

# **UNIVERSITI PUTRA MALAYSIA**

PATIENT SATISFACTION AMONG ADULT PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF KLINIK KESIHATAN GREENTOWN IPOH, 2017

# **MOHAMAD FADLI BIN KHARIE**

FPSK(M) 2017 29



# PATIENT SATISFACTION AMONG ADULT PATIENTS ATTENDING OUTPATIENT DEPARTMENT OF KLINIK KESIHATAN GREENTOWN IPOH, 2017

Ву

MOHAMAD FADLI BIN KHARIE

Dissertation Submitted to the Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia in Fulfillment of the Requirements for the Degree of Master of Public Health

All material contained within the dissertation, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



Abstract of dissertation presented to the Department of Community Health,
Universiti Putra Malaysia in fulfillment of the requirement for the
Degree of Master of Public Health

# PATIENT SATISFACTION AMONG ADULT PATIENT ATTENDING OUTPATIENT DEPARTMENT OF KLINIK KESIHATAN GREENTOWN IPOH, 2017

Ву

## MOHAMAD FADLI BIN KHARIE

## August 2017

Chairman : Dr. Rosliza binti Abdul Manaf, PhD

Faculty: Medicine and Health Science

Introduction: Klinik Kesihatan Greentown is a healthcare clinic, which caters up to 1000 patient attendances a day that covers up to 39564 populations. Several initiatives have been initiated to meet public expectation and to improve their satisfaction towards the healthcare services, yet Klinik Kesihatan Greentown still receives complaints and dissatisfaction among the patients. This study aims to assess the patient satisfaction among adult patients who attend outpatient department of the clinic.

**Objective:** To assess patient satisfaction among adult patient attending outpatient department of Klinik Kesihatan Greentown its determinant factors and predictors.

**Methodology**: A cross-sectional study using systematic random sampling was conducted among adult patients attending Klinik Kesihatan Greentown, Ipoh from April 2017 to Mei 2017. All adult patients who met the inclusion and exclusion criteria were sampled. Data were collected using a self-administered questionnaire. Data were analyzed using descriptive and inferential statistical method with significance level set at 0.05.

**Result:** The majority of respondents were Malay (53.9%) with age in the range of 21 to 40 years old (53.9%), having lower education (69.8%), working in non government sectors (42.9%) and having income less than RM 1200 (73.3%). 53.9% of the respondents were satisfied with the service and amenities offered

in Klinik Kesihatan Greentown. Majority of the respondents were also satisfied with all domains of the satisfaction except for the domain of physical environment where only 50.2% of the respondent satisfied with that aspect of the domain. Accessibility and has strong correlation to overall patient satisfaction and the strongest predictors. Continuity of care has weak correlation and was a weak predictor to overall patient satisfaction.

**Conclusion:** Klinik Kesihatan Greentown has a high patient satisfaction level. The information received from this study would be valuable for future intervention of quality improvement in the clinic.

Keyword: patient satisfaction; healthcare clinic, quality management

Abstrak disertasi yang dikemukakan kepada Jabatan Kesihatan Komuniti, Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Sarjana Kesihatan Awam

## KEPUASAN PESAKIT DIKALANGAN PESAKIT DEWASA YANG MENGHADIRI JABATAN PESAKIT LUAR KLINIK KESIHATAN GREENTOWN, IPOH

Oleh

## MOHAMAD FADLI BIN KHARIE

**Ogos 2017** 

Pengerusi : Dr. Rosliza binti Abdul Manaf, PhD Fakulti : Perubatan dan Sains Kesihatan

Pendahuluan: Klinik Kesihatan Greentown merupakan sebuah klinik kesihatan yang menerima sehingga 1000 kehadiran pesakit dalam sehari dan memberi perkhidmatan kepada 39564 populasi penduduk. Beberapa inisiatif telah dilakukan bagi memenuhi kehendak penduduk dan demi untuk meningkatkan kepuasan mereka terhadap perkhidmatan kesihatan namun Klinik Kesihatan Greentown tetap menerima aduan dan ketidakpuasan hati dalam kalangan pesakit. Kajian ini dilakukan untuk menilai kepuasan pesakit dalam kalangan pesakit dewasa yang menghadiri jabatan pesakit luar klinik ini.

**Objektif:** Untuk menilai kepuasan pesakit dewasa yang menghadiri jabatan pesakit luar Klinik Kesihatan Greentown, faktor-faktor penentu dan faktor peramal.

**Metodologi**: Satu kajian rentas menggunakan kaedah pensampelan rawak sistematik telah dilakukan dalam kalangan pesakit dewasa yang menghadiri Klinik Kesihatan Greentown melalui soal selidik daripada April 2017 sehingga Mei 2017. Semua pesakit dewasa yang memenuhi syarat akan disampel. Data dikumpul mengunakan soalan kaji selidik. Semua data telah dianalisa menggunakan kaedah statistik deskriptif and inferential dengan tahap signifikan ditetapkan pada 0.05.

