Factors Affecting No-Show Behaviour:
A Study on Missed Appointment of Columbia Asia Hospital Taiping Patients

By

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DECLARATION

I hereby announce that the dissertation title "Factors Affecting No-Show Behaviour: A Study on Missed Appointment of Columbia Asia Hospital Taiping Patients" was written entirely by myself and has not been submitted, in full or in part, to any prior applicant for a degree. Unless expressly mentioned by reference or acknowledgment, the work presented is solely my own.

Signature :

Name : Nur Izwa binti Mohd Mukhtar

Date :

PREFACE

This dissertation is the final phase of my master's degree in Business Administration at Tun Abdul Razak University (UNIRAZAK). I began this study on 23 February 2021 and it was performed at Columbia Asia Hospital Taiping CAHT), which my current workplace. I have selected this title for two reasons, one because of my interest in data collection, on the other hand because with this research and its findings, hospitals, clinics, or other medical facilities will benefit from it. This study was challenging, it was also very informative.

I would like to express my gratitude to some special people, without whom I would not have accomplished this research. First, I would like to thank my UNIRAZAK lecturers for offering me invaluable knowledge and a lot of inspiration. I am deeply thankful to my supervisor Professor Dr Benjamin Chan Yin Fah, for providing me with useful advice and feedback during completing the research paper. I would also like to thank Encik Mohd Shafee Awang, CAHT General Manager for his support and approval to conduct the research in the hospital.

Finally, my thankfulness also goes to my family and friends for the support and understanding me while I was writing this dissertation.

Thank you, Allah, for giving me endless blessings, wisdom, and potentials.

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Missed appointments mean appointments that patients have not attended nor cancelled. One of the essential issues of hospital management is missed appointments because they will incur the inactivity of medical staff and equipment, occupy other patients with health resources, and thereby affect the quality of healthcare services. To continue and track the efficacy and success of therapy treatments, physiotherapists use outpatient follow-up appointments. Thus, it is necessary to attend follow-up appointments, as non-attendance has detrimental effects for both the patient and the healthcare facility. This study aimed to examine the factors of no-show behaviour and to facilitate positive social change by raising awareness among patients, staff, and service providers about the factors why patients miss their appointments. This is one shot and non-experimental design research conducted at the Physiotherapy Department of Columbia Asia Hospital Taiping with sample of 100 out-patients and 5 physiotherapists using online survey questionnaires. Descriptive statistics was used to identify the sample variables found. The data obtained were statistically analyzed using the SPSS or known as Statistical Package for the Social Sciences. This study's results may lead to social change by introducing new information or advising strategies to minimize medical no-shows. These results may also gain organizational value and improve health of the population.

Keywords: Missed appointment, hospital, Physiotherapy, Columbia Asia Hospital Taiping, patients.

CHAPTER 1

INTRODUCTION

"If I have made an appointment with you, I owe you punctuality, I have no right to throw away your time if I do my own" (Quotes Richard Cecil)

In the literature, various words are used to characterize the occurrence of patients who do not attend their scheduled appointments. Attendance can be interpreted as "attending a prearranged appointment" (Guy, et al., 2012). Described by Bech (2005) "patient failing to appear for scheduled appointments" as non-attendance. In addition, outpatient non-attendance can be identified as patients who do not show up without notice at the designated date, time, and location (Blæhr, Kristensen, Væggemose, & Søgaard, 2016). The word as not attended, which is described by Healthwatch Lincolnshire (2014) as "patients failing to attend their appointments", is often used. Pesata et al. (1999) referred missed appointments to patients who "fail to appear for their visit" or "do not attend their scheduled visits."

In medical practice, non-attendance at scheduled outpatient clinic appointments is a common concern, posing a major cost to the health care system and resulting in interruption of daily work preparation (George & Ruben, 2003). Private and public healthcare providers need to be aware of why patients struggle to follow their appointments to be effective advocates for change. Apart from forgetting appointments (Wong, et al., 2006), working commitment (Frankel & West, 1989), transportation (Bean & Talaga, 1992) and financial issue (Barron, 1980) are the main reasons given by patients pertaining to the no show behaviour. Besides that, patient who not feeling well and feeling much better (M.P, 1990) also contributed to missed appointment.

The study assessed by Mbada, et al. (2013) at Nigeria Physiotherapy Clinic reported 79.2% of missed appointment caused 720 missed opportunities for other patients, $7370 increase in total liability, lowered efficiency by 79.0% and 1474-days recovery impact. These data show that no shows for out-patient physiotherapy are the major challenge and reflect substantial profit, productivity, and recovery time losses for patients.

To illustrate the problem of no-show, some no-show rates in outpatient treatment are listed. Some studies also have analyzed the overall no-show rates as one from various medical

fields. The no-show rate often differs between studies. The results reveal, in a systematic literature review by Dantas et al. (2018), that primary care and psychiatric care are the specialties most studied in no-show schedule. As seen in Figure 1, "physiotherapy," which is much higher than other specialties, has a no-show median of approximately 57%. "other specialties," consisting of hand surgery, intravenous therapy, obstetrics / gynecology, ophthalmology, pulmonary tuberculosis, rheumatology, and urology, are the lowest median with an estimated 11% (Dantas, Fleck, Cyrino Oliveira, & Hamacher, 2018).

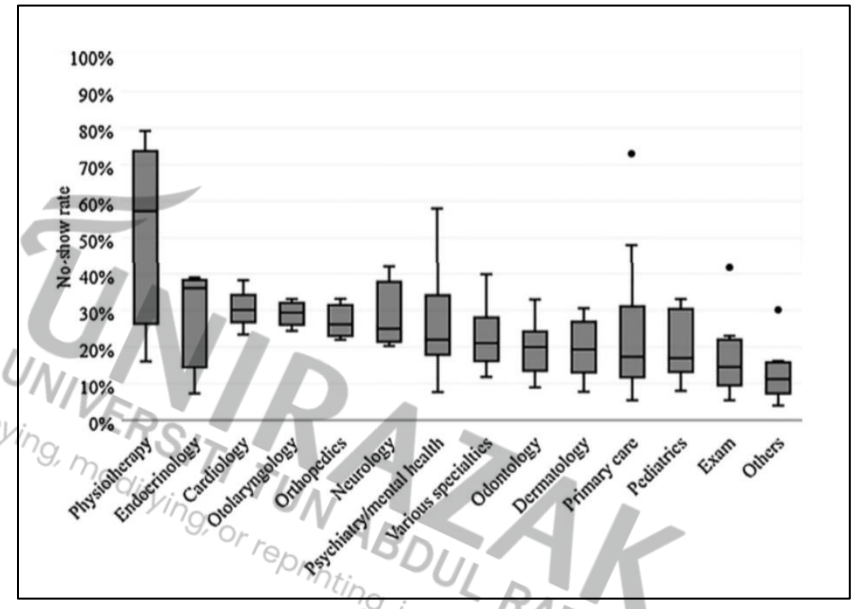


Figure 1: No-show rate by Dantas et al

1.1 Background of the Study

Columbia Asia Hospital Taiping (CAHT) is a medical facility under Columbia Asia Sdn. Bhd., situated in northern Perak, with a maximum capacity of 62 beds and daily outpatient clinics. Accredited in 2019 by the Malaysian Society for Health Quality (MSQH), CAHT offers various specialties and services including Physiotherapy. Physiotherapy is located at 1st floor and offers promotional, prevention, curative and rehabilitative services for injured, sick or disabled patients, regardless of age group. Physiotherapy CAHT services are but not limited to:

- Ante & Post Natal Class

- Chest Physiotherapy
- Exercise Therapy
- Electrotherapy (Pain Relief/ Muscle Stimulator)
- Education & Awareness Program
- Fitness Class
- Inpatient and Outpatient Physiotherapy
- Manual Therapy
- Thermal Therapy
- PERKESO - Return to Work Program

However, the intervention requires regular evaluation of the progress of the patient, monitoring the positive results of the intervention and examining its outcome. Therefore, ability to track patient progress and providing further feedback is essential for physiotherapists. This is to ensure the department objective is align with company mission "To deliver the best clinical outcomes in the most effective, efficient and caring environment" (Columbia Asia, 2020). The hospital would potentially improve patient, employee and service provider understanding as to why patients could neglect their appointments.

A carve-out preparation model is used by the CAHT outpatient physiotherapy department. Traditional scheduling usually helps the department in a scheduled working day to see an optimum number of patients thus ensuring quality of care and patient satisfaction. Scheduling varies according to specialization, service, staffing, and volume. The following processes can occur in the CAHT outpatient physiotherapy department:

a) A patient contacts physiotherapy to schedule an initial evaluation.
b) Physiotherapy will record manually in patient's appointment card and department scheduling book.
c) The patient attends physiotherapy session as per scheduled.
d) Follow up appointment will be scheduled at the end of the session Physiotherapy staff schedules the patient for future appointments based on available treatment times and patient's preference.

e) Physiotherapy staff will record patient attendance in department outpatient census book.
f) If patient fail to turn up for appointment, physiotherapy staff will call for re-scheduled the appointment.

Physiotherapy staff still attend any patient without appointment depends on the urgency and needs. Double booking occurs sometimes. If patients do not turn up for appointments, when using a conventional scheduling model, the department could do nothing. The time slot may be filled with a patient in urgent care. Walk-ins are discouraged, however, because the slot always stays vacant, leading to a loss of income for the department. With a high number of no-show appointments, it is possible to risk financial sustainability. Currently Physiotherapy CAHT does not has policy on missed appointment. Therefore, patients tend to not keep their appointment as per schedule.

1.2 Problem Statement

Surprisingly, research conducted by Lacy et. al. (2004) identified there are three richer factors that affecting no show behaviour (1) emotions barrier, (2) perceived disrespect and (3) lack understanding the scheduling system. Respect issues may clarify why patients do not call to cancel their appointment and do not bother about keeping their appointment. Further research is deserved in the area of study of appointment keeping.

