campbell, S. M., Roland, M. O., and Buetow, S. A. (2000). Defining Quality of Care. *Social Science Medicine*. 51(11): 1611-1625.



- Cano, C. R., Carrillat, F. A., and Jaramillo, F. (2004). A meta-analysis of the relationship between market orientation and business performance: evidence from five continents. *International Journal of research in Marketing*. 21(2): 179-200.
- Carr-Hill, R. A. (1992). The Measurement of Patient Satisfaction. *Journal of Public Health Medicine*. 14(3): 236-249.
- Caruana, A. (2002). Service loyalty: The Effects of Service Quality and The Mediating Role of Customer Satisfaction. *European Journal of Marketing*. 36(7/8): 811-828.
- Chand, R. B., Pant, D. K., and Joshi, D. D. (2012). An evaluation of patients care in Radio Diagnosis Department of Tribhuvan University Teaching Hospital, Kathmandu, Nepal. *Nepal Medical College journal: NMCJ*. 14(2): 133-135.
- Chaniotakis, I. E., and Lymperopoulos, C. (2009). Service quality effect on satisfaction and word of mouth in the health care industry. *Managing Service Quality: An International Journal*, 19(2): 229-242.
- Charles, C., Gafni, A., and Whelan, T. (1999). Decision-Making in the Physician-Patient Encounter: Revisiting the Shared Treatment Decision-Making Model. *Soc Sci Med*. 49: 651-661.
- Chassin, M. R., Loeb, J. M., Schmalz, S. P. and Wachter, R. M. (2010). Accountability Measures – Using Measurement to Promote Quality Improvement. *The New England Journal of Medicine*. 363(7): 683-688.
- Chee, H. L. (1990). Health and Health Care in Malaysia: Present Trends and Implications for the Future. Monograph Series. No. 3. Institute for Advanced Studies: University Malaya, Kuala Lumpur.
- Chen, M. F. (2009). Attitude Toward Organic Foods Among Taiwanese as Related To Health Consciousness, Environmental Attitudes, and The Mediating Effects of a Healthy Lifestyle. *British Food Journal*. 111(2): 165-178.
- Chen, M. F. (2011), The Joint Moderating effect of health consciousness and healthy lifestyle on consumers; willingness to use functional foods in Taiwan, *Appetite*, Vol. 57(1), pp. 253-262.
- Cheng, S. H., Yang, M. C., and Chiang, T. L. (2003). Patient Satisfaction with and Recommendation of a Hospital: Effects of Interpersonal and Technical Aspects of Hospital Care. *International Journal for Quality in Health Care*. 15(4): 345-355.

- Cheraghi-Sohi, S. and Bower, P. (2008). Can a Feedback of Patient Assessment, Brief Training, or Their Combination, Improve the Interpersonal Skill of Primary Care Physicians? A Systematic Review. *BMC Health Service Research*. 8(179).
- Chin, W.W. (1998). *The partial least squares approach to structural equation modeling*. In: Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*. Mahwah New Jersey: Lawrence Erlbaum Associates, 295–336.
- Chisick, M. C. (1997). Satisfaction of Active Duty Soldiers with Family Dental Care. *Military Medicine*. 162(2): 105-108.
- Cho, W. H., Lee, H., Kim, C., Lee, S., and Choi, K. S. (2004). The Impact of Visit Frequency on the Relationship between Service Quality and Outpatient Satisfaction: A South Korean Study. *Health Research Service*. 39(1): 13-33.
- Choi, K. S., Lee, H., Kim, C., and Lee, S. (2005). The Service Quality Dimensions and Patient Satisfaction Relationships in South Korea: Comparisons Across Gender, Age and Types of Service. *Journal of Services Marketing*. 19(3): 140-149.
- Chow-Chua, C., and Goh, M. (2000). Quality Improvement in the Healthcare Industry: Some Evidences from Singapore. *International Journal of Health Care Quality Assurance*. 13(5): 223-229.
- Chow-Chua, C. and Komaran, R. (2002). Managing Service Quality by Combining Voice of the Service Provider and Voice of Their Customers. *Managing Service Quality*. 12(2): 77-86.
- Churchill, G. A., and Suprenant, C. (1982). An Investigation into the Determinants of Customer Satisfaction. *Journal of Marketing Research*. 491-504.
- Clack, G. B., Allen, J., Cooper, D., and Head, J. O. (2004). Personality differences between doctors and their patients: implications for the teaching of communication skills. *Med Educ*. 38(2),177–186.
- Clark, B. H. (1999a). Marketing Performance Measures: History and Inter-relationship. *Journal of Marketing Management*. 15(8): 711-732.
- Clark, B. H. (1999b). Managerial Perceptions of Marketing Performance: Efficiency, Adaptability, Effectiveness and Satisfaction. Working paper: College of Business Administration. Northeastern University.
- Cleary, P. D. and McNeil, B. J. (1988). Patient Satisfaction as an Indicator of Quality of Care. *Inquiry*. 25: 25-36.

- Cochran, W. G. (1963.) in Israel, G D. (1992), Sampling the Evidence of Extension Program Impact. Program Evaluation and Organizational Development, IFAS, University of Florida. PEOD-5. October.
- Cochran, W. G. (1963). Sampling Techniques, 2nd Ed. in Israel, G. D. (1992). Sampling The Evidence Of Extension Program Impact. Program Evaluation and Organizational Development, IFAS, University of Florida: Florida.
- Cohen, D. S., Colliver, J. A., Marcy, M. S., Fried, E. D., and Swartz, M. H. (1996). Psychometric Properties of A Standardized-Patient Checklist and Rating-Scale form Used to Assess Interpersonal and Communication Skills. *Academic Medicine*. 71(1): S87-S89.
- Cohen, G. (1996). Age and Health Status in a patient satisfaction survey. *Social Science and Medicine*. 42(7): 1085-1093.
- Coleman, N. E., & Pon, S. (2013). Quality: performance improvement, teamwork, information technology and protocols. *Critical care clinics*, 29(2), 129-151.
- Cooper, D. R. and Schindler, P. S. (1998). Business Research Methods 6<sup>th</sup>. Ed. Irwin McGrawhill: New York.
- Corbin, C. L., Kelley, S. W., and Schwartz, R. W. (2001). Concepts In Service Marketing For Healthcare Professionals. *The American Journal of Surgery*. 181(1): 1-7.
- Coviello, N., Brodie, R. and Munro, H. (2000). An Investigation of Marketing Practice by Firm Size. *Journal of Business Venturing*. 15(5/6): 523-545.
- Cowing, M., Davino-Ramaya, C. M., Ramaya, K., & Szmerekovsky, J. (2009). Health Care Delivery Performance: Service, Outcomes, and Resource Stewardship. *The Permanente Journal*, 13(4), 72–78.
- Creswell, J. W. (1994). Research design: Qualitative & quantitative approaches. Sage Publications: Thousand Oaks, Canada.
- Creswell, J. W., Fetters, M. D., and Ivankova, N. V. (2004). Designing A Mixed Methods Study In Primary Care. *Annals of Family Medicine*. 2(1): 7-12.
- Cronin, J. J. Jr., and Taylor, S. A. (1992). Measuring Service Quality: A Re-Examination and Extension. *Journal of Marketing*. July: 55-68.
- Cronin, J., Brady, M., and Hult, G. (2000). Assessing the Effect of Quality, Value, and Customer Satisfaction on Consumer Behavioural Intentions in Service Environments. *Journal of Retailing*. 76(2): 193-218.

- Crosby, L. A., Evans, K. R., and Cowels, D. (1990). Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *The Journal of Marketing*. 54(3): 68-81.
- Crosby, P. B (1979). *Quality is Free*. McGraw-Hill: New York.
- Crow, R., Gage, H., Hampson, S. (2002). The Measurement of Satisfaction with Healthcare: Implications for Practice from a Systematic Review of The Literature. *Health Technology Assess.* 6(32): 1-244.
- Cunningham, A. J. Lockwood, G. A., and Cunningham, J. A. (1991). A Relationship between Perceived Self-Efficacy and Quality of Life in Cancer Patient. *Patient Education and Counseling*. 17(1): 71-78.
- Dabholkar, P. A. (2015), How to improve perceived service quality by increasing customer participation. In *Proceedings of the 1990 Academy of Marketing Science (AMS) Annual Conference* (pp. 483-487). Springer International Publishing.
- Dagger, T., and Sweeney, J. C. (2006). The Effects of Service Evaluation on Behavioral Intentions and Quality of Life. *Journal of Service Research*. 19: 3-19.
- Dalton, J. (2005). Reputation Management: A Holistic Business Tool. London school of Public Relations (Available at: <http://www.pr-school-london.com/ppt/REPNEW.ppt# 257>. 1. Slide 1.) (Accesses on 15 December 2008)
- Danaher, P. J., and Haddrell, V. (1996). A Comparison of Question Scales Used for Measuring Customer Satisfaction. *International Journal of Service Industry Management*. 7(4): 4.
- Danaher, P. J., and Rust, R.T. (1996). Indirect Financial Benefits from Service Quality. *Quality Management Journal*. 3(2): 63-85.
- Davidson, J. H. (1999). Transforming the Value of Company Reports Through Marketing Measurement. *Journal of Marketing Management*. 15: 757-777.
- Davies, A. R., and Ware, J. E. Jr. (1988). Involving Consumers in Quality of Care Assessment. *Health Affairs*. Spring: 33-48
- Davies, B., Baron, S., Gear, T., and Read, M. (1999). Measuring and Managing Service Quality. *Marketing Intelligence and Planning*. 17(1): 33-40.

- Davis, R., Wiggins, M. N., Mercado, C., and O'Sullivan, P. (2007), Defining the Core Competency of Professionalism Based on the Patient's Perception, *Clinic Experimental Ophthalmol.* 35(1): 51-54.
- Day, G. S. and Fahey, L. (1988). Valuing Marketing Strategies. *Journal of Marketing.* 52 (3): 45-57
- De Koning, L., Merchant, A. T., Pogue, J., and Anand, S. S. (2006). Waist Circumference and waist-to-hip ratio as predictors of cardiovascular events: meta-regression analysis of prospective studies. *European Heart Journal.* (Available at: <http://eurheartj.oxfordjournals.org/>) (Assessed on 15 April, 2010)
- De Ruyter, K., Wetzels, M. and Bloemer, J. (1997). On the Relationship between Perceived Service Quality, Service Loyalty And Switching Costs. *International Journal of Service Industry Management.* 9(5): 436-453.
- De Silva, D. (2013). Evidence Scan: Measuring patient Experience, The Health Foundation - The Evidence Centre: London.
- Deming, W. E (1986). Out of the Crisis. MIT Center for Advanced Engineering Study: Boston.
- Deng, N., Allison, J. J., Fang, H. J., Ash, A. S., and Ware Jr, J. E. (2013). Using the bootstrap to establish statistical significance for relative validity comparisons among patient-reported outcome measures. *Health Qual Life Outcomes.* 11: 89.
- Department of Statistic Malaysia (2008). Report on Population. Department of Statistic: Malaysia.
- Department of Statistic Malaysia (2009). unpublished data.
- Derek, A. A., and Patrick, A. R. (2007). A Research Model of Health-Care Competition and Customer Satisfaction. *Health Services Management Research.* 20: 244-252.
- Derksen, F., Bensing, J., & Lagro-Janssen, A. (2013). Effectiveness of empathy in general practice: a systematic review. *British Journal of General Practice,* 63(606), e76-e84.
- Desai, M. K. (2006). Customer Churn - A Reason to Churn: Working Paper Series. (Available at: <http://ssrn.com>) (Assessed on 20/1/2009)