**Keputusan:** Majoriti daripada responden terdiri daripada Melayu (53.9%) dalam lingkungan umur 21 hingga 40 tahun (53.9%), mempunyai taraf pendidikan

rendah (69.8%), bekerja di sektor bukan kerajaan (42.9%) dan berpendapatan kurang daripada RM 1200 (73.3%). 53.9% daripada responden berpuas hati secara keseluruhannya dengan perkhidmatan dan kemudahan di Klinik Kesihatan Greentown. Majoriti responden juga berpuas hati dengan domaindomain kepuasan pesakit kecuali domain persekitaran fizikal yang mana hanya 50.2% daripada responden berpuas hati dengan aspek domain tersebut. Kebolehcapaian mempunyai kolerasi yang kuat dan merupakan faktor peramal terkuat terhadap kepuasan pesakit. Kesinambungan penjagaan mempunyai kolerasi yang lemah dan merupakan faktor peramal yang lemah terhadap kepuasan pesakit secara keseluruhan.

**Kesimpulan:** Klinik Kesihatan Greentown mempunyai kadar kepuasan pesakit yang tinggi. Informasi yang diperoleh daripada kajian ini amat berharga untuk program intervensi bagi meningkatkan kualiti perkhidmatan klinik ini pada masa akan datang.

Kata Kunci: Kepuasan pesakit, klinik kesihatan, pengurusan kualiti

## **ACKNOWLEDGEMENTS**

In the name of Allah s.w.t, The Most Gracious and The Most Merciful, abundance of gratefulness to him for bestowing me patience and guidance as a researcher. A special thanks to my wife Nur Balqis Zahirah binti Ali and my daughter Orkid Fatimah binti Mohamad Fadli for the endless understanding and believe in me. An abundance of gratitude towards my dedicated supervisor Dr Rosliza Abdul Manaf for her patience and wisdom that really help to shed light into this unchartered territory of doing a research until I finally able to walk comfortably tall and proud of my own outcome. I also would like to thank Asso. Prof Dato Dr Faisal bin Ibrahim and Asso. Prof Muhammad Hanafiah Juni for their continuous guidance. Thank you also for Perak State Health Department, Kinta District Health Office and staffs from Klinik Kesihatan Greentown for their support while I was doing my research. Last but not least to everyone that help me into making this dissertation a reality, thank you much. Hopefully this dissertation will give benefit to anyone who wish to dwell into this subject.

I certify that a Dissertation Examination Committee has met on 3<sup>th</sup> August 2017 to conduct the final examination of Mohamad Fadli bin Kharie on his dissertation "Patient Satisfaction among Adult Patient Attending Outpatient Department of Klinik Kesihatan Greentown Ipoh, 2017" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Public Health

Members of the Dissertation Examination Committee were as follows:

Dr. Kulanthayan A/L K.C. Mani, PhD
Dip (Lund), B.Sc. (UPM), M.Sc. (UTM), Ph.D (UPM), MCIEH
Associate Professor
Department of Community Health
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Chairman)

Dr. Suriani binti Ismail, PhD
MD (USM), MPH (UM), PhD (Community Health) (UKM)
Senior Lecturer
Department of Community Health
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Internal Examiner)

## Mohd Rizal bin Abdul Manaf, PhD

Professor
Head of Department
Department of Community Health
Universiti Kebangsaan Malaysia
(External Examiner)

Professor Dato' Dr. Abdul Jalil Nordin, DSIS MD (UKM), MMed (Radiologi-UM) Professor and Dean Faculty of Medicine and Health Sciences Universiti Putra Malaysia

Date:

This dissertation was submitted to the Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Public Health. The members of the Supervisory Committee were as follows:

## Dr. Rosliza binti Abdul Manaf, PhD

Senior Lecturer
Department of Community Health
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Chairman)

## Dato' Dr. Faisal bin Ibrahim

Associate Professor
Department of Community Health
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Member)

#### Dr. Muhamad Hanafiah bin Juni

Associate Professor
Department of Community Health
Faculty of Medicine and Health Sciences
Universiti Putra Malaysia
(Member)

Professor Dato' Dr. Abdul Jalil Nordin, DSIS MD (UKM), MMed (Radiologi-UM) Professor and Dean Faculty of Medicine and Health Sciences

Faculty of Medicine and Health S Universiti Putra Malaysia

Date:

## **Declaration by Members of Supervisory Committee**

This is to confirm that:

- the research conducted and the writing of this dissertation was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