Number of steps to reduce the no-show behaviour have been attempted, but none have been consistently successful (Tan, et al., 2017). From the previous researcher, appointment system reminders are the most common and successful approach (Hardy, O'Brien, & Furlong, 2001). This research will explore more nuanced grasp of the issues associated in no show behaviour that emphasize, along with their perceived trust in the healthcare provider, the personal meanings of patient presenting, resulting feelings, and expected consequences. Conceptually, a variation of these variables is the factors of influencing the no show behaviour.

This research was intended to answer the query, “What are the factors affecting no-show behaviour and which appointment reminder system preferred by patients?”

1.3 Research Objectives

The objective of this paper will be to recognize factors to patients no show behaviour and to include strategies recommendations to lessen missed appointment rates. It can all be helpful to incorporate telephone appointment reminders through an automated telephone system, text messages, live phone calls, or written reminders. No show behaviour caused inability of healthcare provider to treat other patients. It also affected waiting time and resources, hence reduce the employee productivity (Costa, Salomao, Martha, Pisa, & Sigulem, 2009).

The objectives are threefold:

RO1: To increase healthcare provider knowledge about potential factors that influencing patient no show behaviour.

RO2: To identify whether those factors are the actual factors that influencing patient no show behaviour.

RO3: To determine the relationship between appointment reminder system and patient no show behaviour and to offer which method is the most preferred by patients.

1.4 Research Questions

A drill-down is necessary to answer the main research query. Two steps are part of this drilldown. First, a literature review study is conducted to gather empirical understanding of research on patient no-show behaviour factors. Second, a quantitative online survey questionnaire will be generated, and a data analysis will be conducted to gather more information on the subject.

The following four sub-questions were constructed in needed to answer the research question:

Q1: What is the relationship between emotional barriers of keeping appointment and patient no show behaviour?

Q2: What is the relationship between perceived disrespect system and patient no show behaviour?

Q3: What is the relationship between lack understanding of the scheduling system and patient no show behaviour?

Q4: What is the relationship between appointment systems method patient no show behaviour?

1.5 Significance of the Study

It can be difficult to understand no-show behaviour as they vary based on the location of healthcare and the form of services offered. Therefore, study within specific clinical settings and various disciplines is needed to truly understand this problem. This study addresses some gaps in prior research in previous research in missed appointment. First, there are limited study involving Physiotherapy and second, there is no focus population sampling in Columbia Asia Hospital Taiping has be done. Third, as most studies emphasized patients' demographic factors, environmental factors there are lack of research focusing on patient's behaviour factors (Lacy, Paulman, Reuter, & Lovejoy, 2004).

As shown in Table *1* there are very limited study on emotion, respect, and appointment keeping. Hence further research on this subject could be interesting and helpful for society.

No.	Author	Variable	Research finding
1	(Somayeh, Zarei, Mahnaz, & Mohammad, 2018)	1. Lead time 2. Appointment system 3. Appointment month 4. Clinic hours	1. Appointment lead time is the main predictor of no show. 2. Appointment reminders via text message, cancellation policy, and nurse-led telephone triage can be expected to decrease patient no-show.
2	(Lacy, Paulman, Reuter, & Lovejoy,	1. Perceived disrespect of the patient's beliefs 2. Emotional barriers 3. Lack of understanding of the	Reviewing miss appointment rate and participants' perspectives of personal respect could help reduce no-show rates among patients who

No.	Author	Variable	Research finding
	2004)	scheduling system.	occasionally participate.
3	(Davies, et al., 2016)	1. New versus Established patients 2. Appointment Age Groups 3. Patient Age Groups 4. Gender 5. Service Line	1. Younger patients are more likely to missed appointment as appointment age increases. 2. New patients no-show at higher rates than current patients, especially beyond 36 days of lead time
4	(Ullah, et al., 2018)	1. No transportation 2. Forgot or unsure their appointment schedule. 3. Financial matter 4.Lack of appointment awareness 5. Not satisfied or had negative emotions about the healthcare provider 6. Current health condition 7. Personal issue 8. Other	The most popular explanation for no-show was patients forgetting about it or not remembering they had one.
5	(Lenzi, Ben, & Stein, 2019)	1. patient record number 2. Age (years) 3. Gender (male/female) 4. Self-reported race/ethnicity 5. Appointment day 6. Date and time of the scheduling 7. Date and time of the appointment 8. Appointment shift (morning or afternoon) 9. Appointment weekday 10. Appointment month 11. Appointment attendance (attendance/no-show) 12. Health professional categories 13. Types of appointment	It showed that the most relevant predictors of a no-show in the facility investigated were previous patient attendance and same-day appointments. More notably, the findings showed that the best model, built from data already available in the scheduling system, had a good output with an 81 percent probability of correctly identifying the real positive and negative aspects of a patient no-show.
6	(Alyahya, Hijazi, & Nusairat, 2016)	Intervention, exemption status, gender, marital status, and copayment. Age of the patient was treated as a covariate.	Younger patients are prone to no-show than older patients

No.	Author	Variable	Research finding
7	(John, et al., 2014)	Lead time, age, financial payer, patient prior attendance history	1. Lead time has the greatest effect and is the most addressable, although the age of the patient, the insurance provider and, to some degree, the actions of the patient cannot be changed. 2. Results show quite a mystery that scheduling systems designed to help ensure maximum utilization at a future date often led to under-use by raising the probability that patients may not be able to do so.
8	(Finstuen, 2007)	Patient's age, branch of service, beneficiary category, enrollment status, day of the week, type of provider seen, and wait times	Variables that were important predictors of no-shows were: age, beneficiary group, service branch, enrolment status, day of the week, provider by form, and each separate wait time examined.
9	(Darrel, 2013)	Demographic factors, environmental factors, and patients' behaviour	Age is the most predictable attribute that triggers a dataset-based no-show. According to the literature, young adults with children have a low SES. Getting a low SES leads to patients not attending their appointments because they are unable to pay for their medical care, have no health insurance and are more likely to have contact and transport difficulties. Adopting advances in the healthcare sector benefits patients, physicians, and staff. Doctors and patients do not need to be present at the same time by making use of social networks such as Facebook and Twitter. Patients can leave important questions to one of these networks, and doctors can then answer these questions later. This can liberate all parties from limitations on conventional contact processes, such as phone

No.	Author	Variable	Research finding
			calls (reminders) and face-to - face visits.
10	(Rayson, Mas'uud, Thiru, Leong, & Yu, 2019)	Patient factors, Disease and medication factors, Healthcare provider factors	1. Age, transport issue, distance, and psychological issues, had no significant association with no show. 2. No show associated with patients who have not been given medication, frustration with treatment and long periods between appointments, long waiting times and inadequate communication between the healthcare provider and the patient.
11	(Claveau, Authier, Rodrigues, & Crevier-Tousignant, 2020)	Personal, organizational	A total of 19.1 per cent of respondents recognized past non-show conduct. Resolved problems (22.9 per cent) and job responsibilities (19.4 per cent) were the most frequent personal reasons for missing appointments, while inconvenient appointment times (17.0 per cent), delay before appointments (14.6 per cent) and lack of clarification (13.7 per cent) were the most frequent organizational reasons. The most common excuse not to alert the clinic of the absence was to fail to call (55.2 percent).
12	(Mohammadi, Wu, Turkcan, Toscos, & Doebbeling, 2018)	Lead time (time between scheduling and the appointment), patient prior missed appointments, cell phone ownership, tobacco use and the number of days since last appointment.	1. Female, single, unemployed, Medicaid, self-paid, smoker patients had a higher risk of missing appointments. 2. Patients without a mobile phone, email or patient portal have a greater risk of missing an appointment. 3. The time (day, weekday, or season) of the appointment and the form of appointment are

No.	Author	Variable	Research finding
			statistically substantially different between check-out and missed appointment patients.
13	(Ngwenya, van Zyl, & E.M, 2014)	Patient demographics, reasons for non-attendance, perceived severity of diabetes, and perceived encouragement from others to attend.	Forgetfulness, which was found to be the primary cause of non-attendance.
14	(Samuels, Ward, Melvin, Macht-Greenberg, & Wenren, 2015)	Forget, transportation issue, working commitment	Popular reasons for missing appointments were as follows: forgotten (27%), transportation issues (21%) and time off from work (14%)
15	(Dantas, Fleck, Cyrino Oliveira, & Hamacher, 2018)	Age, socioeconomic status, distance, and payment method	Patient characteristics that were more commonly correlated with no-show behaviour: younger adults; lower socio-economic status; distant place of residence; no private insurance.
16	(Fiorillo, et al., 2018)	Clinic location, patient demographic factors, attending seniority, temporal factors, insurance types, rurality, and visit type.	Increased clinical no-show rates are correlated with satellite clinics, new patient visits, younger age, and form of insurance.
17	(Tsai, Lee, Chiang, Chen, & Chen, 2019)	Patient characteristics, appointment characteristics, weather characteristics	First visit appointments showed a higher rate than non-first visits
18	(Kheirkhah, Feng, Travis, Tavakoli-Tabasi, & Sharafkhaneh, 2016)	Patient factor, Appointment method	1. In the women's clinic no-show was higher and in geriatric clinics the no-show rate was lower than the general care clinic. 2. Despite its decrease by a centralized phone recall, the no-show rate remained high.
19	(Jiayi, Jingui, Kum, & Zhichao, 2019)	Age, class, race, nation, distance, clinic, specialty, season, day of week, and period of day	Re-scheduling has a big influence on no-show behaviour in patients has a significant impact on patient no-show behaviour