- Desborough, J., Banfield, M., and Parker, R. (2012), A Tool to Evaluate Patient's Experiences of Nursing Care in Australian General Practice: Development of the Patient Enablement and Satisfaction Survey), *Australian Journal of Primary Health*. 20(2): 209-215
- Donabedian, A. (1980). The Definition of Quality: A Conceptual Exploration in Quality Assessment and Monitoring - The Definition of Quality and Approaches to its Assessment. *Health Administration Press*. 1.
- Donabedian, A. (1982). Explorations in Quality Assessment and Monitoring: The Criteria and Standards of Quality. *Health Administration Press*. 2.
- Donabedian, A. (1996). Evaluating Quality of Medical Care. *Millbank Q*. 44: 166-206
- Dover, K., & Levitt, J. (2016). MANAGING the SELF-PAY SURGE. HIM PROFESSIONALS FIT FOR PATIENT FINANCIAL ADVOCATE ROLES AIDING SELF-PAY PATIENTS. *Journal of AHIMA/American Health Information Management Association*, 87(3), 20.
- Doyle, C., Lennox, L., and Bell, D. (2013). A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ open*, 3(1) ; e001570
- Duffy, F. D., Gordon, G. H., and Whelan, G. (2004). Assessing Competence in Communication and Interpersonal Skills: the Kalamazoo II Report. *Acad Med*. 79(6): 495–507.
- Dutta-Bergman, M. J. (2004a). Primary Sources of Health Information: Comparisons in The Domain of Health Attitudes, Health Cognitions, and Health Behaviors. *Health Communication*. 16(3): 273-288.
- Dutta-Bergman, M. J. (2004b). Health Attitudes, Health Cognitions, and Health Behaviors among Internet Health Information Seekers: Population-Based Survey, *Journal Medical Internet Research*. 6(2): e15
- Dutta-Bergman, M. J. (2004c). An Alternative Approach to Social Capital: Exploring the Linkage Between Health Consciousness and Community Participation. *Health Communication*. 16(4): 393-409.
- Dutta-Bergman, M. J. (2005). Developing a Profile of Consumer Intention to Seek Out Additional Information Beyond a Doctor: The Role of Communicative and Motivation Variables. *Health Communication*. 17(1): 1-16.

- Dutta-Bergman, M. J. (2006). A Formative Approach to Strategic Message Targeting through Soap Operas: Using Selective Processing Theories. *Health Communication*. 19(1): 11-18.
- Dutta-Bergman, M. J. (2007). Health Information Processing from Television: The Role of Health Orientation. *Health Communication*. 21(1): 1-9.
- Department of Statistics (2001). *National Census*.: Malaysia: Department of Statistics.
- East, R., and Sinclair, J. (2000). Loyalty: Definition and Explanation. ANZMAC 2000 Visionary Marketing for the 21st Century: Facing the Challenge. 28th November - 1st December 2000. Griffith University: Australia.
- Easton, G. S., and Jarrell, S. L. (1998). The Effects of Total Quality Management on Corporate Performance: an Empirical Investigation. *Journal of Business*. 71(2): 253-307.
- Eccles, R. G. (1991). The Performance Measurement Manifesto, *Harvard Business Review*. Jan-Feb: 131–137.
- Economist Intelligence Unit (2013). *Healthcare Briefing & Forecasts: Brazil Healthcare Report*. Economist Intelligence Unit, July 17.
- Economist Intelligence Unit (2013). *Healthcare Briefing and Forecasts: Japan: Healthcare Report*. Economist Intelligence Unit, August 18.
- Frosch, D. L., May, S. G., Rendle, K. A., Tietbohl, C., and Elwyn, G. (2012). Authoritarian physicians and patients' fear of being labeled 'difficult' among key obstacles to shared decision making. *Health Affairs*, 31(5), 1030-1038.
- Kementerian kesihatan Malaysi (1998). *Akta Kemudahan dan Perkhidmatan Jagaan Kesihatan Swasta (Akta 586)*. Kuala Lumpur: Kementerian kesihatan Malaysia.
- Kementerian Kesihatan Malaysia (2009). *Senarai Klinik Swasta- Cawangan Kawalan Amalan Perubatan Swasta*. Putrajaya: Kementerian kesihatan Malaysia.
- Majlis Perubatan Malaysia Malaysian Medical Council (2001). *Duties of Doctors: Confidentiality*. Kuala Lumpur: Majlis Perubatan Malaysia Malaysian Medical Council
- Fecikova, I. (2004). An Index Method for Measurement of Customer Satisfaction. *The TQM Magazine*. 16(1): 57-66.

- Federation of Private Medical Practitioners Association Malaysia (FPMPAM) (2006). Clinic Manual.
- Feeny, D., Furlong, W., Boyle, M., and Torrance, G. W. (1995). Multi-Attribute Health Status Classification Systems: Health Utilities Index. *Pharmacoeconomics*. 7(6): 490-502.
- Fenton, J. J., Jerant, A. F., Bertakis, K. D., and Franks, P. (2012). The cost of satisfaction: a national study of patient satisfaction, health care utilization, expenditures, and mortality. *Archives of Internal Medicine*. 172(5): 405-411.
- Ferguson T. (1992). Patient, Heal Thyself: Health In The Information Age. *The Futurist*. 26(1): 9-14.
- Feurer, R., and Chaharbaghi, K. (1995). Performance Measurement In Strategic Change. *Benchmarking for Quality Management and Technology*. 2(2): 64-83.
- Fischer, R. L., Hansen, C. E., Hunter, R. L., and Veloski, J. J. (2007). Does Physician Attire Influence Patient Satisfaction in an Outpatient Obstetrics and Gynecology Setting. *Am J Obstet Gynecol*. 196(186): e1-e5.
- Fondacaro, M., Frogner, B., and Moos, R. (2005). Justice in Health Care Decision-Making: Patients' Appraisals of Health Care Providers and Health Plan Representatives. *Soc Justice Res*. 18(1): 63-81.
- Fong, N. P., and Phua, K. H. (1985). Utilization And Expenditure on Medical Services in A Local Community. *Singapore Medical Journal*. 26(2): 131-138.
- Ford, R. C., Bach, S. A., and Fottler, M. D. (1997). Methods of Measuring Patient Satisfaction in Health Care Organizations. *Health Care Management Review*. 22( 2): 74-89.
- Forthofer, M. S., and Bryant, C. A. (2000). Using audience-segmentation techniques to tailor health behavior change strategies. *American Journal of Health Behavior*. 24(1): 36-43.
- Forza, C. and Salvador, F. (2000), Assessing Some Distinctive Dimensions of Performance Feedback Information in High Performing Plants. *International Journal of Operations & Production Management*. 20(3): 359-385.
- Franco-Santos, M., Kennerley, M., Micheli, P., Martinez, V., Mason, S., Marr, B., Gray, D. and Neely, A. (2007). Towards a Definition of a Business



- Performance Measurement System. *International Journal of Operations and Production Management*. 27(8): 784-801
- Fullerton, G. (2003). When does commitment lead to loyalty. *Journal of Service Research*. 5(4) : 333-44.
- Furnham, A., and Forey, J. (1994). The attitudes behaviors and beliefs of patients of conventional vs. complementary (alternative) medicine. *Journal of Clinical Psychology*, 50(3): 458-469.
- Gaiardelli, P., Saccani, N., and Songini, L. (2005). Performance measurement systems in the after-sales service: an integrated framework. *International Journal of Business Performance Measurement* (in press).
- Gale, B. T. (1994). *Managing Customer Value*. Free Press: New York.
- Gandhi, T. K., Francis, C. E., Louise, P. A., Burstin, H. R., Haas, J. S., and Brennan, T. A. (2002). Inconsistent Report Cards: Assessing the Comparability of Various Measures of the Quality of Ambulatory Care. *Medical Care*. 40(2): 55-165
- Garengo, P. and Bernardi, G. (2007). Organizational Capability in SMEs Performance Measurement as A Key System in Supporting Company Development, *International Journal of Productivity and Performance Management*. 56(5/6): 518-532
- Garengo, P., Biazzo, S., and Bititci, U. (2005). Performance Measurement Systems in SMEs: a Review for a Research Agenda. *International Journal of Management Reviews*. 7(1): 25-47.
- Gates, S. (1999). *Aligning Strategic Performance Measures and Results*. The Conference Board: New York, NY.
- Gattellari, M., Butow, P. N., and Tattersall, M. H. (2001). Sharing Decisions in Cancer Care. *Social Science & Medicine*. 52(12): 1865-1878.
- Gautham, M., Binnendijk, E., Koren, R., and Dror, D. M. (2011). First we go to the small doctor: First contact for curative health care sought by rural communities in Andhra Pradesh & Orissa, India. *The Indian Journal of Medical Research*. 134(5): 627-638.
- Ghobadian, A., and Ashworth, J. (1994). Performance Measurement in Local Government - Concept and Practice. *International Journal of Performance Management*. 14(5): 35-51.

- Goold, S. D. and Klipp, G. (2002). Managed Care Members Talk About Trust. *Soc Sci.* 54(6): 879-88.
- Gore, J. and Ogden, J. (1998). Developing, validating and consolidating the doctor–patient relationship: the patients’ views of a dynamic process. *British Journal of General Practice.* 48: 1391–1394.
- Gotsi, M., and Wilson, A. M. (2001). Corporate reputation: Seeking a definition. *Corporate Communications.* 6: 24-30.
- Gould S. J. (1990). Health Consciousness and Health Behavior: The Application of a New Health Consciousness Scale. *American Journal Prev. Med.* 4(4) : 228-237.
- Greco, m., Browniea, A. and McGovern, J. (2001), Impact of Patient Feedback on the Interpersonal Skills of General Practice Registrars: Results of a longitudinal Study, *Med. Educ.*, 35(8), 748-756
- Green, L. A., & Hickner, J. (2006). A short history of primary care practice-based research networks: from concept to essential research laboratories. *The Journal of the American Board of Family Medicine*, 19(1), 1-10.
- Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012). Strategic performance measurement in a healthcare organisation: A multiple criteria approach based on balanced scorecard. *Omega*, 40(1), 104-119.
- Gremler, D. D., and Brown, S. W. (1996). An Empirical Examination of a Model of Service Loyalty. *Frontiers In Services Conference: Vanderbilt University.*
- Gremler, D. D., and Brown, S. W. (1996). *Service Loyalty: Its Nature, Importance, and Implications.* International Service Quality Assosiation: USA.
- Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012). Strategic performance measurement in a healthcare organisation: A multiple criteria approach based on balanced scorecard. *Omega*, 40(1), 104-119.
- Grönroos, C. (1983). *Strategic Management and Marketing in The Service Sector.* Marketing Science Institute: Cambridge, MA.
- Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. *European Journal Marketing.* 18: 36-44.
- Grönroos, C. (1990). *Service Management and Marketing: Managing the Moments of Truth.* Lexington Books: Lexington, MA.
- Gu, N. Y., Gai, Y., and Hay, J. W. (2008). The Effect of Patient Satisfaction with Pharmacist Consultation on Medication Adherence: An Instrumental Variable

- Approach. *Pharmacy Practice (Internet)*. 6(4). (Available at: [http://scielo.isciii.es/scielo.php?pid=S1886-36552008000400006&script=sci\\_arttext](http://scielo.isciii.es/scielo.php?pid=S1886-36552008000400006&script=sci_arttext)) (Accessed on: 30 Jun 2010)
- Gulliford, M., Figueroa-Munoz, J., Morgan, M., Hughes, D., Gibson, B., Beech, R. and Hudson, M. (2002). What Does Access to 'Health Care' Mean. *Journal Health Service Research Policy*. Vol. 7 No. 3. Pp. 186-188.
- Gulliford, M., Morgan, M., Hughes, D., Beech, R., Figueroa-Munoz, J., Gibson, B., Hudson, M., Arumugam, C., Connell, P., Mohiddin, A., Sedgwick, J. (2001). Access to Health Care. Report of a Scoping Exercise for the National Coordinating Centre for NHS Service Delivery and Organisation R & D (NCCSDO). The Public Health and Health Services Research Group. Department of Public Health Sciences, King's College: London
- Gummesson, E., & Grönroos, C. (2012). The emergence of the new service marketing: Nordic School perspectives. *Journal of Service Management*, 23(4), 479-497.
- Gustafson, D. H. and Hundt, A. S. (1995). Findings of Innovation Research Applies to Quality Management Principles for Health Care. *Health Care Management Review*. Vol. 20 No. 2. pp. 16-33.
- Ha, J. F. and Longnecker, N. (2010), Doctor-Patient Communication: A Review, *The Ochsner Journal*, Vol. 10(1), pp. 38-43.
- Haggerty, J. et al. (2007), Operational of Attributes of Primary Health Care: Consensus Among Canadian Experts. *Annals of Family Medicine*, Vol. 10 No 1370. p.p. 682.
- Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1995). *Multivariate Data Analysis with Readings*. Prentice-Hall International: Englewood Cliffs. New Jersey.
- Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998). *Multivariate Data Analysis (5<sup>th</sup> Ed.)*. Prentice Hall: Upper Saddle River, New Jersey.
- Haliza, A. M., Rizal, A. M. and Raja Jamaluddin, R. A. M. (2003). Kajian Kepuasan Pelanggan di Kalangan Pesakit Klinik Swasta di Seremban, Negeri Sembilan. *Jurnal Kesihatan Masyarakat*, Vol. 9. pp. 44-70.
- Hall, J. A. and Dornan, M. C. (1990). Patient Socio-Demographic Characteristics as Predictors of Satisfaction with Medical Care: A Meta-Analysis. *Social Science and Medicine*, Vol. 30 No.7. pp. 811-818.