Signature:	
Name of	
Chairman of	Dr Rosliza binti Abdul Manaf
Supervisory	MBBS (UM), M. Community Medicine
Committee:	(Family Health) (UKM), PhD (Otago)
Signature:	
Name of	
Member of	Associate Professor Dato Dr Faisal bin Ibrahim
Supervisory	MBBS (Cairo), MPH (Philippines),
Committee:	MPHM (Mahidol)
Signature:	
Name of	
Member of	Associate Professor Dr Muhamad Hanafiah Juni
Supervisory	MD (UKM), MPH (UM), MSc
Committee:	(London School of Economic)

# **TABLE OF CONTENTS**

ADOTO	ACT		P	age
ABSTR ABSTR				i iii
_		GEMENT	rs	V
APPRO		JEIVIEIV I		vi
	RATION	1		viii
	F TABL			xiii
LIST O	F FIGUE	RES		xiv
LIST O	F ABBR	EVIATIO	ONS	χV
CHAPT		P.		
1		DUCTIO		1
	1.1	Backgro		1
	1.2		Statement	3
	1.3		ance of Study	4
	1.4		ch Question	4
	1.5		es of the study	4 5
	1.6	Researc	ch Hypothesis	5
2	I ITER	ATURE R	FVIFW	6
_	2.1		n of Patient Satisfaction	6
	2.2		s Satisfaction Approach	6
			Expectation Approach	6
			Health Service Attributes Approach	6 7
			Economic Approach	7
		2.2.4	Holistic Approach	7
	2.3		ement of Patient Satisfaction	7
			Patient Satisfaction Questionaire by Grogran et al	
			(1995)	8
			SERVQUAL Questionnaire	8
			Patient Satisfaction Questionaire by Marshall &	
			Hays (1994)	8
	2.4		Satisfaction's status in Malaysia Primary Care	9
	2.5		Satisfaction status in primary care globally	9
	2.6		of factors associated with patient satisfaction in	40
			a's patient satisfaction study	10
			Socio-demographic factors studied in Malaysia's	10
			patient satisfaction study	10
			Satisfaction's domain studied in Malaysia patient satisfaction studies.	10
			Socio-demographic factors	11
			Domains of Satisfaction	12
	2.7	-	tual Framework	15

3	METH	ODOLOGY	16		
•	3.1	Study Location	16		
	3.2	Study Design	16		
	3.3		16		
		Study Duration			
	3.4	Sampling	17		
		3.4.1 Study population	17		
		3.4.2 Sampling frame	17		
		3.4.3 Sampling Population	17		
		3.4.4 Sampling unit	17		
		3.4.5 Sampling method	17		
		3.4.6 Sample size	18		
	3.5	Instruments and Data Collection	18		
		3.5.1 Instruments	18		
		3.5.2 Data collection technique	19		
		3.5.3 Quality control	19		
		3.5.4 Data analysis	19		
	3.6	Study ethics	20		
	3.7	Variables	20		
	3.1		20		
	0.00	3.7.2 Independent variable	20		
	3.8 Op	erational Definition	21		
4	RESULTS 2				
7	4.1	Response Rate	<b>23</b> 23		
	4.2	Normality Test	23		
	4.2				
		Socio-demographic distribution of the respondents	24		
	4.4	Patients' satisfaction distribution according to domain of	٥.		
		satisfaction	25		
	4.5	Distribution of patients' satisfaction according to the			
	\	domain of satisfaction's items	27		
	4.6	Distribution of patients' satisfaction among respondent	29		
	4.7	Association between socio-demographic characteristic and			
		patient satisfaction	29		
	4.8	Correlation between domain of satisfaction and patient			
		satisfaction	30		
	4.9	Simple logistic regression between socio-demographic			
		characteristic and patient satisfaction	32		
	4.10	Simple logistic regression between domain of satisfaction			
		and patient satisfaction	32		
	4.11	Predictors of Patient Satisfaction	34		
5	DISCU	ISSION	36		
	5.1	Introduction	36		
	5.2	Distribution of patient satisfaction	36		
	5.3	Socio-demographic and patient satisfaction	37		
	5.4	Technical quality and patient satisfaction.	37		
	5.5	Interpersonal Manners and patient satisfaction	38		
	5.6	Communication of medical personnel and patient	00		
	0.0	satisfaction	38		

	5.7	Accessibility and patient satisfaction	39
	5.8	Time availability of medical personnel and patient	
		satisfaction	39
	5.9	Financial aspect and patient satisfaction.	40
	5.10	Continuity of care and patient satisfaction	40
	5.11	Physical environment and patient satisfaction	41
6	CONC	CLUSION AND RECOMMENDATION	42
	6.1	Conclusion	42
	6.2	Strength of the study	42
	6.3	Limitation of the study	43
	6.4	Recommendation	43
REFE	RENCE	S	45
APPE	NDICES		49
BIOD	ATA OF	STUDENT	69