No.	Author	Variable	Research finding
20	(Marbouh, et al., 2020)	Patient-Related Issues, Environmental Issues, Financial Issues, Scheduling-Related Issues	Fear and anxiety may drive high levels of no show
21	(Raid & Mahmoud, 2012)	Patient, Clinic & Customer Service	The proposed overbooking simulation-based model accommodates a broad range of clinical sizes and no-show rates and allows its use in several clinical practices.
22	(Abdulrahman, et al., 2017)	Ethnic, gender and sexual orientation	Ethnicity and sexual orientation of Malaysian patients can play a significant role in their degree of adherence to scheduled clinical appointments.
23	(Helen, Miriam, & Ronald, 2020)	Gender, Age, Race, Ethnicity, Insurance Type, and Geographical Location	Statistically important correlation between the type of physician, that is, preferred over non-preferred primary care, and the status of attendance, cancellation and no-show that indicates that the physician-patient relationship leads to the attendance of pre-scheduled appointments.
24	(Zailinawati, Ng, & Nik-Sherina, 2006)	Forgot the appointment dates, not feeling well, administrative errors and work or family commitments	The key reasons for non-attendance were missing appointment dates (32.9 per cent), not feeling well (12.3 per cent), administrative failures (19.1 per cent) and job or family responsibilities (8.2 per cent). The majority would prefer a phone call (71.4%) followed by letters (41.3%).
25	(Peterson, McCleery, Anderson, Waldrip, & Helfand, 2015)	Patient factors, Appointment scheduling systems engineering design and management factors, Facility characteristics	The scheduling component's independent influence relative to the reminder component remains uncertain.

Table 1: Literature review on Factors affecting no show behaviour.

From this study, Physiotherapy Columbia Asia Hospital Taiping will learn about factors that influencing patients no show behaviour. The information will assist them to construct effective methods to lessen the number of the missed appointment. The findings from this research also can be used to facilitate physiotherapist to discover the nature of no-show behaviour and improve efficiency of the services provided.

The social contribution of this study is providing the findings and as such the will offers fresh perspectives and a structural overview that can help minimize no-show patients in the healthcare industry. In addition, the findings of this study can assist hospitals, clinics, and other medical care centers to understand the patient no-show behaviour factors. Ultimately, healthcare facilities might use the strategy to give presentations to share information about minimizing the number of missed appointments patients to their team members. This insight will help to enhance the relationship between the professionals and their patients and provides better understanding of the patients.

1.6 The Organization of the Study

Three chapters are grouped into the research proposal. Chapter 1 starts with an introduction explaining the study's background, problem statements, research objectives, research questions, the significance of this study, and the organization of the study.

A literature review outlining the theoretical foundation and empirical research related to factors contributing to no show behaviour is discussed in Chapter 2. Then, followed with the proposed conceptual framework for this study. This study's research hypotheses are therefore built based on the conceptual research model suggested.

The research design and methodology used for examining the research hypotheses will be mentioned in Chapter 3. It outlines the study's field survey design, sampling plan, data collection process, operationalization and measurement and this chapter end with explanation of the data analysis approach.

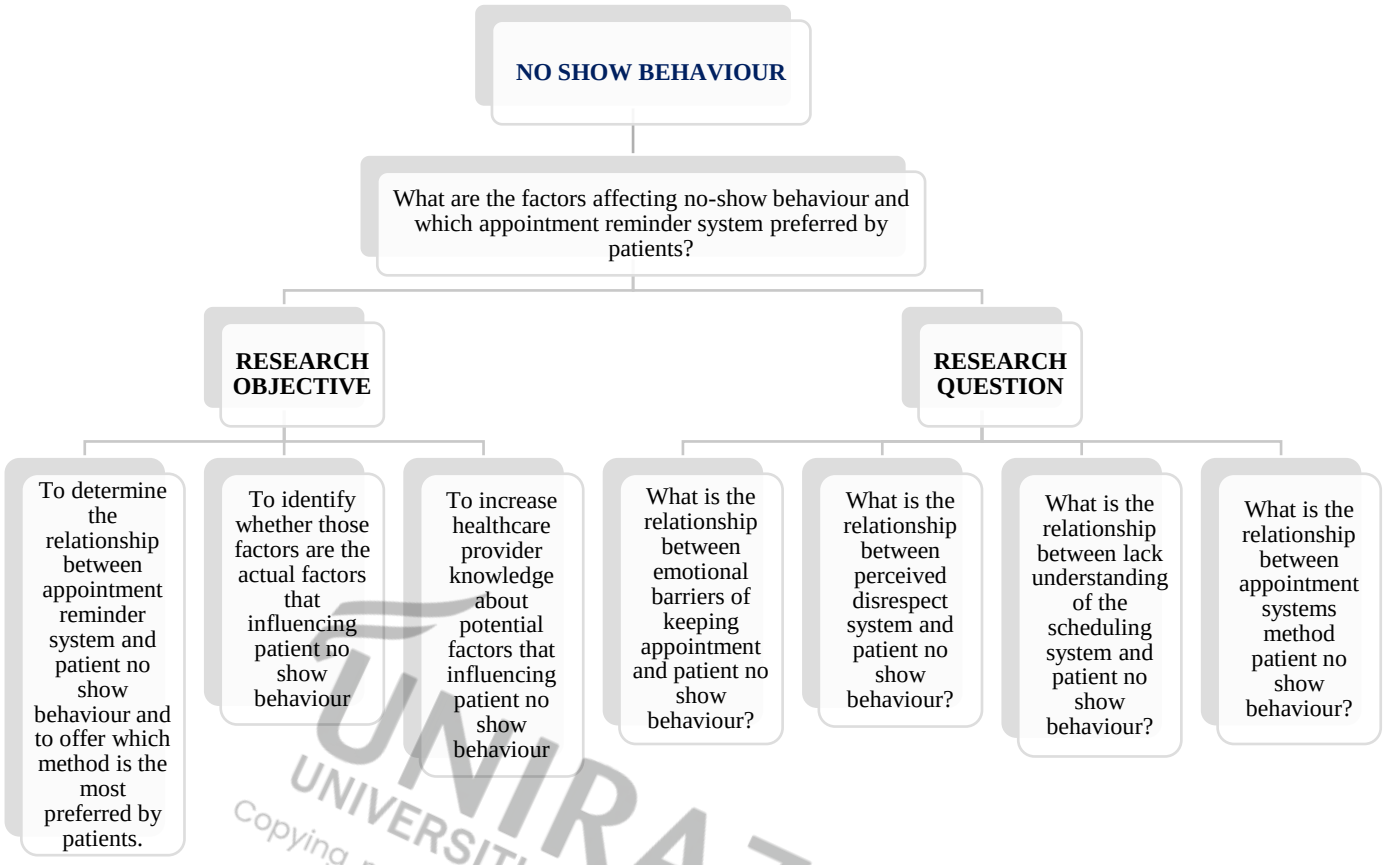


Figure 2: Chapter 1 flowchart

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The goal of this paper is to recognize what factor affecting patient's non-attendance and to provide recommendations how to increase the missed appointment rate in healthcare. Google searches have been used for 'non-attendance', "no-show", "missed appointment" and "physiotherapy". Research conducted outside the Malaysia were included due to patient no show issue is a global concern and very limited study done in Malaysia.

The chosen categories are patients' no-show behavioural features and the appointment reminder system in the healthcare industry. The research papers that are consulted are limited to English papers. Furthermore, the literatures were selected based on relevance by reading the title, abstract, conclusion and discussion. Consulted research papers are restricted to English articles. In addition, by reading the title, abstract, conclusion and discussion, the literature was selected based on relevance.

2.2 Theoretical Foundation

2.2.1 HBM - The Health Belief Model

Designed by U.S. Public Health Service social psychologists in 1950s was used for this study to conduct a systematic and comprehensive analysis. This theory describes and predict behaviours related to health, particularly in relation to the adoption of health services (Janz & Becker, 1984). As shown in Figure 3, it indicates that the assumptions of people about health issues, perceived advantages of action and obstacles to action, and self-efficacy clarify dedication to health-promoting actions (or lack of engagement). To encourage the health-promoting activity, a trigger, or cue to action, must also be present. (Rosenstock, 1974).

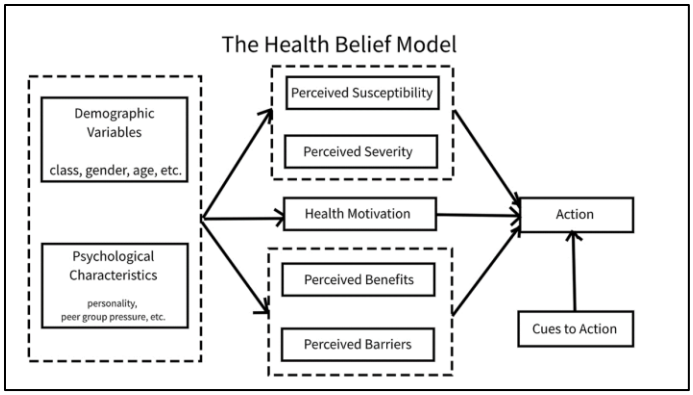


Figure 3: The Health Belief Model

Study done by Spikmans et al. (2003) stated that appointment adherence was assessed by the awareness of the person medical risk – "If I don't go to my appointment, I won't get my prescriptions," and the consequences of a threat avoidance intervention – "attend the appointment and 'care are given' " – are weighed against the potential advantage – "with that my blood pressure become normal." The most critical ideas to think about when creating a new appointment system to resolve missed appointments would be perceived advantages and challenges, for example; cue of action, both internal and external (media, guidance from friends, reminder strategy, family member 's illness), will make the patient more conscious of the importance of holding an appointment (Kuhns & McEwen, 2011).