- Hall, M. F. and Press, I. (1996). Keys To Patient Satisfaction in the Emergency Department: Results of a Multiple Facility Study. *Hospital and Health Services Administration*. Vol. 41 No. 4. pp. 515-532.
- Hallowell, R. (1996). The Relationships Of Customer Satisfaction, Customer Loyalty, And Profitability: An Empirical Study. *International Journal of Service Industry Management*. Vol. 7 No.4. pp. 27-42.
- Hamelin, N. D., Nikolis, A., Armano, J., Harris, P. G., and Brutus, J. P. (2012). Evaluation of factors influencing confidence and trust in the patient-physician relationship: A survey of patient in a hand clinic. *Chirurgie de la Main*. 31(2): 83-90.
- Hansemark, O. C. and Albinsson, M. (2004). Customer Satisfaction and Retention: The Experience Of Individual Employees. *Managing Service Quality*. Vol. 14 No.1. pp.40-57.
- Haque, A. K. M., Sarwar, A. A. M., Yasmin, F., & Anwar, A. (2012). The impact of customer perceived service quality on customer satisfaction for private health centre in Malaysia: a structural equation modeling approach. *Information Management and Business Review*, 4(5), 257-267.
- Harrison-Walker, L. J. (2001). The measurement of a market orientation and its impact on business performance. *Journal of Quality management*. 6(2): 139-172.
- Haughney, J., Cotton, P., Rosen, J. P. Morrison, K. and Price, D. (2007), The Use of a Modification of the patient Enablement Instrument in Asthma, *Primary Care Respiratory Journal*. Vol.16(2), pp. 89-92.
- Hausman, A. (2004). Modeling the Patient-Physician Service Encounter: Improving Patient Outcomes. *Journal of the Academy of Marketing Science*. Vol. 32 No. 4. pp. 403-417.
- Heidegger T. (2002). Patient Satisfaction with Anesthesia Care: Development of A Psychometric Questionnaire and Benchmarking among Six Hospitals in Switzerland and Austria. *British Journal Anaesth*. Vol. 89. pp. 863-872.
- Helgesen, Ø. and Nettet, E. (2007). Images, Satisfaction and Antecedents: Drivers of Student Loyalty - A Case Study of a Norwegian University College. *Corporate Reputation Review*. Vol. 10. Pp. 38-59.
- Hendricks, K. B. and Singhal, V. R. (1997). Does Implementing an Effective TQM Program Actually Improve Operating Performance? Empirical Evidence from

- Firms that have Won Quality Awards. *Management Science*. Vol. 43. pp. 1258-1274.
- Henrdon J., Pollick K. Continuing concerns, new challenges, and next steps in physician-patient communication. *J Bone Joint Surg Am*. 2002;84-A((2)):309–315.
- Heskett, J. L., Sasser Jr., W. E. and Schlesinger, L. A. (1997). *The Service Profit Chain*. New York: Free Press.
- Hoest, V. and Knie-Andersen, M. (2004). Modeling Customer Satisfaction in Mortgage Credit Companies. *The International Journal of Bank Marketing*. Vol. 22 No.1. pp. 26-42.
- Hof, R., Mcwilliams, G. E. and Saveri, G. (1998). The ‘Click Here’ Economy. *Business week*. Vol. 22.
- Holmes-Smith, P. (2001). *Introduction to Structural Equation Modeling Using LISREAL*. ACSPRI-Winter Training Program: Perth.
- Homburg, C., Artz, M., & Wieseke, J. (2012). Marketing performance measurement systems: does comprehensiveness really improve performance?. *Journal of Marketing*, 76(3), 56-77.
- Hong, H. (2009). Scale Development for Measuring Health Consciousness: Re-conceptualization. Annual International Public Relations Research Conference. 11-14 March 2009. Holiday Inn University of Miami Coral Gables, Florida. pp. 212-233
- Hopton, J. L., Howie, J. G. and Porter, A. M. (1993). The Need for Another Look at the Patient in General Practice Satisfaction Surveys. *Family Practice*. Vol. 10 No. 1. pp. 82-87.
- Howie, J. G., Heaney, D. J., Maxwell, M. and Walker, J. J. (1998). A Comparison of A Patient Enablement Instrument (PEI) Against Two Established Satisfaction Scales As An Outcome Measure of Primary Care Consultations. *Fam Pract*, Vol. 15, pp.165–171.
- Huber, G.P. (1991). Organizational Learning: The Contributing Processes and the Literatures. *Organization Science*. Vol. 2 No. 1. pp. 88-115.
- Hudak, P. L., McKeeven, P. and Wright, J. G. (2003), The Metaphor of patients as Customers: Implications for Measuring Satisfaction, *Journal of Clinical Epidemiology*, 56(2), 103-108.

- Hudon, C., Tribble, D. S. C., Bravo, G., Hogg, W., Lambert, M., & Poitras, M. E. (2013). Family physician enabling attitudes: a qualitative study of patient perceptions. *BMC family practice*, 14(1), 8.
- Hudon, C., Fortin, M., Rossignol, F., Bernier, S. and Poitras, M. E. (2011), The Patient Enablement Instrument – French Version in a Family Practice Setting: A Reliability Study, *BMC Family Practice*, Vol. 12(71).
- Hudson, M., Smart, P.A. and Bourne, M. (2001). Theory and Practice in SME Performance Measurement Systems. *International Journal of Operations and Production Management*. Vol. 21 No. 8. pp. 1096-1116.
- Hunt, S. D. (2013). A general theory of business marketing: RA theory, Alderson, the ISBM framework, and the IMP theoretical structure. *Industrial Marketing Management*, 42(3), 283-293.
- Hunt, S. M., Mckenna, S. P., Mcewen, J., Backett, E. M., Williams, J., and Papp. E. (1980). A Quantitative Approach to Perceived Health Status: a Validation Study. *Journal of Epidemiology and Community Health*. Vol. 34. pp. 281-286.
- Hye Hyun, H. (2009). Scale Development for Measuring Health Consciousness: Re-conceptualization. The Association for Education in Journalism and Mass Communication (AEJMC) Group Sessions. Sciphers- Science Communication Interest Group. Boston. x
- Inayat, H. T., Harpham, T., McPake, B. and Garner, P. (1998). Private Practitioners in the Slums of Karachi: What Quality of Care do They Offer? *Social Science and Medicine*. Vol. 46 No 11. pp. 1441-1449.
- Ishak, I., Hasnah, H., Daing Nasir, I. and Salmi, M. I. (2006). Service Quality, Client Satisfaction and Loyalty Towards Audit Firms: Perceptions of Malaysian Public Listed Companies. *Managerial Auditing Journal*. Vol. 21 Iss. 7. pp. 738-756.
- Israel, G. D. (1992). Sampling The Evidence Of Extension Program Impact. *Program Evaluation and Organizational Development*, IFAS, University of Florida: Florida.
- Ittner, C., Larcker, D. and Randall, T. (2003). Performance Implications of Strategic Performance Measurement in Financial Service Firms. *Accounting, Organizations and Society*. Vol. 28 No. 7 – 8. pp. 715-741.

- Iversen, A. C. and Kraft, P. (2006). Does Socio-Economic Status and Health Consciousness Influence How Women Respond to Health Related Messages in Media. *Health Education Research*. Vol. 21 No. 5. pp. 601-610.
- Izogo, E. E. and Ogba, I. E. (2014). Service quality, customer satisfaction and loyalty in automobile repair services sector: ", *International Journal of Quality & Reliability Management*, Vol. 32 Iss: 3.
- Jabnoun, N. and Al-Rasasi, A. (2005). Transformational Leadership and Service Quality in UAE Hospitals. *Managing Service Quality*. Vol. 15 No.1. pp. 70-81.
- Jacobsen, K. H., Ansumana, R., Abdirahman, H.A., Bockarie, A. S>, Bangura, U., Meehan, K.A., Jimmy, D. H., Malanoski, Ap. P., Sundufu, A. J. and Stenger, D. A., (2012), Considerations in the selection of healthcare providers for mothers and children in Bo, Sierra Leone: reputation, cost and location, *Int Health*, 4(4):307-13. doi: 10.1016/j.inhe.2012.09.004.
- Jaipaul, C. K. and Rosenthal, G. E. (2003). Do Hospitals with Lower Mortality Rate have Higher Patient Satisfaction? A Regional Analysis of Patients with Medical Diagnoses. *Am J Med Qual*. Vol. 18. pp. 59-65.
- James P. K. (1997). Qualitative. Available at:  
<http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/newpage21.htm>
- Jani, B. D., Blane, D. N. and Mercer, S. W. (2012), The Role of Empathy in Therapy and the Physician- Patient Relationship, *Forsch Komplementmed*, 19:252–257
- Jayanti, R. K. and Burns, A. C. (1998). The Antecedents of Preventive Health Care Behavior: An Empirical Study. *Academy of Marketing Science*. Vol. 26 No. 1. pp. 9-15.
- Jensen, J., Markland, R. (1996). Improving The Application of Quality Conformance Tools In Service Firms. *Journal of Service Marketing*. Vol. 10 No.1. pp. 35-55.
- Jirapan. L. (2001). Measuring and Enhancing the Performance of Closely Linked Decision Making Units in Supply Chains Using Customer Satisfaction Data. A Dissertation. USA: Clemson University.
- John, J. (1992). Patient Satisfaction: The Impact of Past Experience. *Journal of Health Care Marketing*, Vol. 12 No. 3. pp. 56-64.