# LIST OF TABLES

Table		Page
3.1	Operational definition	21
4.1	Test of Normality	25
4.2	Socio-demographic distribution of the respondent	26
4.3	Patient satisfaction levels according to domains' item	28
4.4	Association between socio-demographic characteristic and patient satisfaction	31
4.5	Correlation between domain of satisfaction and patient satisfaction	32
4.6	Simple logistic regression between socio-demographic characteristic and patient satisfaction	33
4.7	Simple logistic regression between domains of satisfaction and patient satisfaction	34
4.8	Multivariate logistic regression of patient satisfaction predictor	36

# LIST OF FIGURES

Figure		Page
2.1	Conceptual framework	15
4.1	Distribution of patient satisfaction according to domain of satisfaction	27
4.2	Distribution of patient satisfaction among the respondent	30



## LIST OF ABBREVIATIONS

Abbreviation Description

AOR Adjusted odds ratio
CI Confidence interval
df Degree of freedom

IKU Institute for Public Health Malaysia

IQR Interquartile range

MOH Ministry of Health Malaysia

NHMS National Health Morbidity Survey

PMR Penilaian Menengah Rendah

SD Standard deviation

SPM Sijil Pelajaran Malaysia

STPM Sijil Tinggi Pelajaran Malaysia

#### **CHAPTER 1**

#### INTRODUCTION

## **Background**

In a patient-centered care, providers are encouraged to be more sensitive, responsive and proactive in knowing and meeting patients' expectations, needs and preferences. Hence, patient satisfaction comes into the picture. Initially, patient satisfaction lingers around experience from clients and whether the service manages to meet or exceed their expectation. However, this concept only emphasizes on process' component of a service. This dimension been described as how a service is delivered, which focus more on providers' attitudes and facilities equipment. Over the years, other technical aspects of the service have been taken into account thus making the concept of patient satisfaction become more complex and sophisticated (Sitzia & Wood, 1997).

Patient satisfaction is principally assessed over several health service dimensions such as general satisfaction, technical quality, interpersonal aspects, communication, financial aspects, time spent with doctor, and the ease of contact or availability (Ganasegeran et al., 2015; Haliza, Rizal, & Raja Jamaluddin, 2003; Hizlinda et al., 2012; Pitaloka & Rizal, 2006). Observation on patients positive or negative reactions towards the process, procedure and environment of a healthcare setting are pertinent in the evaluation of healthcare quality (Crow et al., 2002).

Numerous patient satisfaction studies have been done since 1980. Initially, patient satisfaction's researches were done by large public hospital and private hospital focused mainly on their effort of service improvement. These studies were performed to fulfill the requirements for accreditation and also as incentives to clinical and non-clinical workers based on their patient satisfaction score (Detsky & Shaul, 2013).

Over the past 20 years in Malaysia, the numbers of studies on patient satisfaction have been increasing (Ganasegeran et al., 2015; Hizlinda et al., 2012). These studies were done in various settings of healthcare facilities such as in primary healthcare clinics (Haliza, Rizal, Raja Jamaluddin, & Noorhaida, 2005), various centers of hospital (Narimah et al., 2006) across multiple specialties like emergency department (Saiboon et al., 2008), dental (Tin-Oo et al., 2011), pediatrics (Aniza et al., 2011), and obstetrics and gynecology (Pitaloka & Rizal, 2006). Several factors contribute to the level of patient's satisfaction such as socio-demographic factors such as socioeconomic status, age and education level (Yunus, Nasir, Nor Afiah, Sherina, & Faizah, 2004); medical providers-related factors such as knowledge, skills, duration of

consultation, communication, manners, and attitude (Aniza & Suhaila, 2011; Hasyimah, Aniza, Ahmad Taufik, Jamsiah, & Azimatun Noor, 2014); and system-related factors such as equipment, facilities, accessibility, affordability, referrals, and continuity of care (Haliza et al., 2003, 2005; Hizlinda et al., 2012). These are the factors are commonly being evaluated in association with patient satisfaction.

In order to answer population needs and expectation, health infrastructures in Malaysia have improved drastically since independence in keeping with the development of the nation. Primary Healthcare clinics especially the outpatient department become the first level of encounters for the community to seek medical advice and treatment (Kamaliah, 2011). In Malaysia, primary care services are provided by both public and private primary care clinics. Ministry of Health Malaysia (MOH) mainly funds the public primary care sector. In 2015, there were about 1061 government health clinics, 1081 government rural clinics while at the same time there were 7146 registered private clinics in Malaysia (Ministry of Health Malaysia (MOH), 2015).