In a meta-analysis conducted by Carpenter (2010) with 18 studies from 1982-2007 that used HBM to understand various behavioural outcome studies, many dimensions remain unproven, although HBM was one of the most frequently used behavioural understanding models. The analysis showed that each of them had the highest severity and susceptibility to prescription drugs, although each relationship was weak. Perceived benefits had a consistently positive relationship with behaviour while barriers were the belief most strongly linked to results, especially preventive as opposed to curative acts. Except for barriers, these relationships have been found to fade over time, suggesting that the longer the duration between HBM measurement and behaviour, the less consistent the link. The researcher acknowledges that these findings contradict the association between HBM factors and findings, but that many of the study's underlying factors were individual item tests, were not psychometrically evaluated for proper use or presented too simplistic models to properly isolate effects if present.

A systematic review of 18 studies using data from model conception to 2012, carried out by Jones, Smith & Llewellyn (2014). These researchers have concluded that most studies have shown an impact of these interventions, particularly on primary prevention, but not generally on changes in the beliefs of health. These studies were mainly based on adult populations mostly in U.S. or in other high-income countries, just like for the Carpenter review. These studies contained limited justification for selecting certain health beliefs for the study, for being reliable or valid in a research context, and rarely included additional information such as motivation to the HBM. Finally, the interface between this framework and the indications of impact perceptions, assessments and behaviour was adequately recorded by few studies included in the review.

One of the aspects of the HBM that has been most studied according to the original theorists (Janz & Becker, 1984) is the cue to attend. While appointment reminders are an important driving force for action (McCaul, Johnson, & Rothman, 2002), few studies have determined how the HBM framework fits. Oinas-Kukkonen and Harjumaa (2009) argue that technology to change belief and actions needs to be built and evaluated in the sense of persuasion (what the purpose, event and plan are called). This reflects how communication techniques have been developed, how health beliefs and characteristics have been developed, the characteristics used in the analysis of messages received and the technique used to manipulate values or actions (Oinas-Kukkonen & Harjumaa, 2009). While there are several issues still unanswered for a more detailed view of the interface between attitudes, attitudes, health technologies and the attendance of patients (Champion & Skinner, 2008).

2.2.2 TPB – Theory of Planned Behaviour

A theory as shown in Figure 4 of the relation between actions and attitudes. Icek Ajzen (1991) developed this theory to strengthen the predictive power of reasoned action by including perceived behavioural control. This theory has been applied to research in numerous fields, including in health care, of the relationships between values, behaviours, behavioural intentions, and comportments. The TPB consists of 4 factors:

- Attitude toward the behaviour.
- Subjective norm.

- Perceived behavioural control.
- Intention.

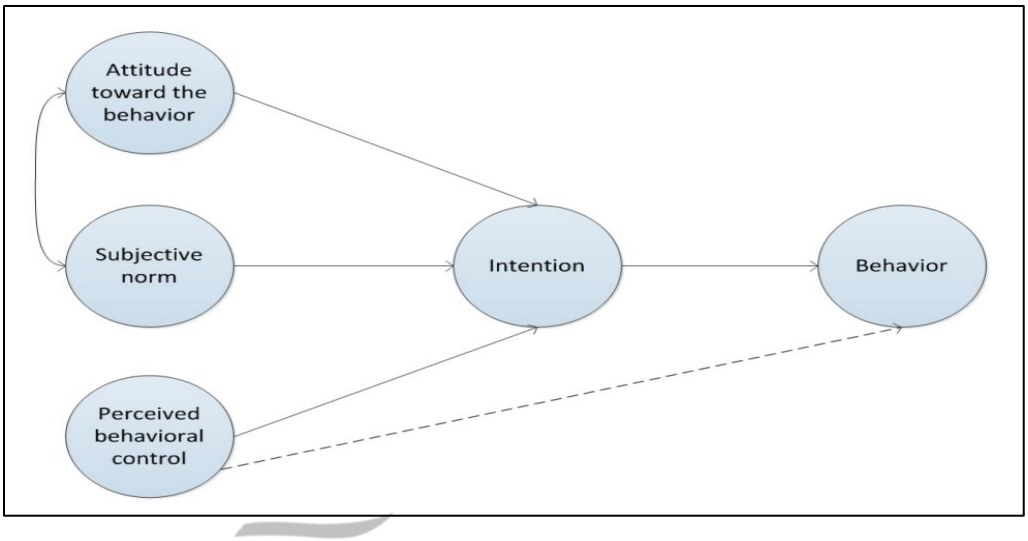


Figure 4: TPB model by Ajzen

Intention. The purpose of the person to conduct a given action is said. Intents are examples of how hard people are willing to work, or of the effort they are willing to make to perform a conduct. The greater the intention, the more likely the behaviour is to take place. In the case of no-show patients, their intention is related (depending on) the amount of money they have, the time they must attend their appointments and the relationship between the patient and the doctor.

Perceived behavioural control. Perceived behavioural control is the value of the real action or the anticipation of the action 's performance and the motive afterward. Control assumptions about the existence or absence of obstacles and facilitators to behavioural success assess the perceived behavioural control (Glanz & Viswanath, 2008). It is believed that both past experiences and predicted impediments and obstacles are expressed (Ajzen, 1991). In the case of no-show patients, they are more likely to attend if patients know the reason for attending their appointment or if they understand that the appointment is necessary and if they do not have to wait a long time to see their doctor. Perceived behavioural control, together with behaviour intention, can be used, according to the TPB, to predict the behaviour achievement of a person (Ajzen, 1991). In other words, 'Intention' is the 'Perceived behaviour control' mediator, weighted by its perceived

power or its effect (Glanz & Viswanath, 2008). When the 'perceived behavioural control' impacts 'intention,' patients are most likely to attend their appointments.

Subjective norms. Subjective norms depend on the normative values of a person and are weighed by his motive for fulfilment. For instance, if a person thinks he can conduct behaviour to his own advantage, he will do so to fulfil his own needs. If the patient does not turn up if the doctors address the advantages of attending on appointments.

Attitude towards behaviour. This refers to the degree to which an individual has a favorable or unfavorable assessment or perception of the behaviour in question. Attitude has been defined by many theorists as composed of efficient and cognitive dimensions (Glanz & Viswanath, 2008). Attitude towards a behaviour is the emotional reaction of a person to the principle of performing a prescribed behaviour. This conduct is least likely to be carried out by individuals who display a negative emotional reaction to a certain conduct. The more optimistic an individual's attitude and subjective norm, the more likely he will conduct the action with respect to his actions. They do not attend their appointments while addressing no-show patients because of fear or anxiety before seeing their doctor, mostly because of what the doctor could tell them (Ong, Hoos, & Lammes, 1995).

2.2.3 SIT - Social Influence Theory

SIT notes that "behaviour is affected by others consciously or unconsciously" (Schmitz & Fulk, 1991). In other words when one's beliefs, intentions or actions are influenced by others, SIT happens. The SIT is based on the theory of media richness and introduces the social power construct (Schmitz & Fulk, 1991). This hypothesis suggests that the social environment determines an individual's actions and attitude toward communication media. SIT can be divided into three distinct influencing systems, namely (Kelman, 1958).

- Compliance. When an individual accepts control from another person, it can be said to occur because he knows to obtain or obtain some advantages or a favorable response in return (Kelman, 1958).

- Identification. When a person has caused a behaviour because the relationship is related to the desired one (Kelman, 1958). In other words, if a person is affected by someone else, he or she is closely related, such as a friend or family member.
- Internalization. This is when a person embraces control based on the substance of induced activity, such as the ideas and acts of which it is composed are necessarily beneficial (Kelman, 1958).

Social Influence Theory also impacts the healthcare sector's patients. For instance, a recent retrospective cohort study conducted with multiple General Practitioners (GP) indicates that a family has an important role to play in whether a family member can see a doctor (Cardol, et al., 2005). If a family member (e.g., a parent) is frequently ill and therefore always goes to his GP and returns with good results or positive reviews, there is a greater likelihood that members of his family will either go to their GP or attend their appointments. In the studies of Cardol et al. (2005) and Dove and Schneider (1981), this correlation has been substantially confirmed. Moreover, between mothers and their children, this effect is greater than between fathers and their children (Dijk, 2007).

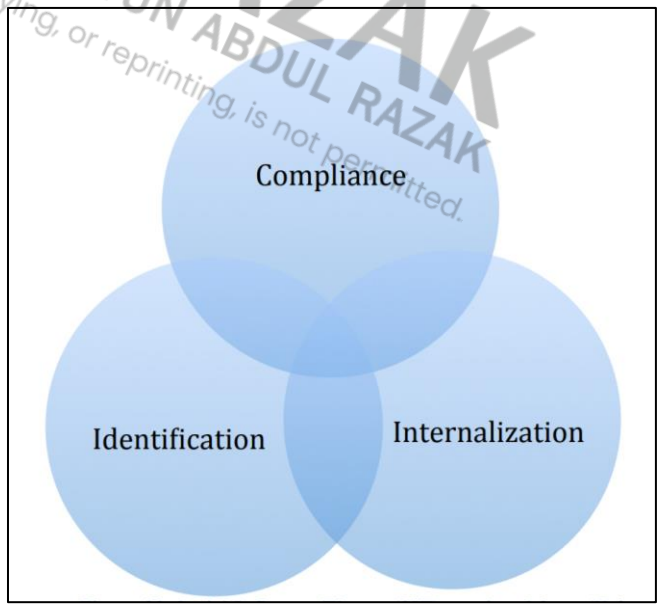


Figure 5: SIT by Kelman

2.2.4 TAM - Technology Acceptance Model

This theory is aimed at assessing the acceptance of information systems and attitudes in information technology. Based on Reasoned Action Theory (TRA) Technology, Acceptance Model (TAM) and used to describe human acceptance actions. According to the Theory of Reasoned Action (TRA), human conduct motivated by behavioural goals is a feature of an individual's attitude toward behaviours Within this model, the target is characterized by attitudes that have a direct and indirect impact on perceived ease of use and usefulness. TAM offers a straightforward framework for modelling the effect of external influences on the views, behaviours, and intentions of individuals.