- Johnston, R. (1995). The Determinants of Service Quality: Satisfiers and Dissatisfiers. *International Journal of Service Industry Management*. Vol. 6 No.5. pp. 53-71.
- Jones, T. and Sasser, W. (1995). Why Satisfied Customers Defect. *Harvard Business Review*. Vol. 73 No.6. pp. 88-99.
- Jubelt, L. E., Graham, J., Maeng, D. D., Li, H., Epstein, A. J., and Metlay, J. P. (2014), Patient Ratings of Case Managers in a Medical Home: Associations With Patient Satisfaction and Health Care Utilization. *Ann Intern Med.*, 161, S59-S65.
- JuinLin, D., HsinLi, Y., YuanPai, J., CheauSheu, I., Glen, R., JenChou, M. and YiLee, C. (2009). Chronic Kidney-Disease Screening Service Quality: Questionnaire Survey Research Evidence from Taichung City. *BMC Health Services Research*. Vol. 9. pp. 239.
- Kaba, R., and Sooriakumaran, P. (2007). The Evolution of the Doctor-Patient Relationship. *International Journal of Surgery*. 5: 57-65.
- Kamat, V. R. (2001). Private Practitioners and Their Role in The Resurgence of Malaria in Mumbai (Bombay) and Navi Mumbai (New Bombay), India: Serving the Affected or Aiding an Epidemic. *Social Science Medicine*. 52: 885-909.
- Kaplan, R. S. (2005). Add a Customer Profitability Metric to Your Balanced Scorecard. *Balanced Scorecard Report*. 7(4): July-August.
- Kaplan, R. S., and Norton, D. P. (2004). *Strategy Maps*. Harvard Business School Press: Boston, MA.
- Kaplan, R. S. and Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press: Boston, MA. : 44.
- Kaplan, R. and Norton, D. (1992). The Balanced Scorecard: Measures That Drive Performance. *Harvard Business Review*. January-February: 71-70.
- Kaplan, R. S. (1983). Measuring Manufacturing Performance: A New Challenge for Accounting Research. *The Accounting Review*. 58: 686-705.
- Kerse, N., Buetow, S., Mainous, A. G., Young, G., Coster, G. and Arroll, B. (2004), Physician-Patient Relationship And Medication Compliance: A Primary Care Investigation, *Ann Fam Med.*, Vol. 2, pp. 455-461.



- Kerssens-Van Drongelen, I. C. and Fisscher, O. A. M. (2003). Ethical Dilemmas in Performance Measurement. *Journal of Business Ethics*. Vol. 45 No. 1-2. pp. 51-63.
- Kessler, D. P., and Mylod, D. (2011). Does patient satisfaction affect patient loyalty? *International Journal of Health Care Quality Assurance*. 24(4): 266 – 273.
- Khamis, A., & Said, N. B. M. (2014). Measuring Student Loyalty towards Residential College using Structural Equation Model. *International Journal of Science and Technology*. 4(12).
- Khan, T. M., Hassali, M. A., and Al-Haddad, M. S. M. (2011). Patient-physician communication barrier: A pilot study evaluating patient experiences. *Journal of Young Pharmacists*. 3(3): 250-255.
- Kokkinaki, F. and Ambler, T. (1999). Marketing Performance Assessment: An Exploratory Investigation into Current Practice and the Role of Firm Orientation. Working paper no. 99-114. Marketing Science Institute: Cambridge, MA.
- Kraft, F. B., and Goodell, P. W. (1993). Identifying the Health Conscious Consumer. *Journal of Health Care Marketing*. 13(3): 18-25.
- Kutner, J. S., Steiner, J. F., Corbett, K. K., Jahnigen, D. W., and Barton, P. L. (1999). Information Needs in Terminal Illness. *Soc Sci Med*. 48: 1341-1352.
- Laine, C. and Davidoff, C. (1996). Patient-Centered Medicine: A Professional Evolution. *Journal of American Med Assn*. Vol. 275. pp. 152-156.
- Lebas, M. J. (1995). Performance Measurement and Performance Management, *International Journal of Production Economics*. Vol. 41 No. 1-3. pp. 23-35.
- Lee, P. M. (2006). Sustainable Quality Services in the Health Care Industry. *The TQM Magazine*. Vol. 18 No. 6.
- Lei, P., and Jolibert, A. (2012). A three-model comparison of the relationship between quality, satisfaction and loyalty: an empirical study of the Chinese healthcare system. *BMC health services research*, 12(1), 436.
- Leong, J. C. I am pleased to present the report of the 2014 Patient Experience and Satisfaction Survey (PESS) on Specialist Outpatient Service of the Hospital Authority (HA).

- Levey, A. S., Eckardt, K. U., Tsukamoto, Y., Levin, A., Coresh, J., Rossert, J., ... and Eknoyan, G. (2005). Definition and classification of chronic kidney disease: a position statement from Kidney Disease: Improving Global Outcomes (KDIGO). *Kidney international*. 67(6): 2089-2398.
- Lewis, J. R. (1994). Patient Views on Quality Care in General Practice: Literature Review. *Social Science and Medicine*. Vol. 39 No. 5. pp. 655-670.
- Linder-Pelz, S. (1982). Toward a Theory of Patient Satisfaction. *Social Science Medicine*. Vol. 16. pp. 577-582.
- Linder-Pelz, S. and Struening, E. L. (1985). The Multidimensionality of Patient Satisfaction with a Clinic Visit. *Journal Communication Health*. Vol. 10. pp. 42- 54.
- Lindsay, G. M. Smith, L. N., Hanlon, P. and Wheatley, D. J. (2001). The Influence of General Health Status and Social Support on Symptomatic Outcome Following Coronary Artery Bypass Grafting. *Heart*. Vol. 85. pp. 80-86 .
- Liu, S., Amendah, E., En-Chung Chang, E. C. and Pei, L. K. (2008). Satisfaction and Value: A Meta-Analysis in the Healthcare Context. *Health Marketing Quarterly*. Vol. 23 Issue 4. pp. 49-73.
- Llonch, J., Eusebio, R. and Ambler, T. (2002). Measure of Marketing Success - A Comparison between Spain and the UK. *European Management Journal*. Vol. 20 No. 4. pp. 414-422.
- Loeb, J. M. (2004). The Current State of Performance Measurement in Health Care. *International Journal for Quality in Health Care*. Vol. 16 Supplement 1. pp. i5-i9.
- Logie, C., James, L., Tharao, W., and Loutfy, M. (2013). Associations between HIV-related stigma, racial discrimination, gender discrimination, and depression among HIV-positive African, Caribbean, and Black women in Ontario, Canada. *AIDS patient care and STDs*. 27(2): 114-122.
- Lönnroth, K., Tran, T. U., Thuong, L. M., Quy, H. T. and Diwan V. (2001). Can I Afford Free Treatment? Perceived Consequences of Health Care Provider Choices among People With Tuberculosis in Ho Chi Minh City, Vietnam. *Social Science Medicine*. Vol. 52. pp. 935-948.
- Lovell, M. R., Luckett, T., Boyle, F. M., Phillips, J., Agar, M., & Davidson, P. M. (2014). Patient education, coaching, and self-management for cancer pain. *Journal of Clinical Oncology*, 32(16), 1712-1720.

- Lurie, S. J. (2012). History and practice of competency-based assessment. *Medical education*, 46(1), 49-57.
- Luxford, K., Safran, D. G., & Delbanco, T. (2011). Promoting patient-centered care: a qualitative study of facilitators and barriers in healthcare organizations with a reputation for improving the patient experience. *International Journal for Quality in Health Care*, 23(5), 510-515.
- Lynch, R. L. and Cross, K. F. (1991), *Measure Up – The Essential Guide to Measuring Business Performance*. Mandarin: London.
- Lyu, H., Wick, E. C., Housman, M., Freischlag, J. A., and Makary, M. A. (2013). Patient satisfaction as a possible indicator of quality surgical care. *JAMA surgery*. 148(4): 362-367.
- Maguire P., Pitceathly C. Key communication skills and how to acquire them. *BMJ*. 2002;325((7366)):697–700.
- Maisel, L. S. (2001). *Performance Measurement Practices Survey Results*. AICPA: New York.
- Malaysian Health promotion Board Act 2006 and 586 Act.
- Manary, M. P., Boulding, W., Staelin, R., and Glickman, S. W. (2013). The patient experience and health outcomes. *New England Journal of Medicine*. 368(3): 201-203.
- Mansouri, S. H., & Pakia, M. M. (2015). Investigation of the Effect of Brand Image and Service Quality on trust, commitment and Behavioral Intentions. *Asian Journal of Research in Marketing*, 4(1), 87-99.
- Mant, J. (2001). Process Versus Outcome Indicator in the Assessment of Quality of Health Care. *International Journal for Quality in health Care*. Vol. 13 No. 6. pp. 475-480.
- Marquis, M. S., Davies, A. R. and Ware, J. E. (1983). Patient Satisfaction and Change in Medical Care Provider: A Longitudinal Study. *Medical Care*. Vol. 21. pp. 821-829.
- Marshal, G. N. and Hays, R. D. (1994). *The Patient Satisfaction Questionnaire (PSQ-18)*. RAND: Santa Monica, Canada.
- Marshall, G. N., Hays, R. D., Sherbourne, C. D., and Wells, K. B. (1993). The Structure of Patient Satisfaction with Outpatient Medical Care. *The American Psychological Association Inc*. Vol. 3 No. 4. pp. 477-483.

- McAlexander, J. H., Kaldenberg, D. O. and Koenig, H. F. (1994). Service quality measurement. *Journal of Health Care Marketing*. Vol. 14 No. 3. pp. 34-40.
- McCarthy, D. G. (1997). *The Loyalty Link: How Loyal Employees Create Loyal Customers*. John Wiley and Sons: New York. pp.13.
- McCombie, S. C. (1996). Treatment Seeking for Malaria: A Review of Recent Research, *Social Science Medicine*. Vol. 43. pp. 933-945.
- McCord, C. (1988). Health care in Mozambique: the Colonial Legacy to 1985. In *Women's Health and Apartheid: The Health of Women and Children and The Future of Primary Health Care in Southern Africa*, eds. M. Wright, Z. Stein and J. Scandlyn, pp. 177-184. Columbia University, New York.
- McDonnell, A. and Hall, C. M. (2008). A Framework for the Evaluation of Winery Servicescapes: A New Zealand Case. *Pasos: Journal of Tourism and Cultural Heritage*. Vol. 6. No. 2. pp. 231-247.
- McGee, J. V. (1992), *What is Strategic Performance Measurement?*, Ernst & Young Center for Business Innovation: Boston, MA.
- McGorr, S. (2000). Measurement in A Cross-Cultural Environment: Survey Translation Issues. *Qualitative Market Research*. Vol. 3 No. 1. pp. 74-81.
- McKinley, R. K., Manku-Scott, T., Hastings, A. M., French, D. P. and Baker, R. (1997). Reliability and Validity of a New Measure of Patient Satisfaction with Out of Hours Primary Medical Care in the United Kingdom: Development of a Patient Questionnaire. *BMJ*. Vol. 314. pp. 193-198. (Available at: <http://www.bmj.com/cgi/content/abstract/314/7075/193>) (Accessed on: 13 February, 2009)
- McNeil, S. E. (2010). Tips on How to Increase your Survey Response Rates. Primary Point, Inc. (Available at: <http://www.peoplepulse.com.au/Survey-Response-Rates.htm>). (Assessed on 31 January 2010)
- McQuitty, S. (2004). Statistical Power and Structural Equation Models in Business Med. Vol. 54(6), pp. 879–888.
- Mead, N., Bower, P., and Hann, M. (2002). The impact of general practitioners' patient-centredness on patients' post-consultation satisfaction and enablement. *Social science & medicine*. 55(2): 283-299.
- Mead, N., Bower, P., & Roland, M. (2008). Factors associated with enablement in general practice: cross-sectional study using routinely-collected data. *The British Journal of General Practice*, 58(550), 346.