Klinik Kesihatan Greentown, which is the location of the study is a primary healthcare clinic located in the middle of the town in Ipoh, Perak, Malaysia. It is administratively under the jurisdiction of Kinta Health District Office. This clinic caters up to 1000 patients per day (Greentown Health Clinic, 2014). As a primary healthcare facility, it has an important role in being the first level of encounter that provides its community towards the healthcare service. This type of clinic provides a huge range of services comprising of curative, preventive, health promotion and rehabilitative services (Hizlinda et al, 2012).

Several initiatives have been initiated to answer public expectation and to improve their satisfaction towards the healthcare facilities. For instances, a Family Medicine Specialist is stationed here for expert consultation and to lead the team that consists of medical officers, paramedics, pharmacist and allied health workers. This clinic also provides lab services, x-ray department and pharmacy (Greentown Health Clinic, 2014). Furthermore it offers an extended service hour service until 10pm and applied lean healthcare initiatives to reduce patient waiting time (Perak State Health Department, 2015).

Despite the wide range of services and improved facilities, Klinik Kesihatan Greentown is still vulnerable to patient dissatisfaction and complaints. Like other primary healthcare facilities, it needs to face the challenge to be able to provide continuously patient-centered, safe and efficient healthcare. In 2015, Klinik Kesihatan Greentown received 10 complaints regarding their services and was listed among the health facilities that had highest number of patients' complaints in Perak (Perak State Health Department, 2015).

#### 1.2 Problem Statement

Patient dissatisfaction rooted from the imbalance of population needs (disease burdens, increase of patients attendances) with the services that healthcare facilities able to provide (Ganasegeran et al., 2015).

Currently, public healthcare facilities in Malaysia have to face the surge of patient admissions and attendances. According to the National Health and Morbidity Survey (NHMS) of Malaysia conducted in 2015, there was an increase in the proportion of patients who sought care from the public healthcare providers (40.6%) compared to the previous NHMS in 2011 which was 37.1% (Institute for Public Health Malaysia, 2015). There was also a steady increase in patients' attendance to the primary healthcare. National Health Fact 2016 reported that there were 38,311,223 outpatient attendances to government health clinic in 2015 compare to 35,444,397 attendances in the previous year as reported through the National Health Fact 2015 (MOH, 2015).

At the same time, primary healthcare providers also had to face the increase of disease burden among Malaysian particularly in non-communicable diseases. According to the NHMS 2015, the diabetes prevalence in Malaysia had increased to 17.5% from 15.2% in 2011 and hypercholesterolemia prevalence had leaped from 32.6% in 2011 to 47.7% in 2015. While the prevalence of hypertension had decreased slightly from 32.7% in 2011 to 30.3% in 2015, the proportion of undiagnosed hypertension still remains high at 17.2% (Institute for Public Health Malaysia, 2015). As the complexity of diseases and patients' load increased, primary healthcare needs to work effectively in order to meet the expectation.

This imbalance leads to poor perceptions towards service quality. Long waiting duration, emotional burnout, lack of empathy among the provider, questionable level of competencies and their ignorance to patient suffering had caused significant dissatisfaction towards public healthcare facilities and service providers (Ganasegeran et al., 2015). According to the NHMS 2015 findings also, while most of Malaysian citizen gave positive feedback towards Malaysian Healthcare services, there were still dissatisfaction particularly in waiting time and inability to choose their own doctor. Furthermore, Public Complaints Bureau reported that there is a mismatch between public expectation and healthcare service delivery by Ministry of Health facilities. Most of the complaints are delay in service delivery, failure to comply to standard procedures, public servant misconduct and inadequacy of public amenities (Ministry of Health Malaysia (MOH), 2016)

## 1.3 Significance of Study

Studies done on patient satisfaction in a single primary clinic with high patient attendance in Malaysia are scarce. Most studies on government primary healthcare facilities combine several facilities together in their studies (Haliza et al., 2003; Sharifa Ezat et al., 2010; Yunus et al., 2004) while several others studies on outpatient clinic focused on outpatient facilities within the vicinity of the university (Hizlinda et al., 2012; Pitaloka & Rizal, 2006). This study would contribute valuable information regarding service quality in Klinik Kesihatan Greentown, Ipoh. Findings from the Patient satisfaction study can also be used to identify the quality gaps for better and focused improvement strategies.

In addition, this study will be beneficial to identify the areas, which are less satisfied by the attending patient of the clinic. Improvement can be made on this area to improve patient satisfaction and make this clinic more patient centered.

#### 1.4 Research Question

- 1.4.1 What is the patient satisfaction level among patients attending outpatient department of Klinik Kesihatan Greentown?
- 1.4.2 What are the factors that influence patient satisfaction in Klinik Kesihatan Greentown?
- 1.4.3 Which domains of satisfaction strongly correlate with the patient satisfaction of Klinik Kesihatan Greentown?
- 1.4.4 What are the predictors of patient satisfaction level among patient of Klinik Kesihatan Greentown, Ipoh?