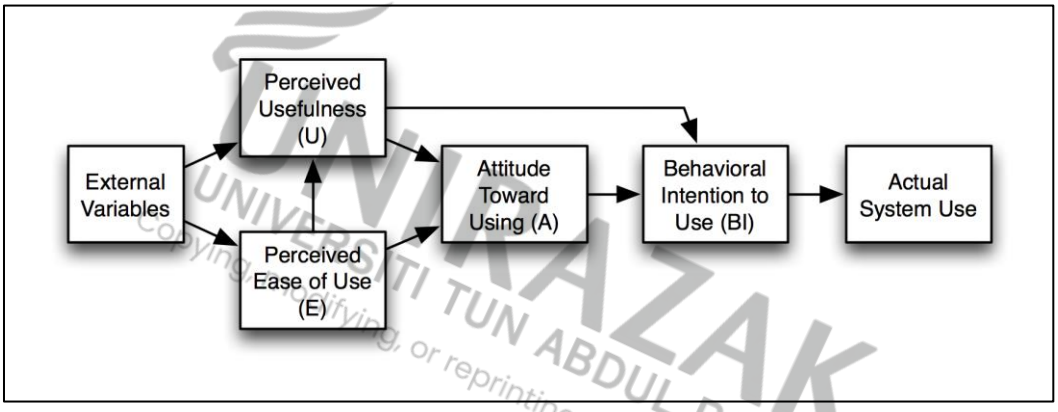


Figure 6: TAM by Davis.

A number of studies have repeated Davis 's initial (Davis, 1989) analysis in order to provide empirical proof of the relationships between effectiveness, ease of use and device use (Hendrickson, Massey, & Cronan, 1993) (Adams, Nelson, & Todd, 1992) (Segars & Grover, 1993) (Subramanian, 1994) (Szajna, 1994). The questionnaire instrument used by Davis (1989) is already stable and relevant in a lot of publicity. Adams and colleagues (1992) repeated the Davis work to prove that his instrument and its scales are accurate and reliable. They have also applied it to various environments, demonstrating the internal accuracy and efficiency of replication of the two scales using two different samples. Hendrickson et al. (1993) found good assurance and reliability for testing. According to Szajna (1994), the system is predictively useful, auto reported, and

user-friendly. The amount of the studies has shown that the Davis instrument is accurate and that it can be used for various user groups and device choices.

Winarto & Hadiprajitno (2011) notes that a total of 70 external variables have been introduced to explain how new skills can be taught. These variables can be divided into four categories, i.e., organizational features, system characteristics, personal user features, and other variables (Yousafzai, Foxall, & Pallister, 2007). The willingness or degree to which a person is ready to perform such deeds may explain intentions and behaviours. It is intended that the actual use of such credentials contributes to the creation of an attitude would be predicted by a dependent variable. The goal is the dependent variable which forecasts the actual use of a particular ability which ultimately leads to a formation of attitude.

2.2.5 System Theory

Once one starts analyzing the variables that hinder the ability of a person appointment adherence, the most influential term seems to be systems theory. This theory concentrates on environmental processes and how these processes communicate with and influence individuals (Kirst-Ashman, 2014). To work correctly, each person structures require resources in both physical and monetary ways, such as individuals financing, mental forms, information, or legitimacy (Netting, Kettner, McMurtry, & Thomas, 2017). All of the systems are connected, and each subsystem has an impact on the population, which shows how one interruption in the life of a person, such as the loss of health insurance, may affect the individual's overall well-being. Furthermore, the theory of processes can explain how a patient ignoring an appointment may cause problems on the overall organizational flow or patient care.

2.3 Empirical Research

Extensive research is underway on how no-show rates adversely affect the healthcare system. Failure to keep a scheduled appointment resulted in higher medical costs and ineffective utilization of human health care expertise, according to a study performed at the Urban Pediatric Clinic. (Samuels, Ward, Melvin, Macht-Greenberg, & Wenren, 2015). The failure to attend appointments on schedules reflects substantial costs for time loss and financial consequences, added George and Rubin (2003). There was also a clear correlation between the patient's missed appointments and the number of times he or she visited the emergency department as staed by (DuMontier, Rindfleisch, Pruszynski, & Frey (2013). Suggests that no-show rates will adversely affect patient health.

Patients, although sometimes deemed complicit of missed appointments, may be the most impacted category. A missed appointment may mean an interruption to medical care supervision, repeated tests, insufficient treatment, decreased health outcomes by delayed care, or compromised physician-patient relationships for patients (Kalb, et al., 2012). Patient attendance is associated with decreased commitment to care, indicating that the effect of missed appointments goes beyond the facility visit. Depending on the background, patients can suffer additional financial losses due to inadequate of penalty fees, time away from work and several other complications-related expenses and additional health care needs due to delayed or unresolved health problems. Missed appointments are potentially disruptive to other patients as well; unattended appointments could be a missed opportunity for another patient (Macharia, Leon, Rowe, Stephenson, & Haynes, 1992).

Referring to the negative impacts mentioned, it is important that providers of health care implement approaches that increase no-show rates and therefore enhance patient health outcomes and financial cost recovery. A systematic approach that points to the strengths and shortcomings of similar studies can help to create an in-depth analysis that builds on previous research. Strategies to improve no-show rates in both private and community health are analyzed (Boshers, 2018).

A researcher examines the use of service navigators in a medical clinic setting to minimize missed appointment rates and boost overall patient care (Bolch, 2013). Healthcare providers and social workers have mobilized to remind patients of the value of preventive medical care, causing increased patient health outcomes and reduced attendance rates. Care

navigators have been implemented, which has proven helpful to the patient, the doctor's office as well as to the wider healthcare system. The only drawback of this intervention is the difficulty that community health centres will have in raising funds for it. The quality research of Cook and colleagues (2015) was pioneered in understanding patient experience in healthcare centers in the city. This study explored patients' interpretation of facilities from five separate Florida cultures. Patients are highly happy with the customized and coordinated care, which is appropriate for the function and service of a community health centre, according to the findings. The study found, however, that changes in the availability and processes of appointments were required. The authors agreed with previous findings that demonstrated the need to boost appointments for vulnerable primary care patients. They conclude the study by proposing improvements in patient communication to ensure that community health centres remain a viable option for low-income residents.

There are different causes for no-show, according to DiMatteo et al. (2000), such as disbelief if the procedure has a beneficial impact, financial restrictions or personal reasons concerning missing assistance and family support. There is also a list of forgotten, dementia, incorrect dates, oversleep, illness or improvement, mobility problems, transportation problems, issues associated with work or childcare, social problems such as a low socioeconomic status, bad healthcare experience, language issues or other issues of communication (Stone, Palmer, & Saxby, 1999) (Lacy, Paulman, Reuter, & Lovejoy, 2004) (NHS Digital, 2014). The fishbone diagram by Mohamed et al. (2016) as Figure 7, shows some of the root causes for the no-show of patients.

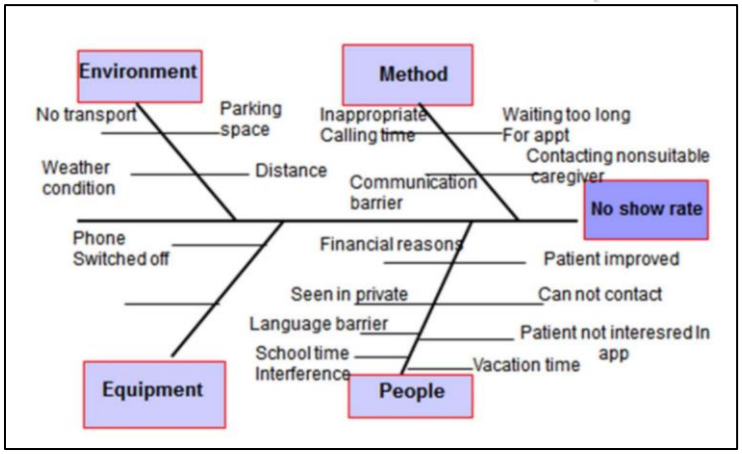


Figure 7: Fishbone diagram by Mohamed et al.

Other factors include:

2.3.1 Emotional Barrier

The influence of emotional towards no-show behaviour. The purpose of this section is to collect useful information about the emotional barrier that causes patients missed appointment. This will answer to sub-question number 1: *What is the relationship between emotional barriers of keeping appointment and patient no show behaviour?*

Emotional barriers were stated by twenty-two respondents (65%) as a reason for appointments not being kept. The negative feelings about going to see the doctor were often greater than the perceived advantage of holding the appointment. The gap between the scheduling and the preservation of the appointment has led to this dynamic for others. (Lacy, Paulman, Reuter, & Lovejoy, 2004) . In placing more emphasis, Locke (2020) claimed that acceptability of treatment is a key barrier to access to healthcare services which can be targeted by educational programmed for health practitioners and public education. Furthermore, a study by Stone (2015) has shown evidence that majority women find it intimidating to prohibit their pregnancies from pursuing comprehensive healthcare due to emotional barrier.

A study finding by Espinosa, A., & Kadić-Maglajlić, S. (2019) indicate that the perception of health linked positively to the patient's trust, which in turn was correlated with higher health adhesion and which mediated the overall impact of health perception at a rate of 28%. Nonetheless the route from confidence to adherence was not important among patients who valued their doctors to have little assessment of their patients' emotions and a strong assessment of their own emotions. These findings underline the value of fostering literacy skills among younger generations, while enabling them to identify well with emotions and circumstances of their patients above their own. However, further studies suggest that the relationship between doctors' emotional characteristics and adherence is not inherently one-way and needs further research.