- Medha, S. and Kumar, R. A. (2013). Investigating The Mediating Effect Of Customer Satisfaction In The Service Quality . Customer Loyalty Relationship. *Journal of Consumer Satisfaction, Dissatisfaction & Complaining*, Vol. 26 pp. 95
- Medical Act 1971
- Medical Legislation and Globalisation Section, Ministry of Health Malaysia
- Medicines Act (ads and Sales) Act 1956 (Revised 1983).
- Meehan, K. A., and Stenger, D. A. (2012). Considerations in the selection of healthcare providers for mothers and children in Bo, Sierra Leone: reputation, cost and location. *International Health*. 4(4): 307-313.
- Mercer, S. W., Jani, B. D., Maxwell, M., Wong, S. Y., & Watt, G. C. (2012). Patient enablement requires physician empathy: a cross-sectional study of general practice consultations in areas of high and low socioeconomic deprivation in Scotland. *BMC family practice*, 13(1), 6.
- Meyer, M.W. (1998). Finding Performance: The New Discipline in Management. In *Performance Measurement: Theory And Practice 1*. Centre for Business Performance Cambridge: United Kingdom. pp. xiv–xxi.
- Michaelidou, N. and Hassan, L. M. (2008). The Role of Health Consciousness, Food Safety Concern and Ethical Identity on Attitudes and Intentions Towards Organic Food. *International Journal of Consumer Studies*. Vol. 32 No. 1. pp. 163-170.
- Michaud, P. L., de Grandmont, P., Feine, J. S., and Emami, E. (2012). Measuring patient-based outcomes: is treatment satisfaction associated with oral health-related quality of life?. *Journal of dentistry*. 40(8): 624-631.
- Miles, J. A. and Naumann, S. E. (2004). The English Patient: A Model of Patient Perceptions of Triage in an Urgent Care Department in England. *M@n@gement*. Vol. 7 No. 1. pp. 1-11.
- Mills, A., Brugha, R., Hanson, K. and McPake, B. (2002). What Can be Done about The Private Sector in Low-Income Countries? *Bulletin of the World Health Organization*. Vol. 80. pp. 325-330.
- Minhas, R. (2007). Does copying clinical or sharing correspondence to patients result in better care? *Int J Clin Prac*. 61(8), 1390–1395.
- Ministry of Health (1995). *An Annual Report*. Ministry of Health: Putrajaya, Malaysia.

- Ministry of Health (2001). *An Annual Report*. Ministry of Health: Putrajaya, Malaysia.
- Ministry of Health (2007). *An Annual Report*. Ministry of Health: Putrajaya, Malaysia.
- Ministry of Health (2008). *An Annual Report*. Ministry of Health: Putrajaya, Malaysia.
- Ministry of Health, Malaysia (1990). *Quality Assurance: A Problem Solving Approach*.
- Ministry of Health: Putrajaya, Malaysia.
- Mintz, O., and Currim, I. S. (2013). What drives managerial use of marketing and financial metrics and does metric use affect performance of marketing-mix activities?. *Journal of Marketing*. 77(2): 17-40.
- Mittal, B. and Lassar, W. M. (1998). Why do Customer Switch? The Dynamics of Satisfaction Versus Loyalty. *Journal of Services*. Vol. 10 No. 1. pp. 34-58.
- Mittal, V. and Baldasare, P. M. (1996). Eliminate the Negative. *Journal of Health Care Marketing*. Vol. 16 No. 3. pp. 24-31.
- Morgan, N. A., Clark, B. H. and Gooner, R. (2002). Marketing Productivity, Marketing Audits, and Systems for Marketing Performance Assessment Integrating Multiple Perspectives. *Journal Business Research*. Vol. 55 No. 5. pp. 363-375.
- Moliner, M. A. (2009). Loyalty, perceived value and relationship quality in healthcare services. *Journal of service management*. 20(1): 76-97.
- Morris, B. J., Jahangir, A. A., and Sethi, M. K. (2013). Patient satisfaction: an emerging health policy issue. *AAOS Now*.
- Moullin, M. (2002). *Delivering Excellence in Health and Social Care*. Open University Press: Buckingham.
- Mumford, M. D., Connelly, M. S. Helton, W. B., Van-Doorn, J. R. and Osburn, H. K. (2002). Alternative Approaches for Measuring Values: Direct and Indirect Assessments in Performance Prediction. *Journal of Vocational Behavior*. Vol. 61. pp. 348-373.
- Murrell, A. R. (2012). *Relationships among self-esteem, psychological and cognitive flexibility, and psychological symptomatology* (Doctoral dissertation, UNIVERSITY OF NORTH TEXAS).

- Murti, A., Deshpande, A., & Srivastava, N. (2013). Service Quality, Customer (Patient) Satisfaction and Behavioural Intention in Health Care Services: Exploring the Indian Perspective. *Journal of Health Management*, 15(1), 29-44.
- Naidu, A. (200). Factors Affecting Patient Satisfaction and Healthcare Quality. *Int J Health Care Qual Assur.* Vol. 22(4), pp.366-381.
- Naidu, A. (2009). Factors Affecting Patient Satisfaction and Healthcare Quality. *International Journal of Health Care Quality Assurance.* Vol. 22 Iss: 4, pp. 366-381.
- Naylor, C. D. (1988). Private Medicine and Privatization of Health Care in South Africa. *Social Science and Medicine.* Vol. 27 No. 11. pp. 1153-1170.
- Ndubisi, N. O. (2012). Mindfulness, reliability, pre-emptive conflict handling, customer orientation and outcomes in Malaysia's healthcare sector. *Journal of Business Research.* 65(4): 537-546.
- Neely, A. (eds.) (2002). *Business Performance Measurement: Theory and Practice.* Cambridge University Press: UK.
- Neely, A. D. (1998). *Measuring Business Performance: Why, What and How.* The Economist and Profile Books Ltd.: London.
- Neely, A., Gregory, M. and Platts, K. (1995). Performance Measurement System Design: A Literature Review and Research Agenda. *International Journal of Operations and Production Management.* Vol. 15 No. 4. pp. 80-116.
- Neil Boyce (1996). Using Outcome Data To Measure Quality In Health Care. *International Journal For Quality In Health Care.* Vol. 8 No. 2. pp: 101-104.
- Nelson, E. C. and Wasson J. H. (1994). Using Patient-Based Information to Rapidly Redesign Care. *Health Care Forum.* July-August. pp. 25-29.
- Nelson, E., Rust, R. T., Zahorik, A., Rose, R., Batalden, P. and Siemanski, B. (1992). Do patient perceptions of quality relate to hospital financial performance. *Journal of Health Care Marketing.* Vol. 13 pp. 1-13.
- Nelson, K. M., Helfrich, C., and Sun, H. (2014). Implementation of the Patient-Centered Medical Home in the Veterans Health Administration: Associations With Patient Satisfaction, Quality of Care, Staff Burnout, and Hospital and Emergency Department Use. *JAMA Intern Med.* Vol. 174(8), 1350-1358.
- Nemetz, S. and Giarelli, E. (2002). Improving the Quality of Life Through Education: A pilot program of symptom management classes for oncology

- patients. *The American Journal of Nursing*. 1Vol. 102. April. pp. 40-42.
- Newcomer, R., Preston, S. and Harrington, C. (1996). Health Plan Satisfaction and Risk of Disenrollment Among Social/HMO and Fee-For-Service Recipients. *Inquiry*. Vol. 33. pp. 144-154.
- Newsom, J. T. (2002). A Multilevel Structural Equation Model for Dyadic Data. *Structural Equation Modeling*, Vol. 9. pp. 431-447.
- Nguyen, N. and LeBlanc, G. (2001). Corporate Image and Corporate Reputation in Customers Retentions Decisions in Services. *Journal of Retailing and Consumer Services*. Vol. 8. pp. 227-236.
- Noble, P. C., Conditt, M. A., Cook, K. F., & Mathis, K. B. (2006). The John Insall Award: Patient expectations affect satisfaction with total knee arthroplasty. *Clinical orthopaedics and related research*, 452, 35-43.
- Noor Hazilah, A. M. and Phang, S. N. (2009). Patient Satisfaction as an Indicator of Service Quality in Malaysian Public Hospitals. *Asian Journal on Quality*. Vol. 10 Issue. 1. Pp. 77-87
- Norcross, W. A., Ramirez, C. and Palinkas, L. A. (1996). The Influence of Women on The Health Care-Seeking Behavior of Men. *Journal of Family Practice*. Vol. 43 No. 5. pp. 475-80
- Oja, P. I., Kouri, T. T. and Pakarinen, A. J. (2006). From Customer Satisfaction Survey to Corrective Actions in Laboratory Services in a University Hospital. *International Journal of Quality in Health Care*. Vol. 18. pp. 422-428.
- Oliver, R. L (1980a). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*. Vol. 42. pp. 460-469.
- Oliver, R. L. (1980b). Theoretical Bases of Consumer Satisfaction Research: Review Critique and Future Directions. , In Lamb, C.W., and Dunne, P.M. (Eds). *Theoretical Developments in Marketing*, AMA: Chicago, IL, pp. 11-14.
- Oliver, R. L. (1981). Measurement and Evaluation of Satisfaction Processes in Retail Settings. *Journal of Retailing*. Vol. 57 Issue. Fall. pp. 25-48 and 138-139.
- Oliver, R. L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. McGraw-Hill: New York.
- Ong, W. M., and Nankervis, A. (2012). Service quality in higher education: Students' perceptions in Australia and Malaysia. *Review of Integrative and Business Research*. 1(1): 277-290.



- Ovretveit, J. (2000). Total Quality Management in European Healthcare. *International Journal of Healthcare Quality Assurance*. Vol. 13 No. 2. pp. 74-80.
- Palaniappan, A. K. (2007). *SPSS in Educational Research*. Kuala Lumpur: Scholar Press.
- Palmer, N. (2000), The use of private-sector contracts for primary health care: theory, evidence and lessons for low-income and middle-income countries. *Bull World Health Organ* Vol. 78, pp:821–829.
- Palmer, R. H., Donabedian, A. and Povar, G. J. (1991), *Striving for Quality in Health Care: an Inquiry into Policy and Practice*. pure and simple? An Inquiry, Health Administration Press, Vol. 28, pp. 29-38
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1985), A Conceptual Model of Service Quality and Implications for Future Research, *Journal of Marketing*, Vol. 49 Fall, pp. 41-50.
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1988), SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality, *Journal of Retailing*, Vol. 64 Issue. Spring, pp. 12-40.
- Pascoe, G. C. (1983). Patient Satisfaction in Primary Health Care: a Literature Review and Analysis. *Evaluation and Program Planning*. Vol. 6. pp. 185-210.
- Paul, J., & Rana, J. (2012). Consumer behavior and purchase intention for organic food. *Journal of Consumer Marketing*, 29(6), 412-422.
- Pauwels, R. A., Buist, A. S., Calverley, P. M., Jenkins, C. R., & Hurd, S. S. (2014). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. *American journal of respiratory and critical care medicine*, 163(5).
- Pawlikowska, T., Zhang, W., Griffiths, F., Van Dalen, J., & van der Vleuten, C. (2012). Verbal and non-verbal behavior of doctors and patients in primary care consultations—How this relates to patient enablement. *Patient education and counseling*, 86(1), 70-76.
- Payne, A. and Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing*. Vol. 69 October. pp. 167-176.
- Perez, M. S., Gazquez Abad, J. C., Carrillo, G. M. M. and Fernandez, R. C. (2007). Effects of Service Quality Dimensions on Behavioural Purchase Intentions: A study in Public-Sector Transport. *Managing Service Quality*. Vol. 17 No. 2.

pp. 134-151.