## 1.5 Objectives of the study

- 1.5.1 General Objective
- To evaluate patient satisfaction among adult patients attending outpatient department of Klinik Kesihatan Greentown in 2017
- 1.5.2 Specific Objectives
- 1.5.2.1 To determine patient satisfaction level among adult patients attending the outpatient department in Klinik Kesihatan Greentown

- 1.5.2.2 To determine socio-demographic characteristic adult patients attending the outpatient department in Klinik Kesihatan Greentown
- 1.5.2.3 To identify the association between socio-demographic factors with patient satisfaction.
- 1.5.2.4 To identify strength of association between each domain of patient satisfaction and overall patient satisfaction level in Klinik Kesihatan Greentown.
- 1.5.2.5 To identify the predictors of patient satisfaction level among associated factors of patient satisfaction of Klinik Kesihatan Greentown.

## 1.6 Research Hypothesis

There is a significant association between socio-demographic factors (e.g. age, education level, employment status, household status, and ethnicity) and patient satisfaction.

There is significant association between each domains of satisfaction towards overall patient satisfaction level.

There are significant factors that can predict patient satisfaction among those attending outpatient clinic in Klinik Kesihatan Greentown.

#### **REFERENCES**

- Al-Abri, R., & Al-Balushi, A. (2014). Patient satisfaction survey as a tool towards quality improvement. *Oman Medical Journal*, *29*(1), 3–7.
- Almoajel, A., Fetohi, E., & Alshamrani, A. (2014). Patient Satisfaction with Primary Health Care in Jubail City, Saudi Arabia. *World Journal of Medical Science*, *11*(2), 255–264.
- Aniza, I., Rizal, A. M., Ng, Y. S., Mardhiyyah, M., Helmi, I., Syamimi, B. K., & Muhamad Tahar, A. R. (2011). Caregivers' satisfaction of healthcare delivery at paediatric clinics of Universiti Kebangsaan Malaysia Medical Centre in 2009. *The Medical Journal of Malaysia*, *66*(2), 84–8.
- Aniza, I., & Suhaila, A. (2011). Client Satisfaction in ISO Certified Health Clinic in Klinik Kesihatan Bandar Baru Bangi. *Journal of Community Health*, 17(1), 18–25.
- Batbaatar, E., Dorjdagva, J., Luvsannyam, A., Savino, M. M., & Amenta, P. (2016). Determinants of patient satisfaction: a systematic review. *Perspectives in Public Health*, 1–13.
- Birkhäuer, J., Gaab, J., Kossowsky, J., Hasler, S., Krummenacher, P., Werner, C., & Gerger, H. (2017). Trust in the health care professional and health outcome: A meta-analysis. *PLOS ONE*, 12(2), e0170988. http://doi.org/10.1371/journal.pone.0170988
- Bleich, S. N., Ozaltin, E., & Murray, C. J. (2009). How does satisfaction with the health-care system relate to patient experience? *Bulletin of the World Health Organization*, (87), 271–278.
- Bleustein, C., Rothschild, D. B., Valen, A., Valaitis, E., Schweitzer, L., & Jones, R. (2014). Wait Times, Patient Satisfaction Scores and the Perception of Care. *American Journal of Managed Care*, *20*(May 2014).
- Cheng, S. H., Yang, M. C., & 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.
- Clever, S. L., Jin, L., Levinson, W., & Meltzer, D. O. (2008). Does doctor-patient communication affect patient satisfaction with hospital care? Results of an analysis with a novel instrumental variable. *Health Services Research*, *43*(5), 1505–1519.
- Crow, R., Gage, H., Hampson, S., Hart, J., Kimber, A., Storey, L., & Thomas, H. (2002). The measurement of satisfaction with healthcare: implications for practice from a systematic review of the literature. *Health Technology Assessment*, 6(32), 1–244.
- Dagger, T. S., Sweeney, J. C., & Johnson, L. W. (2007). A Hierarchical Model of Health Service Quality: Scale Development and Investigation of an Integrated Model. *Journal of Service Research*, 10(2), 123–142. http://doi.org/10.1177/1094670507309594
- Detsky, J., & Shaul, R. Z. (2013). Incentives to increase patient satisfaction: are we doing more harm than good? *Canadian Medical Association Journal*, 185(14), 1199–200.
- Donabedian, A. (1988). The Quality of Care How Can It Be Assessed? *Journal of American Medical Association*, 260(12), 1743–1748.