Results indicate that interpersonal stigmatization has a clear correlation with excess weight. Which is, between people with both mild and extreme obesity who had undergone insulting treatment by a doctor and refused health care due to fear of being exposed to insulting treatment (Hansson & Rasmussen, 2014).

The proof differs widely and is mixed with the general fear of increased missing appointments. For instance, Cashman, Savageau, Lemay & Ferguson (2004) found a higher rate of missed appointments to anxiety but did not find any correlation with DiMatteo, Lepper, & Croghan (2000). Meanwhile, Miller-Matero, Clark, Brescacin, Dubaybo, & Willens (2016) proposed that the form of concern could be connected to increased rates of missed appointments. It makes some sense, since patients with anxiety about disease may be more likely than agoraphobias to attend their appointment (DiMatteo, Lepper, & Croghan, 2000). The researchers suggest that anxiety diagnoses vary from severe distress obsessive / compulsive and generalized anxiety symptoms to very heterogeneous. In a research carried out by van Dieren and colleagues (2013), the missed rate for primary anxiety patients was 22.3 percent.

2.3.2 Perceived Disrespect of Patient's Belief

The influence of perceived disrespect of patient's belief toward no-show behaviour. Perceived disrespect of patient's belief could have a negative influence on patient attendance as well. This will answer to sub-question number 2: *What is the relationship between perceived disrespect system and patient no show behaviour?*

According to Lacy et al. (2004), Fifteen respondents (44%) reflected on health care system compliance concerns. Patients' time, feelings, and emotions were not respected by health care professionals, who discounted their time, thoughts, and emotions. Waiting was one way that disrespect was communicated such as waiting for an appointment slot to be given, having to wait for the doctors in the waiting room, and treatment room. In similar study done by Cuevas et al (2016) , medical mistrust emerged where doctors could not convey respect to patients, causing patients to question whether the care of their clinicians was biased. Bad coordination occurred as physicians could not understand the experiences of patients during encounters. Patients have also interpreted these acts as racist. Moreover Flint (2015) claimed that health practitioners have behaviours that are stigmatizing and often do not counsel and treat obese people.

Researchers (Blanchard & Lurie, 2004) hypothesized that patients with negative views of the relationship with the healthcare provider were less likely to pursue necessary treatment, and that reports of these feelings were more prevalent among minority

patients .In the study also reveal that individuals who English was not his/her first language were also more likely to state that they were treated with disrespect, and to claim that if they were of a certain social class, they might have received better treatment. Bivariate associations persisted for each racial / ethnic group after adjusting for other characteristics of respondents, including education and income.

2.3.3 Lack Understanding of The Scheduling System

The influence of lack understanding of the scheduling system toward no-show behaviour. Communication between healthcare providers and patients is very essential. This will reveal the answer to sub-question number 3: *What is the relationship between lack understanding of the scheduling system and patient no show behaviour?*

Based on the same research done by Lacy et al. (2004), forty-one percent of respondents showed that when there is a missed appointment, they do not know what would happen in a clinic. Participants tended to be unaware of the financial consequences of missing an appointment and believed that no-shows could be beneficial to clinicians and staff. This claim also supported by similar research done by Howard et al. (2018) and Powell et al (2016).

An author discussed the value of communication in healthcare, and the information given is a key element in deciding how people respond to health advice (Berry, 2007). In the decision-making process, Kane et al. (2004) refer to information as a potential obstacle. If the information offered by a healthcare professional is overlooked by the patient, this may be due to communication difficulties, if the advice offered is not understood by the patient. The health risk or benefits of a certain action or risk of their disease may not be completely understood for individuals (Kane, Johnson, Town, & Butler, 2004). Patients may still be unsure about their health knowledge and how to deal with it (Wright, Sparks, & O´Hair, 2013). Wright et al. (2013) additionally suggested that in their correspondence, patient contentment with their healthcare provider may affect patient compliance, such as dedication and follow-up.

Elwyn et al. (2014) suggest health care practitioners play a major role in providing patient information. This can result in better health outcomes for the patient if conversations between them go well (Berry, 2007) (Wright, Sparks, & O´Hair, 2013). On

the other hand, the communication might not always execute so well, which might lead to adverse effects (Berry, 2007).

2.3.4 Appointment Reminder System

The influence of appointment reminder system toward no-show behaviour. Electronic alerts increase attendance in healthcare environments and minimize no shows. To support this data, a study needs to be done to get the answer to sub-question number 4: *What is the relationship between appointment systems method patient no show behaviour?*

In regards to appointment scheduling planning (Cayirli & Veral, 2003), a host of notification systems have been embraced by healthcare providers and facilities globally, realizing that although some missed appointments may be inevitable, others may be minimized by intervening before the appointment (Tierney, et al., 2003) (Mitchell A. , 2007).

Cochrane 's study by Gurol-Urganci et al. (2013) found that, from 8 randomized controlled trials studied, text messages had a similar effect as attendance calls, all of which were outperforming total attendance compared to no reminder of 78.6 percent vs. 80.3 percent vs. 67.8 percent, respectively. The participation of the reminder systems was analyzed by Hasvold and Wootton (2011) and found that, aggregated over the 33 studies studied in the 2000s, all but one study showed substantial differences. For manual calls, this difference was greater, resulting in a greater relative reduction in missed appointments compared to SMS or automated calls (39% vs. 29%).

Multiple reminders were more successful than a single notification in lowering missed appointments rates. When an electronic message was issued, the probability of patients attending a clinic was increased by 23 percent (Robotham, Satkunanathan, Reynolds, & Stahl, 2016). As a whole, reminder systems do seem to increase patient attendance, but the choice of intervention can be determined by health system priorities and cost limitations for the many choices available.

Although several reminders have been proposed to boost adherence in a variety of types of appointments, there are still limitations (Zailinawati, Ng, & Nik-Sherina, 2006). Manual reminders, such as face-to - face contact, letters, or individual phone calls, do not require technology access; however, they can require more time and money than the

available staff (Irigoyen, Findley, Earle, Stambaugh, & Vaughan, 2003). Automated interventions in health technology like website, email, SMS / MMS can also work as well as manual reminders (Chen, Fang, Chen, & Dai, 2008). Emerging research evidence in the low - income community indicates that SMS, automatic recalls, and other intervention in health technologies are potentially significant but under-evaluated methods for impacting awareness, behaviour, and outcomes (Beuermann, et al., 2015). According to Bhise et al. (2016) to minimize missed appointments, each health system might require special strategies.

Study	Letter	Manual telephone	Automated telephone	Mobile/SMS	Voice messaging	Email	Other
(Hasvold & Wootton, 2011)		√					
(Free, et al., 2013)				√	√		
(Guy, et al., 2012)				√			

Table 2: Manual vs single automate vs multiple automate reminder example.

2.4 Proposed Conceptual Framework

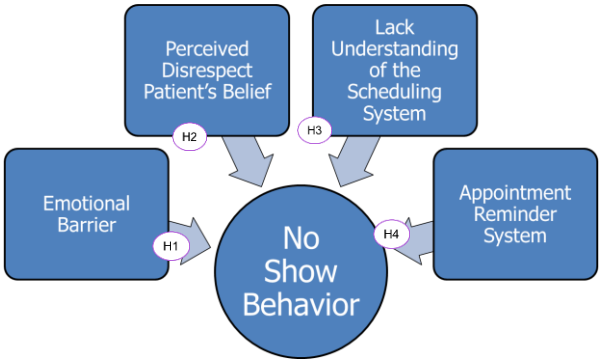


Figure 8: The proposed conceptual framework

A framework that guides the researcher as study questions are fine-tuned, methods for measuring variables are selected, and analyses are structured is referred to as an analysis system (Liehr & Smith, 1999). To direct the assessment of patient reminder systems and their effect on attendance, a unified framework that details possible relationships between reminder systems and patient attendance factors is required (Rusoja, 2015). Proposing the conceptual framework as shown in Figure 8, the research will examine the literature review findings. Emotional barriers, perceived disrespect of patients' beliefs, and a lack of awareness of the scheduling method and appointment reminder system were all found to influence patient no-show actions in most of the literature reviews addressed. It may therefore be hypothesized as follow.

2.5 Hypothesis Development

When researchers speculate on the findings of a study or experiment, they formulate a research hypothesis. In participant observation, analytical induction is the most common data analysis process. This may contribute to the initial theory being redeveloped several times. (Saunders, Lewis, & Thornhill, 2009). This study will test the following hypotheses: Null Hypothesis (No relationship) and Alternate Hypothesis (a relationship)

For sub question no.1: *What is the relationship between emotional barriers of keeping appointment and patient no show behaviour?*

H1: There is no significant relation between emotional barrier of keeping appointment and patient no show in behaviour.

H1: There is a significant relation between emotional barrier of keeping appointment and patient no show in behaviour.

For sub question no.2: *What is the relationship between perceived disrespect of the patients' beliefs and patient no show behaviour?*

H2: There is no significant relation between perceived the perceived disrespect of the patient's belief and no show in behaviour.

H2: There is a significant relation between perceived the perceived disrespect of the patient's belief and no show in behaviour.

For sub question no.3: *What is the relationship between lack understanding of the scheduling system and patient no show behaviour?*

H3: There is no significant relation between perceived lack understanding of the scheduling system and patient no show in behaviour.

H3: There is a significant relation between perceived lack understanding of the scheduling system and patient no show in behaviour.

For sub question no.4: *What is the relationship between appointment reminder systems and patient no show behaviour?*

H4: There is no significant relation between appointment reminder systems and patient no show in behaviour.