- Perrini, F., Russo, A., Tencati, A., & Vurro, C. (2011). Deconstructing the relationship between corporate social and financial performance. *Journal of Business Ethics, 102*(1), 59-76.
- Peters, T. J. and Waterman, R. H. (1982). In search of excellence. Harper and Row, Publishers: New York.
- Petti, C. A., Polage, C. R., Quinn, T. C., Ronald, A. R., & Sande, M. A. (2006). Laboratory medicine in Africa: a barrier to effective health care. *Clinical Infectious Diseases, 42*(3), 377-382.
- Pitaloka, D. S. and Rizal A. M. (2006). Patient's Satisfaction in Antenatal Clinic Hospital Universiti Kebangsaan Malaysia. *Jurnal Kesihatan Masyarakat (Malaysia)*. Vol. 12 No. 1. pp. 1-10.
- Platonova, E. A., Kennedy, K. N. and Shewchuk, R. M. (2008), Understanding Patient Satisfaction, Trust, and Loyalty to Primary Care Physicians, *Med Care Res Rev*, Vol. 65 (6), pp. 696-712.
- Polese, F., and Capunzo, M. (2013). The determinants of translational medicine success-A managerial contribution. *Translational Medicine@ UniSa*. 6: 29.
- Pollitt, D. (2007). Fujitsu Services Develops the Reputation for Great Customer Satisfaction. *Human Resource Management International Digest*. Vol. 15 No. 4. pp. 21-25.
- Poter, M. E. (2010), What is Value in Health Care, *The New England Journal of Medicine*,
- Preker AS, Harding A, Travis P. "Make or buy" decisions in the production of health care goods and services: new insights from institutional economics and organizational theory. *Bull World Health Org* 2000;78:779-90.
- Price, S., Mercer, S. W., & MacPherson, H. (2006). Practitioner empathy, patient enablement and health outcomes: a prospective study of acupuncture patients. *Patient education and counseling, 63*(1), 239-245.
- Price, L. L. and Arnould, E. J. (1999). Commercial Friendships: Service Provider-Client Relationships in Context. *Journal of Marketing*. Vol. 63 October. pp. 38-56.
- Primary Care Doctor's organization Malaysia (PCDOM) (available at: <http://www.primacare.org.my>) (accessed on 16<sup>th</sup> February, 2008)

- Pritchard, M. P. and Howard, D. R. (1997). The loyal traveler: examining a typology of service patronage. *Journal of Travelers Research*. Vol. 35 No. 4. pp. 2-11.
- Private Medical Clinics, Malaysian Medical Association (MMA), MMA Johor Branch (available at: [http://www.mma.org.my/html/pdf/prv\\_health\\_fac.pdf](http://www.mma.org.my/html/pdf/prv_health_fac.pdf)) (Accessed on 23<sup>rd</sup>. August, 2008).
- Private Medical Practitioners Association of Selangor (available at: <http://www.mmawilayah.com/index.htm>) (accessed on: 15<sup>th</sup>. February, 2009).
- Private Medical Practitioners Association of Selangor (available at: <http://www.mmaselangor.org/>) (accessed on 15<sup>th</sup>. February, 2009).
- Proctor, S. and Campbell, J. (1999). A Developmental Performance Framework for Primary Care. *International Journal of Health Care Quality Assurance*, Vol. 12 No. 7, pp. 279-286.
- Qian, D., Pong, R. W., Yin, A., Nagarajan, K. V., and Meng, Q. (2009). Determinants of health care demand in poor, rural China: the case of Gansu Province. *Health Policy and Planning*. 24(5). 324-333.
- Raduan, C. R., Jegak, U., Mohani, A. and Ng. K. L. (2004). Hospital Service Quality: A Managerial Challenge. *International Journal of Health Care Quality Assurance*.
- Rahmqvist, M. and Bara, A. C. (2010), Patient Characteristics and Quality Dimensions Related to Patient Satisfaction. *International Journal for Quality in Health Care*. Volume 22, No. 2, pp: 86–92.
- Raja Eileen Soraya, Messrs Raja, Darryl and Loh - The Advocate and Solicitor (2009). High Court of Malaya. *Medico-Legal Issues In Medicine*. Presented at: MMA Symposium - Future Challenges for Healthcare in Malaysia. 18<sup>th</sup> January. Sunway Resort Hotel & Spa. Kuala Lumpur.
- Raja Jamaluddin, R. A. M. (2001). Mengujudkan Budaya Kualiti di Klinik-Klinik Jagaan Kesihatan Primer Swasta. *Jurnal Kesihatan Masyarakat*. Vol. 7. pp. 19-23.
- Raja Jamaluddin, R. A. M., Azmi, M. T., Hanafiah, M. S., Rozlan, I. and Aljunid, S. M. (1998). Reorientation of Medical and Health Services through Community Health Centers in The Klang Valley. Final Report - IRPA Research Project 06-02-02-0049. Kuala Lumpur: Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia.

- Rakich, J. S., Longest, Jr. B.B. dan Darr, K. (1985). *Managing Health Services Organizations*. Philadelphia: W.B. Saunders Company.
- Ramesh, M. and Wu, X. (2008), *Realigning public and private health care in southeast Asia*, *The Pacific Review*, Vol. 21 No. 2 May 2008: 171–187
- Ramsay, J., Campbell, J. L., Schroter, Green, J. and Roland, M. (2000), *The General practice Assessment Survey (GPAS): Test of Data Quality and Measurement Properties*, *Fam. Pract.*, Vol. 17(5), pp. 372-379.
- RAND Health (available at: [http://www.rand.org/site\\_info/](http://www.rand.org/site_info/))
- Rao, K. D., Peters, D. H. and Bandeen-Roche, K. (2006). *Toward Patient- Centered Health Services In India—A Scale to Measure Patient Perceptions of Quality*. *International Journal for Quality in Health Care*. Vol. 18, pp. 414-421.
- Raposo, M. L., Alves, H. M. and Duarte, P. A. (2009), *Dimensions of Service Quality and Satisfaction in Healthcare: A Patient’s Satisfaction Index*, *Service Business*, Vol. 3(1), pp. 85-100
- Raykov, T. and Marcoulides, G. A. (2000). *A Method for Comparing Completely Standardized Solutions in Multiple Groups*. *Structural Equation Modeling*. Vol. 7. pp. 292-308.
- Rebuge, Á., & Ferreira, D. R. (2012). *Business process analysis in healthcare environments: A methodology based on process mining*. *Information Systems*, 37(2), 99-116.
- Regulation 2006 P.U. (A) 137/2006 (2006). *Laws Of Malaysia: Act 586 Private Healthcare Facilities And Services Act 1998*. Ministry of Health: Malaysia.
- Rehman, S. U., Nietert, P. J., Cope, D. W. and Kilpatrick, A. O. (2005). *What to Wear Today? Effect of Doctor’s Attire on the Trust and Confidence of Patients*. *The American Journal of Medicine*. Vol. 118 Issue: 11. Pp. 1279-1286.
- Reidenbach, E. R. and Sandifer-Smallwood, B. (1990). *Exploring Perceptions of Hospital Operations by a Modified SERVQUAL Approach*. *Journal of Health Care Marketing* . Vol. 10 No. 4. pp. 47- 55.
- Rempala, D. and Garvey, K. (2007). *Sex Differences in the Effects of Incremental Changes in Waist-To-Hip Ratio*. *Journal of Social, Evolutionary, and Cultural Psychology*. Vol. 1 No. 3. pp. 86-97. (Available at: [www.jsecjournal.com](http://www.jsecjournal.com))
- Reynaldo, J. and Santos, A. (1999). *A Tool for Assessing the Reliability of Scales*. *Journal of Extension*. Vol. 37 No. 2. (Available at:

<http://www.joe.org/joe/1999april/tt3.php>) (Accessed on 4 April 2009).

- Richard, M. D. and Allaway, A. W. (1993). Service Quality Attributes and Choice Behaviour. *Journal of Services Marketing*. Vol. 7 No. 1. pp. 59-68
- Richards, H. M., & Schwartz, L. J. (2002). Ethics of qualitative research: are there special issues for health services research?. *Family Practice*, 19(2), 135-139.
- Ridd, M., Shaw, A., Lewis, G. and Salisbury, C. (2009), The Patient–Doctor Relationship: A Synthesis of The Qualitative Literature on Patients’ Perspectives, *Br J Gen Pract.*, Vol. 59, pp. 268–275
- Robertsson, O., Dunbar, M., Pehrsson, T., Knutson, K., & Lidgren, L. (2000). Patient satisfaction after knee arthroplasty: a report on 27,372 knees operated on between 1981 and 1995 in Sweden. *Acta Orthopaedica Scandinavica*, 71(3), 262-267.
- Roncoroni, J., Tucker, C. M., Wall, W., Nghiem, K., Wheatley, R. S., & Wu, W. (2014). Patient Perceived Cultural Sensitivity of Clinic Environment and Its Association With Patient Satisfaction With Care and Treatment Adherence. *American Journal of Lifestyle Medicine*, 8(6), 421-429.
- Rose, S. A., Poynter, P. S., Anderson, J. W., Noar, S. M., and Conigliaro, J. (2013). Physician weight loss advice and patient weight loss behavior change: a literature review and meta-analysis of survey data. *International journal of obesity*. 37(1): 118-128.
- Rhoades, L., Eisenberger, R., Armeli, S. (2001), "Affective commitment to the organization: the contribution of perceived organizational support", *Journal of Applied Psychology*, Vol. 86 No.5, pp.825-36.
- Roberge, D., Beaulieu, M. D., Hadad, S., Lebeau, R. and Pineault, R. (2001), Loyalty to the Regular Care provider: Patients and Physicians View. *Family Practice*. Vol. 18 No. 1. pp. 53-59.
- Roberts, N., & Grover, V. (2012). Investigating firm's customer agility and firm performance: The importance of aligning sense and respond capabilities. *Journal of Business Research*, 65(5), 579-585.
- Ross, C. K., Steward, C. A. and Sinacore, J. M. (1993), The Importance of Patient Preferences in the Measurement of Health Care Satisfaction, *Medical Care*, Vol. 31 No. 12, pp. 1138-1149.

- Rööst, M., Zielinski, A., Petersson, C., & Strandberg, E. L. (2015). Reliability and applicability of the Patient Enablement Instrument (PEI) in a Swedish general practice setting. *BMC Family Practice*, *16*, 31. <http://doi.org/10.1186/s12875-015-0242-9>
- Roter, D. L., Stewart, M., Putnam, S. M., Lipkin, M., Stiles, W. and Inui, T. S. (1997), Communication Patterns of Primary Care Physicians, *JAMA*, Vol. 277 No. 4, pp. 350-356.
- Rust, R.T, Oliver, R.L (1994), "Service quality: insights and managerial implications from the frontier", in Rust, R.T, Oliver, R.L (Eds), *Service Quality: New Directions in Theory and Practice*, Sage Publications, Thousand Oaks, CA, pp.1-19.
- Rust, R.T, Zahorik, A.J, Keiningham, T.L (1995), "Return on quality (ROQ): making service quality financially accountable", *Journal of Marketing*, Vol. 59 pp.58-70.
- Rutledge, R. W. and Nascimento, P. (1996), Satisfaction with HMOs: Accessibility Issues Top the List for Patients in Commercial Groups, *Journal of Health Care Marketing*, Vol. 16 No. 1, pp. 22-27.
- Ryu, K., Lee, H. R., & Gon Kim, W. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, *24*(2), 200-223.
- Sachdeva, R., Rice, T., Ciesielczyk, L., and Singleton, M. (2014). 773: A National Approach For Measuring Performance And Quality In Pediatric Critical Care. *Critical Care Medicine*, *42*(12), A1546.
- Saeed, R., Ghafoor, M. O., Sarwar, B., Lodhi, R. N., Arshad, H. M., and Ahmad, M. (2013). Factors Affecting Customer Satisfaction in Health Care Services in Pakistan.
- Sandberg, K. (2002). Kicking the tires of corporate reputation. *Harvard Management Communication Letter*. Vol. 5. pp. 3-4.
- Sanjay Basu, S., Andrews, J., Kishore, S., Panjabi, R. and Stuckler, D. (2012), Comparative Performance of Private and Public Healthcare Systems in Low- and Middle-Income Countries: A Systematic Review. *PLoS Medicine*, Vol. (6).