- Dugdale, D. C., Epstein, R., & Pantilat, S. Z. (1999). Time and the patient-physician relationship. *Journal of General Internal Medicine*, 14(Supplement 1), S34–S40.
- Evans, D. B., Hsu, J., Boerma, T., Evans, D. B., Hsu, J., & Boerma, T. (2013). Universal health coverage and universal access. *Bulletin of the World Health Organization*, *91*(8), 546–546A.
- Ganasegeran, K., Perianayagam, W., Rizal, A. M., Ali Jadoo, S. A., Al-Dubai, S. A. R., Ganasegeran, K., ... Al-Dubai, S. A. R. (2015). Patient Satisfaction in Malaysia's Busiest Outpatient Medical Care. *The Scientific World Journal*. 1–6.
- Greentown Health Clinic. (2014). Greentown Health Clinic Profile.
- Grogan, S., Conner, M., Willits, D., & Norman, P. (1995). Development of a questionnaire to measure patients' satisfaction with general practitioners' services. *The British Journal of General Practice: The Journal of the Royal College of General Practitioners*, *45*(399), 525–529.
- Haliza, A. M., Rizal, A. M., & Raja Jamaluddin, R. A. M. (2003). kajian kepuasan pelanggan di kalangan pesakit klinik swasta di Seremban, Negeri Sembilan. *Jurnal Kesihatan Masyarakat*, *9*, 44–50.
- Haliza, A. M., Rizal, A. M., Raja Jamaluddin, R. A. M., & Noorhaida, U. (2005). Kepuasan Pelanggan di Kalangan Pesakit Luar Klinik Kerajaan dan Klinik Swasta di Seremban. *Jabatan Kesihatan Masyarakat*, 11.
- Hassali, M. A., Alrasheedy, A. A., Ab Razak, B. A., AL-Tamimi, S. K., Saleem, F., Ul Haq, N., & Aljadhey, H. (2014). Assessment of general public satisfaction with public healthcare services in Kedah, Malaysia. *Australasian Medical Journal*, 7(1), 35–44.
- Hasyimah, R., Aniza, I., Ahmad Taufik, J., Jamsiah, M., & Azimatun Noor, A. (2014). Factors affecting outpatients' satisfactionat at University Kebangsaan Malaysia Medical Centre (UKMMC). *Malaysian Journal of Public Health Medicine*, 14(2), 77–85.
- Hizlinda, T., Teoh, S., Siti Nurbaiyah, K., Azrina, A., Mohammad Hafizzudin, M., Chang, L., & Noraliza, M. (2012). A Cross-Sectional Study on Patient Satisfaction with Universiti Kebangsaan Malaysia Medical Centre (UKMMC) Primary Care Clinic. *Medicine & Health*, 7(1), 12–23.
- Institute of Public Health Malaysia (IKU). (2015a). *National Health Morbidity Survey* (Vol. II).
- Institute of Public Health Malaysia (IKU). (2015b). *National Health Morbidity Survey 2015* (Vol. III).
- Kamaliah, M. N. (2011). Primary Health Care–Reform in 1Care for 1Malaysia. *International Journal of Public Health Research*, 50–56.
- Lam, C. L. K., Yu, E. Y. T., Lo, Y. Y. C., Wong, C. K. H., Mercer, S. M., Fong, D. Y. T., ... Leung, G. M. (2014). Having a Family Doctor is Associated with Some Better Patient-Reported Outcomes of Primary Care Consultations. *Frontiers in Medicine*, 1, 29. http://doi.org/10.3389/fmed.2014.00029
- Levy, P. S., & Lemeshow, S. (2008). Sampling of populations: methods and applications (4th editio). Wiley.
- Marshall, G. N., & Hays, R. D. (1994). The Patient Satisfaction Questionnaire Short Form (PSQ-18). *Rand.* http://doi.org/10.1111/j.1525-1497.2004.30059.x