H4: There is a significant relation between appointment reminder systems and patient no show in behaviour.

2.6 Summary

This section focuses on the theoretical framework that is being established based on the literature review and the study objectives. Before proposing a conceptual framework, the theory that relates to research goals and research questions is examined in detail in order to prevent inaccurate details, and the conceptual framework has also been formulated in such a way that the sequence can be understood and suggests that there is a relation between each variable or concept. The creation of the hypothesis that the researcher generates in the study is necessary for its purpose.

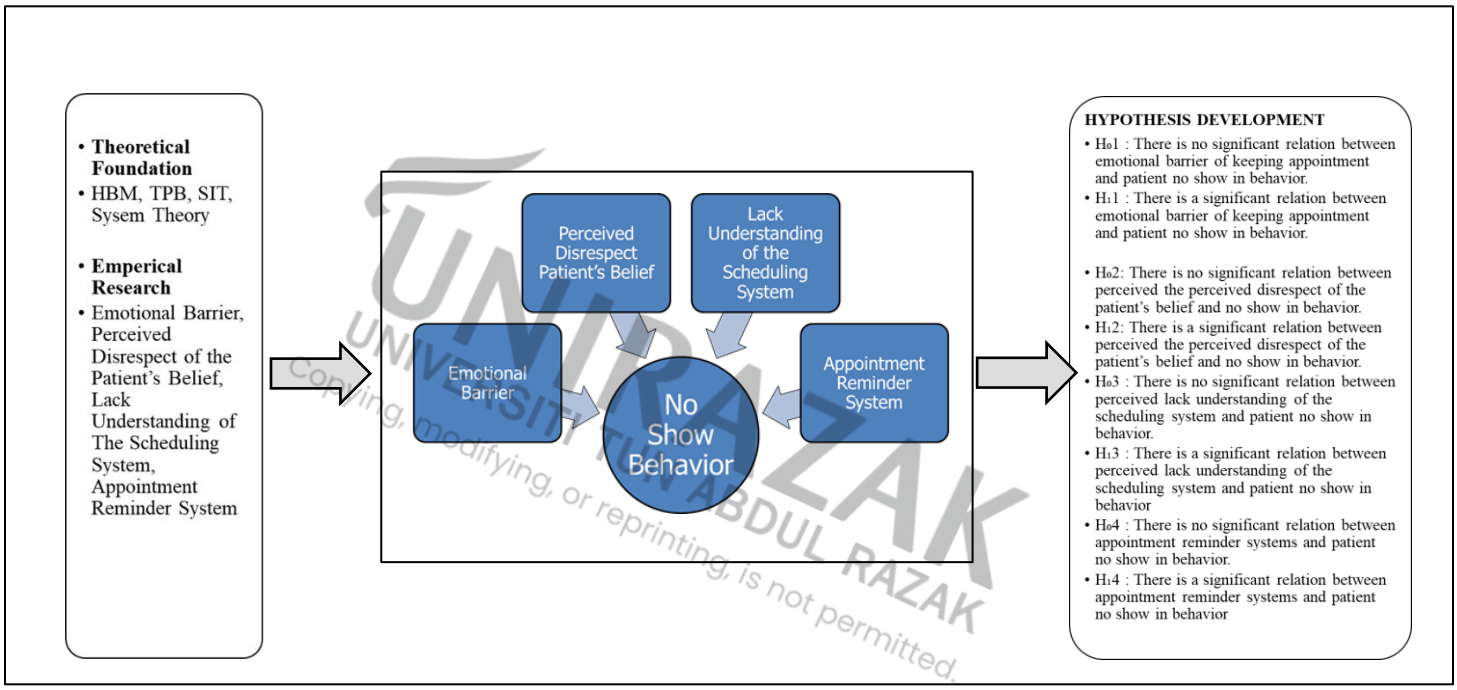


Figure 9: Chapter 2 flowchart

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is divided into 8 parts. An introduction of the research design methodology is given in the first section. The second section is about research design. The third section contains the population and sample procedures of the study, and the fourth section contains methods for the collection of data. The fifth section outlines the operationalization and measurement followed by explanation about how the data of this analysis will be evaluated. This chapter end with summary of research methodology of the study.

3.2 Research Design

Figure 10: Research design

In general, research design implies a framework for the preparation and execution of a specific research (Punch, 1998). Research design is a vital part of the research, since it incorporates all four key considerations: the approach, the conceptual structure, the selection of whom and what to study, and the methods and procedures to be used for data collection and analysis (Punch, 1998).

In this study, from exploratory study, the researcher will be used quantitative research method. This research is intended to examine some details about a phenomenon of a subject.

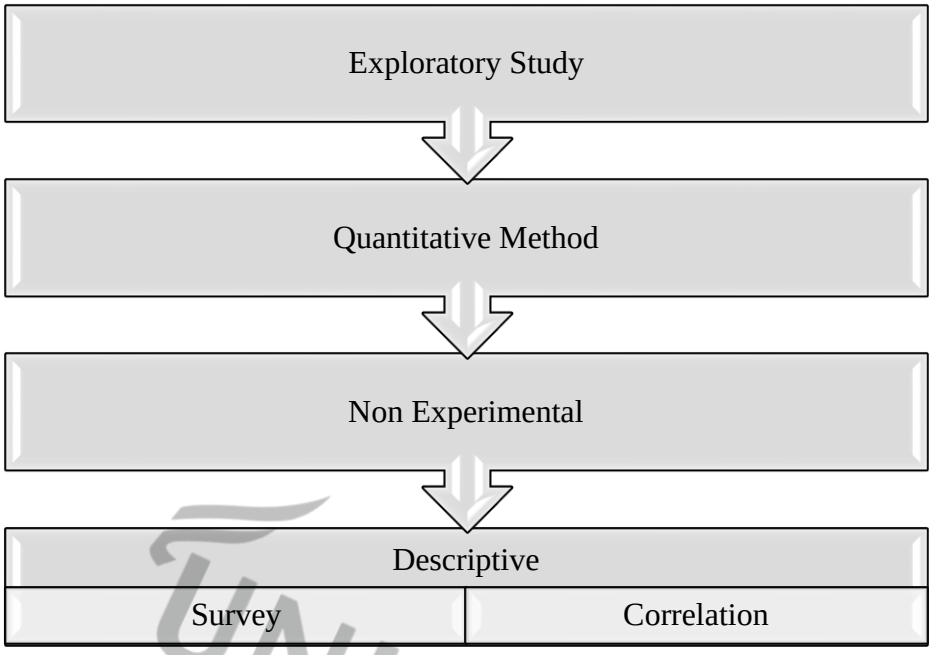


Figure 11: Research method flowchart

Burns and Grove in their book (1997) described quantitative analysis as a structured, objective, systematic method for defining and testing relationships and analyzing cause and effect interactions between variables. Surveys can be used for descriptive, explanatory, and exploratory study purposes. A descriptive survey method will be used. The survey is used to gather original data for the purpose of representing a population that is too large to be studied directly (Mouton, 1996). A survey obtains information from a group of people by self-reporting, i.e., people answering to a set of questions asked by the investigator (Polit & Hungler, 1999). In this analysis, the information was collected through survey questionnaires, which will be distributed to the subjects by the researcher.

In addition, this research design also allows the researcher to collect data on a chart or graph, perform large-scale research and provide much more detail on importance and statistics (Aliaga & Gunderson, 2006). In fact, a quantitative approach has been chosen for this analysis to make it possible to generalize the results to the selected population. In furthermore, this is the approach used in previous training studies (Maria, 2012).

This study is also a cross-sectional research, which means that the data for this research were gathered at a specific point in time (Bland & Renouf, 2001). Furthermore, this method of analysis has a number of advantages, including being low cost and taking less time to collect data since all variables' information can be obtained at the same time. (Bland & Renouf, 2001).The researcher's goal of using correlational research is to classify variables that have some kind of relationship to the degree that a change in one causes a change in the other.

3.3 Study Population and Sampling Procedures

In one of Reid's (2013) study, he identified the population as all units possessing certain characteristics that are of interest to the researcher. From the concept, the population can be interpreted as the target community or group of people involved or chosen by the researcher for their analysis.

The researcher's study will concentrate on 100 outpatient physiotherapy and 5 physiotherapists at Columbia Asia Hospital Taiping. The sample of this research is measured using the 95 percent confidence level formula of Taro Yamane (Yamane, 1967). Total outpatient's physiotherapy recorded from year 2016 - 2020 is 6064 with total 5 physiotherapist currently working in Columbia Asia Hospital Taiping. Hence, number of sample size decided is based reference in Table 4.

Size of	Sample Size (n) for Precision (E) of:		
Population	±5%	±7%	±10%
100	81	67	51
125	96	78	56
150	110	86	61
175	122	94	64
200	134	101	67
225	144	107	70
250	154	112	72
275	163	117	74
300	172	121	76
325	180	125	77
350	187	129	78
375	194	132	80
400	201	135	81
425	207	138	82
450	212	140	82

Table 3: Taro Yamane Sample size for ±5%, ±7% and ±10% Precision Levels Where Confidence Level is 95% and P=.5.

Size of	Sample Size (n) for Precision (E) of:			
Population	±3%	±5%	±7%	±10%
500	a	222	145	83
600	a	240	152	86
700	a	255	158	88
800	a	267	163	89
900	a	277	166	90
1,000	a	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100
50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	**1,111**	**400**	**204**	**100**

a = Assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.

Table 4: Taro Yamane Table 2 Sample size for ±3%, ±5%, ±7% and ±10% Precision Levels Where Confidence Level is 95% and P=.5.