- Sapsford, R. and Abbott, A. (1992). *Research Methods for Nurses and the Caring Professions*. Buckingham: Open University Press.
- Saver, B. G., Martin, S. A., Adler, R. N., Candib, L. M., Deligiannidis, K. E., Golding, J., ... & Topolski, S. (2015). Care that matters: quality measurement and health care. *PLoS Med*, 12(11).
- Sawatzky, R., Ambrose, T. L., Miller, W. C. and Marra, C. A. (2007). Physical Activity as a Mediator of the Impact of Chronic Conditions on Quality of Life In Older Adults. *Health and Quality of Life Outcomes*. Vol. 5 No. 68.
- Schneider, B. and White, S. (2004). Service Climate. In Schneider, B. and White, S. (Eds.)
- Service quality: Research perspectives (pp. 91-134). Sage Publications: Thousands Oaks, CA.
- Schneider, B., White, S.S. and Paul, M.C. (1998). Linking Service Climate and Customer Perceptions of Service Quality: Test of a Causal Model. *Journal of Applied Psychology*. Vol. 83 No. 2. pp. 150-163.
- Schoeps, N., Chaudry, R. and Brandon, W. (1999). Measuring Patient Satisfaction for Medicaid Recipients. *Assoc Health Serv Res Meet*. Vol. 16. pp. 372-373.
- Schumacker, R. E. and Lomax, R. G. (2004). *A Beginner's Guide to Structural Equation Modeling*. London: Lawrence Erlbaum Associates.
- Seidell, J. C., Perusse, L., Despres, J. P. and Bouchard, C. (2001). Waist and Hip Circumferences Have Independent and Opposite Effects on Cardiovascular Disease Risk Factors: The Quebec Family Study. *Am J Clin Nutr*. Vol.74. pp. 315-321.
- Sekaran, Uma. (2005). *Research Methods for Business: A Skill Building Approach*. (4<sup>th</sup>Ed.). New York: John Wiley & Sons, Inc.
- Services Act 1998 and Private Health Care Facilities and Services (Private Medical Clinics or Private Dental Clinics) Regulations 2006.
- Setia, P., Venkatesh, V., & Joglekar, S. (2013). Leveraging digital technologies: How information quality leads to localized capabilities and customer service performance. *Mis Quarterly*, 37(2), 565-590.
- Sevier, R. (1994). Image is everything, College and University, Winter, pp. 60-75.
- Sewell, N. (1997). Continuous Quality Improvement in Acute Healthcare: Creating a Holistic and Integrated Approach. *International Journal of Healthcare Quality Assurance*. Vol. 10 No. 1. pp. 20-26.

- Shaw, E. (2014). The quest for a general theory of the marketing system. *Journal of Historical Research in Marketing*, 6(4), 523-537.
- Sheth, J. N. and Sisodia, R. S. (2002), Marketing Productivity Issues and Analysis, *Journal Business Research*, Vol. 55 No. 3, pp. 349-362.
- Shoukri, M. M. and Edge, V. L. (1996). *Statistical Methods for Health Sciences*, Boca Raton, Florida: CRC Press.
- Siddiqi, K. O. (2011). Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International Journal of Business and Management*, 6(3), p12.
- Simmons, J. (2004), Managing in the Post-Managerialist Era, *Management Decision*, Vol. 42 No. 75, pp. 601-611.
- Singer, S. J., Burgers, J., Friedberg, M., Rosenthal, M. B., Leape, L., & Schneider, E. (2011). Defining and measuring integrated patient care: promoting the next frontier in health care delivery. *Medical Care Research and Review*, 68(1), 112-127.
- Sitzia, J. and Wood, N. (1997), Patient Satisfaction: A Review of Issues and Concepts, *Social Science Medicine*, Vol. 45, pp. 1829-1843
- Sitzia, J., Wood, N. (1998), "Response rate in patient satisfaction research: an analysis of 210 published studies", *International Journal for Quality in Health Care*, Vol. 10 No.4, pp.311-17.
- Sivo, S. A., Fan, X. T., Witta, E. L., and Willse, J. T. (2006). The Search for 'Optimal' Cutoff Properties: Fit Index Criteria in Structural Equation Modeling, *The Journal of Experimental*
- Smaiziene, I. and Jucevicius, R. (2009). Corporate Reputation: Multidisciplinary Richness and Search for a Relevant Definition. *Engineering Economics*. Vol. 2. Pp. 91-100.
- Smith E, Brugha R, Zwi A. (2001). Working with private sector providers for better health care, an introductory guide. London: Options and LSHTM.
- Smith, A. M. (2000). Using consumer Benchmarking Criteria to Improve Service Sector Competitiveness. *Benchmarking: An International Journal*, Vol. 7 No 5, pp. 373-388.
- Smith, J. A., Scammon, D. L. and Beck, S. L. (1995). Using Patient Focus Groups for New Patient Services. *Journal Quality Improvement*. Vol. 21. pp. 22-31.



- Smith, M. A., Bindman, A. B., Davis, M. K. and Finch, M. D. (2001). To Help or Hinder: Which Is More Important in Explaining a Physician's Willingness to Recommend a Health Plan? *Medical Care*. Vol. 39 No. 5. pp. 469-77.
- Snijder, M. B., Zimmet, P. Z., Visser, M., Dekker, J. M., Seidell, J. C. and Shaw, J. E. (2004). Independent and Opposite Associations of Waist and Hip Circumferences with Diabetes, Hypertension and Dyslipidemia: The AusDiab Study. *International Journal of Obesity*. Vol. 28. pp. 402- 409. (Available at: [www.nature.com/ijo](http://www.nature.com/ijo)). (Assessed on 15 April 2010)
- Soh, G. (1991). Patient Satisfaction with Physician Care. *Hawaii Medical Journal*. 50(4): 149-152.
- Spreng, R. A., and Mackoy, R. D. (1996). An Empirical Examination of A Model of Perceived Service Quality And Satisfaction, *Journal of Retailing*. 72(2): 201-214.
- Standifird, S. S. (2005). Reputation Among Peer Academic Institutions: An Investigation of The US News And World Report's Rankings. *Corporate Reputation Review*. 8(3): 233-244.
- Starfield, B. (1998). *Primary Care, Balancing Health Needs, Services and Technology*. New York: Oxford University Press: 141-158.
- Steihaug, S., Gulbrandsen, P., and Werner, A. (2012). Recognition can leave room for disagreement in the doctor-patient consultation. *Patient education and counseling*, 86(3): 316-321.
- Steward, M. A. (1995). Effective Physician-Patient Communication and Health Outcomes: A Review. *Can. Med. Assoc. Journal*. 152(9): 1424-1433.
- Streiner, D. L., and Norman, G. R. (1995). *Health Measurement Scales. A Practical Guide to their Development and Use (2<sup>nd</sup> Ed)*. Oxford: Oxford University Press.
- Suki, N. M. (2011). Assessing patient satisfaction, trust, commitment, loyalty and doctors' reputation towards doctor services. *Pakistan Journal of Medical Sciences*, 27(5), 1207-1210.
- Sumaedi, S., Gede, I., Bakti, Y. M., Nidya, T. R., Astrini, J., Yarmen, T. W. M., (2014), The empirical study on patient loyalty, *Clinical Governance: An International Journal*, Vol. 19 (3). 269 – 283.
- Sureshchandar, G., Rajendran, C., and Anantharaman, R. (2002). Determinants of

- Customer-Perceived Service Quality: A Confirmatory Factor Analysis Approach. *Journal of Services Marketing*. 16(1): 9-34.
- Suwignjo, P., Bititci, U. S., and Carrie, A. S. (2000). Quantitative Models for Performance Measurement Systems. *International Journal of Production Economics*. 64(1): 231-241.
- Swan, M., and Zwi, A. (1997). *Private Practitioners and Public Health: Close the Gap or Increase the Distance*. London: London School of Hygiene and Tropical Medicine.
- Swensen, S. J., Meyer, G. S., Nelson, E. C., Hunt Jr, G. C., Pryor, D. B., Weissberg, J. I., and Berwick, D. M. (2010). Cottage industry to postindustrial care—the revolution in health care delivery. *New England Journal of Medicine*, 362(5).
- Szakály, Z., Szente, V., Kövér, G., Polereczki, Z., & Szigeti, O. (2012). The influence of lifestyle on health behavior and preference for functional foods. *Appetite*, 58(1), 406-413.
- Tai, S. H. C., and Tam, J. L. M. (1997). A lifestyle analysis of female consumers in Greater China. *Psychology & Marketing*. 14(3): 287-307.
- Tarrant, C., Windridge, K. and Boulton, M. (2003). Qualitative Study of The Meaning of Personal Care In General Practice. *BMJ*. 326(1310).
- Teas, R. (1994). Expectations as a Comparison Standard in Measuring Service Quality: an Assessment of Reassessment. *Journal of Marketing*. 58: 132-139.
- The Federation of Private Medical Practitioner's Association of Malaysia (FPMPAM) (2006). *The Clinic Manual And Standard Operating Procedures*. September. Malaysia.
- The Malaysian Medical Association (2002). *Professional Confidence: Code of Medical Ethics. Adopted at the 41st Annual General Meeting Held on 26th - 27th May 2001 in Seremban, Negeri Sembilan. The Malaysian Medical Association: Malaysia: 10.* (Available At: [http://www.mma.org.my/Portals/0/pdf/MMA\\_ethicscode.pdf](http://www.mma.org.my/Portals/0/pdf/MMA_ethicscode.pdf))
- Thiagarajan, T., and Zairi, M. (1998). An empirical analysis of critical factors of TQM: A proposed tool for self-assessment and benchmarking purposes. *Benchmarking: An International Journal*. 5(4): 291-303.
- Tilburt, J. C., Wynia, M. K., Sheeler, R. D., Thorsteinsdottir, B., James, K. M., Egginton, J. S. Liebow, M., Hurst, S. and Danis, M. (2013), *JAMA*, Vol. 30(4)., pp. 380-388.

- Thom, D., and Campbell, B. (1997). Patient-Physician Trust: An Exploratory Study. *Journal Family Practice*. 44: 169-176.
- Tolson, D., Rolland, Y., Andrieu, S., Aquino, J. P., Beard, J., Benetos, A., ... & of Gerontology, T. I. A. (2011). International Association of Gerontology and Geriatrics: A global agenda for clinical research and quality of care in nursing homes. *Journal of the American Medical Directors Association*, 12(3), 184-189.
- Tomarken, A. J., and Waller, N. G. (2005). Structural Equation Modeling: Strengths, Limitations, and Misconceptions. *Annual Review Clinical Psychology*. 1: 31-65
- Tomes, A. E., and Peng Ng, S. C. (1995). Service Quality in Hospital Care: The Development of an In-Patient Questionnaire. *International Journal of Health Care Quality Assurance*. 8(3): 25-33.
- Tonchia, S. (2001). Linking Performance Measurement Systems to Strategic and Organizational Choices. *International Journal of Business Performance Management*. 2(1): 15-29.
- Tongue JR, Epps HR, Forese LL. Communication skills for patient- centered care: research-based, easily learned techniques for medical interviews that benefit orthopaedic surgeons and their patients. *J Bone Joint Surg Am*. 2005;87:652–658.
- Tontini, G., Sjøilen, K. S., & Silveira, A. (2013). How interactions of service attributes affect customer satisfaction: A study of the Kano model's attributes.
- Trochim, W. M. (2006). *The Research Methods Knowledge Base (2<sup>nd</sup>. Ed.)* Available at: <http://www.socialresearchmethods.net/kb/> (Assessed on 14 October 2009).
- Tse, D. K., and Wilton, P.C. (1988). Models of Consumer Satisfaction Formation: An Extension. *Journal of Marketing Research*. 25(May): 204-212.
- Tucker, J. L. (2002). The Moderators of Patient Satisfaction. *Journal of Management in Medicine*. 16(1): 48-66.
- Turnbull, J. E., and Luther, K. M. (1996). Patient satisfaction report paves way to improved care. *QRC Advisor*. 13(1): 1-7.
- Ullrich, P. F. Jr., and Vaccaro, A. R. (2002). Patient Education on the Internet: Opportunities and Pitfalls. *PubMed*. 1(27): 185-188.