- Ministry of Health Malaysia (MOH). (2015). Health Facts 2016, Malaysia.
- Ministry of Health Malaysia (MOH). (2016). Strategic Plan Ministry of Health Malaysia 2016-2020.
- Mohd Idris, O., Noraini, M. Y., Nor 'Aishah, A., Zurina, A., Roslinah, A., Noriah, B., ... Ang, K. T. (2012). Patient Satisfaction in MOH facilities 2011, Institute for Health Management, Ministry of Health Malaysia., 1–4.
- Myburgh, N., Solanki, G., Smith, M., & Lalloo, R. (2005). Patient satisfaction with health care providers in South Africa: the influences of race and socioeconomic statuss. *International Journal for Quality in Health Care*, 17(6), 473–477.
- Nabbuye-Sekandi, J., Makumbi, F. E., Kasangaki, A., Kizza, I. B., Tugumisirize, J., Nshimye, E., ... Peters, D. H. (2011). Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda. *International Journal for Quality in Health Care*, 23(5).
- Narimah, A., Rizwan, O. S., Nadhrah, N. N., Adlina, S., Hakimi, Z., & Nuraliza, A. (2006). A Descriptive Cross Sectional Study on Patient Satisfaction Study in a Private Hospital in Selangor. *Malaysian Journal of Public Health Medicine*, 6(2), 6–12.
- Noor'ain, M. Y., Dilla Syadia, A. L., Suryani, C. D., & Siti Noorsuriani, M. (2013). Patient Satisfaction with Access to 1Malaysia Clinic. *Procedia Social and Behavioral Sciences*, *91*, 395–402.
- Noor Hazilah, A. M., & Phang, S. N. (2009). Patient Satisfaction as an Indicator of Service Quality in Malaysian Public Hospitals. Retrieved from http://library.oum.edu.my/repository/378/
- O'Connor, S. J., Trinh, H. Q., & Shewchuk, R. M. (2000). Perceptual gaps in understanding patient expectations for health care service quality. *Health Care Management Review*, 25(2), 7–23.
- Parasuraman, a, Zeithaml, V. a, & Berry, L. L. (1988). SERVQUAL: A Multipleltem scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*. http://doi.org/10.1016/S0148-2963(99)00084-3
- Perak State Health Department. (2015). Mesyuarat Pelan Tindakan Kesihatan Awam Bil 5/2015.
- Pitaloka, S. D., & Rizal, A. M. (2006). Patient's Satisfaction in Antenatal Clinic Hospital Universiti Kebangsaan Malaysia. *Journal of Community Health*, 12(1), 1–10.
- Saiboon, I., Eng, H. S., Krishnan, B., Ali, S. N., Pathnathan, A., & Choy, C. Y. (2008). A Study of Patients 'Satisfaction with the Emergency Department (ED) of Hospital Universiti Kebangsaan Malaysia (HUKM). Medicine & Health, 3(1), 7–13.
- Schoenfelder, T., Klewer, J., & Kugler, J. (2011). Determinants of patient satisfaction: a study among 39 hospitals in an in-patient setting in Germany. *International Journal for Quality in Health Care*, 23(5).
- Sharifa Ezat, W., Jamsiah, M., Malka, S. A., Azimatun, N. A., Tuti, N., & Noor Izzah, A. S. (2010). Customers' Satisfaction Among Urban and Rural Public Health Clinics in State of Selangor, Malaysia. *Malaysian Journal of Public Health Medicine*, 10(2), 52–67.
- Sitzia, J., & Wood, N. (1997). Patient satisfaction: a review of issues and concept. Soc Sci Med, 45(12), 1829–1843.
- Syaifulsyahira, Muhammad Hanafiah, J., & Salmiah, M. (2015). Predicting

- factors of patients' satisf action with outpatient services in military hospital. *International Journal of Public Health and Clinical Sciences*, 2(4), 29–43.
- Szecsenyi, J., Goetz, K., Campbell, S., Broge, B., Reuschenbach, B., & Wensing, M. (2011). Is the job satisfaction of primary care team members associated with patient satisfaction? *BMJ Quality & Safety*, *20*(6), 508–514.
- Tanser, F., Gijsbertsen, B., & Herbst, K. (2006). Modelling and understanding primary health care accessibility and utilization in rural South Africa: An exploration using a geographical information system. *Social Science & Medicine*, 63(3), 691–705. http://doi.org/10.1016/j.socscimed.2006.01.015
- Tasso, K., Behar-Horenstein, L. S., Aumiller, A., Gamble, K., Grimaudo, N., Guin, P., ... Ramey, B. (2002). Assessing Patient Satisfaction and Quality of Care through Observation and Interview. *Hospital Topics*, *80*(3), 4–10. http://doi.org/10.1080/00185860209597996
- Thompson, A. G., & Suñol, R. (1995). Expectations as determinants of patient satisfaction: concepts, theory and evidence. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care / ISQua*, 7(2), 127–41. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/7655809
- Tin-Oo, M. M., Saddki, N., Hassan, N., Qualtrough, A., Burke, F., Geld, P. Van der, ... Eslamipour, F. (2011). Factors influencing patient satisfaction with dental appearance and treatments they desire to improve aesthetics. *BMC Oral Health*, 11(1), 6. http://doi.org/10.1186/1472-6831-11-6
- Tucker, J. L. (2002). The moderators of patient satisfaction. *Journal of Management in Medicine*, 16(1), 48–66.
- VanGompel, E. C. W., Jerant, A. F., & Franks, P. M. (2015). Primary Care Attributes Associated with Receipt of Preventive Care Services: A National Study. *Journal of the American Board of Family Medicine: JABFM*, *28*(6), 733–41. http://doi.org/10.3122/jabfm.2015.06.150092
- Yunus, M. A., Nasir, M. M. T., Nor Afiah, M. Z., Sherina, M. S., & Faizah, M. Z. (2004). Patient satisfaction: a comparison between government and private clinics in Mukim Labu, Sepang, Selangor. *Malaysia Journal of Public Health Medicine*, 4(2), 6–11.