- Unadkat, P. (2014). Empirical Study on Various Factor Influencing Preferences of Patients for Availing Medical Consultancy in Rajkot City, Gujarat, India. *PHILICA.COM*. No. 419.
- Uplekar, M., Juvekar, S., Morankar, S., Rangan, S., and Nunn, P. (1998). After Health Sector Reform, Whither Lung Health? *International Journal Tuberculosis Lung Diseses*. 2: 324-329.
- Uplekar, M. (1989). *Implications of Prescribing Patterns of Private Doctors in the Treatment of Tuberculosis in Bombay, India. Takemi Program in International Health, Research Paper No. 41, Harvard School of International Public Health: Boston.*
- Vargo, S.L. (2007). On a Theory of Markets and Marketing: From Positively Normative to Normatively Positive. *Australasian Marketing Journal*. 15(1): 53–60.
- Vargo, S. L. (2011). On marketing theory and service-dominant logic: Connecting some dots. *Marketing Theory*. 11(1): 3-8.
- van Empel, I. W., Dancet, E. A., Koolman, X. H., Nelen, W. L., Stolk, E. A., Sermeus, W., ... & Kremer, J. A. (2011). Physicians underestimate the importance of patient-centredness to patients: a discrete choice experiment in fertility care. *Human reproduction*, 26(3), 584-593.
- Vogus, T. J., & McClelland, L. E. (2016). When the customer is the patient: Lessons from healthcare research on patient satisfaction and service quality ratings. *Human Resource Management Review*, 26(1), 37-49.
- van Zanten M., Boulet J. R., McKinley D. W., DeChamplain A., Jobe A. C. (2007). Assessing the communication and interpersonal skills of graduates of international medical schools as part of the United States Medical Licensing Exam (USMLE) Step 2 Clinical Skills (CS) Exam. *Acad Med*. 82(10): 65–68.
- Veloutsou, C., Gilbert, R.G., Moutinho, L.A., Good, M.M. (2005), "Measuring transaction-specific satisfaction in services", *European Journal of Marketing*, Vol. 39 No.5-6, pp.606-28.
- Voon, B. H., Abdullah, F., Lee, N. and Kueh, K., (2014), *Developing a Hospital Service Excellence scale for hospital service excellence*, *International Journal of Quality & Reliability Management*, Vol. 31(3), 261-280.
- Vrijhoef, H. J. M., Rieneke1, B., Wagner, E. H., and Steuten, L. M. G. (2009). *Quality of Integrated Chronic Care Measured by Patient Survey:*

- Identification, Selection and Application of Most Appropriate Instruments. *Health Expectations*, 12(4): 417-429.
- Wallace, M. L., Frank, E., and Kraemer, H. C. (2013). A novel approach for developing and interpreting treatment moderator profiles in randomized clinical trials. *JAMA psychiatry*. 70(11): 1241-1247.
- Wan Edura, W. R., and Kamaruzaman, J. (2009). Service Quality in Health Care Setting. *International Journal of Health Care Quality Assurance*. 22(5): 471-482.
- Wang, Z., and Hoy, W. E. (2004). Body Size Measurements as Predictors of Type 2 Diabetes in Aboriginal People. *International Journal of Obesity*. 28(12): 1580-1584.
- Ward, P. (1987). Reproduction of Social Inequality: Access To Health Services In Mexico City. *Health Policy and Planning*. 2(1): 44-57.
- Ware, J. E., and Hays, R. D. (1988). Methods for Measuring Patient Satisfaction with Specific Encounters. *Medical Care*. 26: 393-402.
- Webb, J. W., Ireland, R. D., Hitt, M. A., Kistruck, G. M., & Tihanyi, L. (2011). Where is the opportunity without the customer? An integration of marketing activities, the entrepreneurship process, and institutional theory. *Journal of the Academy of Marketing Science*, 39(4), 537-554.
- Weenink, J. W., Braspenning, J., and Wensing, M. (2014). Patient Reported Outcome Measures (Proms) In Primary Care: An Observational Pilot Study of Seven Generic Instruments. *Family Practice*. 15(88): 2-8.
- Westaway, M. S., Rheeder, P., Van Zyl, D. G., and Seager, J. R. (2003). Interpersonal and Organizational Dimensions of Patient Satisfaction: The Moderating Effects of Health Status. *International Journal for Quality in Health Care*. 15(4): 337-344.
- Westbrook, R. A., and Oliver, R. L. (1991). The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction, *Journal of Consumer Research*. 18(June): 84-91.
- Wiele, T., Boselie, P., and Hesselink, M. (2002). Empirical Evidence for the Relationship between Customer Satisfaction and Business Performance. *Managing Service Quality*. 12(3): 184-193.
- Wiggins, M. N., Coker, K., and Hicks, E. K. (2009). Patient Perceptions of

- Professionalism: Implications for Residency Education. *Medical Education*. 43: 28-33.
- Wiggins M.N., Coker K, Hicks E.K. (2009) Patient perceptions of professionalism: implications for residency education. *Med Educ*. 43, 28-33.
- Williams, S. J., and Calnan, M. (1991). Convergence and Divergence Assessing Criteria of Consumer Satisfaction Across General Practice, Dental and Hospital Care Settings. *Soc. Sci. Med.* 33(6): 707-716.
- Williams, S., Weinman, J., Dalel, J., and Newman, S. (1995). Patient Expectations: What do Primary Care Patients Want from the GP and How Far does Meeting Expectations Affect Patient Satisfaction. *Family Practice*. 12(2): 193-201.
- Willians, P., and Naumann, E. (2011). Customer Satisfaction and Business Performance: A Firm-Level Analysis. *Journal of Services Marketing*. 25(1): 20-32.
- Wofford, M. M., Wofford, J. L., Bothra, J., Kendrick, S. B., Smith, A., and Lichstein, P. R. (2004). Patient Complaints About Physician Behaviors. A *Qualitative Study, Acad Med*. 79(2): 134-138.
- Woodhouse, E., and Siu, N. Y. M. (2005). *A Study of Service Quality in Leisure Clubs. BRC Working Papers Series No. WP200501*. School of Business, HKBU.
- World Bank (1993). World Development Report - Investing in Health. World Bank: Washington.
- World Health Organization (2000). The World health report: 2000: Health systems: improving performance.
- World Health Organization (2000). *Obesity: preventing and managing the global epidemic. Report of a World Health Organization Consultation. Geneva, Switzerland: World Health Organization; 2000* (No. 894, p. 256). WHO Obesity Technical Report Series.
- Wright, J. G. (2000). Evaluating the outcome of treatment. Shouldn't We be Asking Patients if they are Better? *Journal of Clinical Epidemiology*. 53(6): 549-553.
- Wong, W. C. W., Liu, R. H., Lam, C. L. K., Kung, K., Li, C., & Chen, Q. Q. (2016). An assessment on the quality of general practice care in a general hospital: Study of Patient Enablement and the factors with enablement. *Chinese Journal of General Practice*.

- Wu, C. C. (2011). The impact of hospital brand image on service quality, patient satisfaction and loyalty. *African Journal of Business Management*, 5(12), 4873-4882.
- Yap, L. K. P., Au, S. Y. L., Ang, Y. H., Kwan, K. Y., Ng, S. C., and Ee, C. H. (2003). Who are the residents of a nursing home in Singapore?, *Singapore Med. J.*, 44(2), 65-73.
- Yasin, M., Correia, E., and Lisboa, J. (2004). The Profitability of Customer-Targeted Quality Improvement Efforts: An Empirical Examination. *The TQM Magazine*. 16(1): 45-49.
- Yen, H., and Gwinner, K. (2003). Internet Retail Customer Loyalty: The Mediating Role of Relational Benefits. *International Journal of Service Industry Management*. 14(5): 483-500.
- Yesudian, C. A. K. (1991). *Utilization Pattern of Health Services and Its Implications on Urban Health Policy*. Research Paper No. 61. Takemi Program in International Health. Harvard School of Public Health Boston: U.S.A
- Yeung, M., Ging, L., and Ennew, C. (2002). Customer Satisfaction and Profitability: a Reappraisal of the Nature of the Relationship. *Journal of Targeting, Measurement and Analysis for Marketing*. 11(1): 24-33.
- Young, D. (1997). Establishing and maintaining good corporate reputation. Shanghai People Publishing House. In Zhang, Y. (2009), A Study of Corporate Reputation's Influence on Customer Loyalty Based on PLS-SEM Model, *International Business Research*. 2(3): 28-35 (p.28).
- Zabkar, V. (2000). Some Methodological Issues with Structural Equation Model Application in Relationship Quality Context - New Approaches in Applied Statistics. *Metodološki zvezki*. 16: 211-226.
- Zahir Osman (2013). Mediating Effect Of Customer Satisfaction On Service Quality And Customer Loyalty Relationship In Malaysian Rural Tourism, *International Journal of Economics Business And Management Studies. IJEBMS*. 2(1): 25-37.
- Zaim, H., Bayyurt, N., & Zaim, S. (2013). Service quality and determinants of customer satisfaction in hospitals: Turkish experience. *International Business & Economics Research Journal (IBER)*, 9(5).

- Zairi, M. (2000). Managing Customer Dissatisfaction Through Effective Complaints Management Systems. *The TQM Magazine*. 12(5): 331-337.
- Zeithaml, V. A., Berry, L. L., and Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*. 60: 31-46.
- Zeithaml, V. A., Parasuraman, A., and Berry, L. L. (1990). *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. New York: Free Press.
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*. 52: 2-22.
- Zemke, R., and Kramlinger, T. (1984). *Figuring Things Out: A Trainer's Guide to Needs and Task Analysis*, Reading, Mass.: Addison-Wesley Publishing Company. (Available at: <http://www.internettraining.com/Statkit/SampleTable.htm>) (Accessed on 4 January 2010).
- Zhang, C., and Pan, F. (2009). The Impact of Customer Satisfaction on Profitability: A Study of State-Owned Enterprises in China. *Service Science*. 1(1): 21-30.
- Zgierska, A., Rabago, D., and Miller, M. M., (2014), Impact of patient satisfaction ratings on physicians and clinical care. *Patient Preference and Adherence*, 8, 437-446.
- Zhang, Y. (2009). A Study of Corporate Reputation's Influence on Customer Loyalty Based on PLS-SEM Model. *International Business Research*. 2(3): 28-35.
- Zhao, L., Lu, Y., Zhang, L., & Chau, P. Y. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision Support Systems*, 52(3), 645-656.
- Zhong, T., McCarthy, C., Min, S., Zhang, J., Beber, B., Pusic, A. L., and Hofer, S. O. (2012). Patient satisfaction and health-related quality of life after autologous tissue breast reconstruction. *Cancer*. 118(6): 1701-1709.
- Zikmund, W. (2003). *Business Research Methods*, (7<sup>th</sup> Ed.). South Western, Australia: Thomson Learning.
- Zineldin M. (2006). The Quality Of Health Care And Patient Satisfaction: An Exploratory Investigation Of The 5Qs Model At Some Egyptian And



- Jordanian Medical Clinics. *International Journal for Quality in Health Care*. 19: 60-99.
- Zineldin, M. (2000). Total relationship management (TRM) and total quality management (TQM). *Managerial Auditing Journal*, 15(1/2): 20-28.
- Zineldin, M. (2000). *TRM: total relationship management*. Studentlitteratur.
- Zins, A. H. (2001). Relative Attitudes and Commitment in Customer Loyalty Models. *International Journal of Service Industry Management*. 12(3): 269-294.
- Zoe, S. D. (2006). Customer Satisfaction, Loyalty and Commitment in Service Organizations: Some Evidences from Greece. *Management Research News*. 29(12): 782-800
- Zondag, W., Kooiman, J., Klok, F. A., Dekkers, O. M., & Huisman, M. V. (2013). Outpatient versus inpatient treatment in patients with pulmonary embolism: a meta-analysis. *European Respiratory Journal*, 42(1), 134-144.
- Zuckerman, A. M. (2006). Advancing the state of the art in healthcare strategic planning. *Frontiers of Health Services Management*, 23(2): 3.
- Zwi, A., Brugha, R., and Smith, E. (2001). Private Health Care in Developing Countries. *British Medicine Journal*. 323: 463-464.