The researcher has decided to use probability sampling methods. Probability or random sampling has the greatest independence from bias but can be the most expensive sample for a given amount of sampling error in terms of time and resources (Brown, 1947). Simple random sampling will be used to obtain data where each member of a population merely happens by chance. A simple random sample means that the likelihood of inclusion in the sample is equal in each case of the population (Ben-Shlomo, Brookes, & Hickman, 2013).

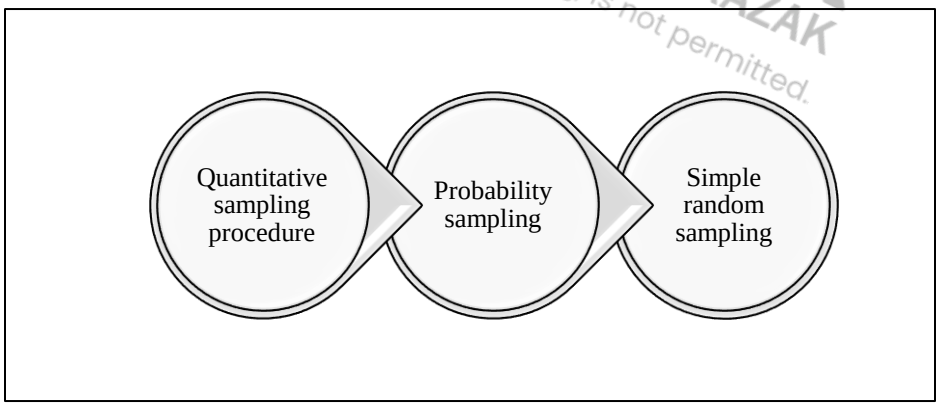


Figure 12: Sampling procedure

3.4 Data Collection Method

For this study, the researcher selects two methods to collect data, collect data documentation from journal publications / website (secondary data) and survey questionnaire (primary data). Documentation is the analysis, compilation, monitoring, storage, planning, usage, and distribution of records with a view to obtaining details and informed information and facts, including the utility of archives and libraries. According to Suharsimi Arikunto (2010), the technical documentation is to search for details about items or variables in the form of notes, transcripts, books, newspapers, magazines, journals, or websites. Agenda for details Incorporated data related to the inquiry. This is to find answers to research questions that are already accessible online, in academic databases, news, published books, journals, etc.—work is done through the knowledge that is already accessible and to find evidence that suits the specific research project.

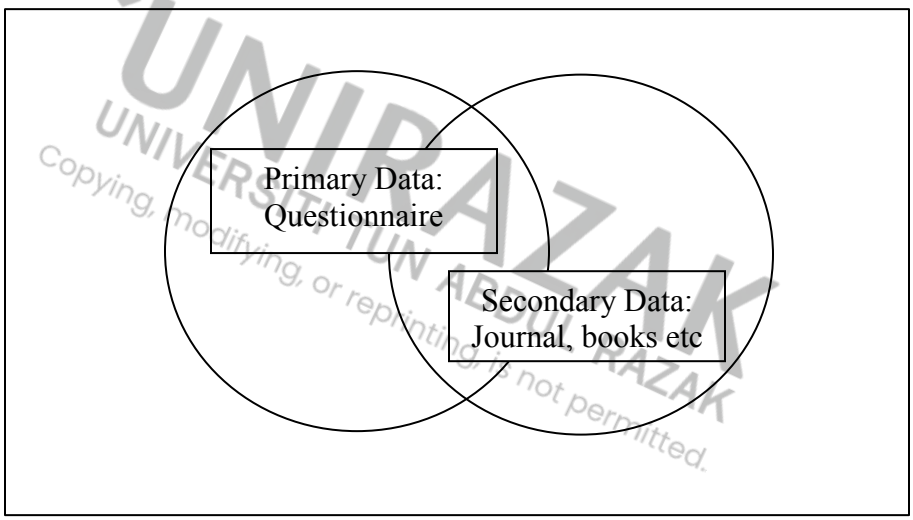


Figure 13: Data collection method

Questionnaire survey is commonly used to gather quantitative data from both patients and practitioners in perioperative and pain management study. Interest data can vary between measurable data (e.g., lesion existence, mobility) and subjective feelings of the actual status of patients (e.g., amount of pain they sense, psychological status) (Tsang, Royse, & Terkawi, 2017). A standardised questionnaire was designed based on the research objectives and research question to collect the data required to test hypotheses derived from the research question. Apart from a small number of knowledges collecting quantitative questions, the Likert scale is a degree

of agreement by testing one to five answer categories. The questionnaire was structured to bear in mind the level of education and experience of the respondents.

The researcher build questionnaire according to Likert's (1932) guidelines. Alteration of survey questionnaire from past research has been developed. Sample survey questions reference is from research titled "*Why We Don't Come: Patient Perceptions on No-Shows"* (Lacy, Paulman, Reuter, & Lovejoy, 2004), "*Obstacles to Attending Treatment in an Urban Mental Health Clinic: A Client's Perspective Approach to Identifying Factors Influencing Treatment Attendanc*e" (Delaney, 2012) and "*National Survey Programme"* (NHS, 2011). At the time of this study, online survey questionnaires platform has been offered. For some purposes, the approach has been chosen to establish it less quickly (as opposed to other methods of data collection), to capture data from a range of respondents, to allow more questions about a specific topic to be asked, to make the research more versatile and to be cost efficient (Maria, 2012). The questionnaire contained all variables included in the conceptual context of the analysis. The questionnaire will be drawn up in English and will be translated into the Bahasa Melayu, the national language of Malaysia. The use of the translated version enhances the readability of the survey respondents and increases the possibility that the method will function in this new aim culture as in the original culture in which it was produced (Bates & Khasawneh, 2005).

When conducting the survey, the researcher also considered ethical concerns in this study by protecting the confidentiality of survey participants and assuring them that the data obtained would only be used for academic purposes. Cooper and Schindler (2008) define ethics as "the norms or standards of conduct that guide moral decisions about our conduct and interactions with others." The researcher's actions must adhere to the social norms of the respondent's society (William & Zikmund, 2013).

The survey questionnaires were randomly distributed to outpatient physiotherapy and physiotherapists in Columbia Asia Hospital Taiping. The selection of the population is due to there is no research that involved investigation of the factors affecting patient no-show behaviour on the population sampling of Columbia Asia Hospital Taiping patients.

An introduction of a researcher was shared at the beginning of the survey page, and an explanation of the purpose of the study were provided. In addition, the participants were informed of the completely voluntary responses to this study and of the anonymity of all their identities. The researcher also ensures that the respondent will understand easily all the wording

and sequence of the questions and able to answer the questionnaires based on his or her own experience. Finally, the participants were thanked for their participation at the end of the survey questionnaires.

3.5 Operationalization and Measurement

The direction of which variable to study is clear from a conceptual model developed in these research and what effects each variable has on the results of the study. The research focused on this clear conceptual and hypothesis development and avoid wasteful time and scope in the field of research. Each variable in the research model was given an operational definition using a five-point Likert scale (runs from 'Strongly Agree' given the score of '5' to 'Strongly Disagree' given the score of '1'). Scores as follow:

Strongly Agree	: 5 points
Agree	: 4 points
Undecided	: 3 points
Disagree	: 2 points
Strongly Disagree	: 1 point

The questionnaire should be assessed by the assigned supervisor due to his/her experts familiar with the framework in which the questionnaire is to be calculated. As a panel, the supervisor assessed whether the questionnaire items measure the construction intended to be assessed properly and whether the items are sufficient to measure the domain of interest. Several approaches are also available to quantify content validity judgement of the expert, such as the content validity ratio and the content validation form (Lawshe, 1975).

The current measurements established in previous trials are focused on all measures in each variable. All indicators used in this analysis are in English. For those involved in intercultural research, these steps were used in another culture (Earley, 2015). The researcher has modified the measures to a target language of the bilingual people (people who speak two languages: Bahasa Melayu and English) to ensure that the meaning and purpose of the above-mentioned measures are equivalent.

3.5.1 Independent Variables

The researcher examining 4 variables identified as independent variables and research focus to try to demonstrate that the relationship between them. The variables to be considered as the variable independent variable are the following:

i. emotional barriers
ii. perceived disrespect of the patients' beliefs
iii. lack understanding of the scheduling system.
iv. appointment reminder systems

In this study, the most important thing is to examine how these independent variables affect the dependent variables in a positive or negative way. The independent variable represents the variance in the dependent variable.

3.5.2 Dependent Variable

The dependent variable is no show behaviour. This the key point of this study. The objective of this research project is to understand the variability of this variable, to predict or to explain it.

3.6 Data Analysis Techniques

Data for this analysis have been analyzed using SSPS 26. Statistical Package for Social Sciences (SPSS) is an empirical statistical software utility. SPSS can accommodate vast quantities of data and can perform all analyses covered by the document. It was one of the most widely used statistical systems in the social sciences, including medical services, government, market research, and surveys, when it was first introduced in 1968. Due to its accessibility and user-friendliness to most other software packages used for data analysis (Field, 2009), SPSS will be selected. The following are the measures for evaluating the data used in the study.

3.6.1 Descriptive Analysis Techniques

The first step is analyzing the basic demographics of respondents, including gender, age, and race. Summary of the demographic data will be shown in pie charts.

In the second step, a factor analysis (EFA) was carried out. Exploratory factor analysis (EFA) in multivariate statistics is a statistical tool for detecting a relatively large group of variables as the underlying structure. EFA is, for example, a factor analysis methodology whose ultimate objective is to define the fundamental relationships between measured variables (Lecavalier & Norris, 2010). It is widely used for scale construction and describes a collection of latent buildings that form the base of a battery of calculated variables. It can also be used when the researcher has no previous hypothesis of calculated variables factors or trends (Finch & West, 1997). EFA protocols are in place. First, the adequacy of the data for factor analysis must be reviewed. The data is considered sufficient for factor analysis according to both Pallant (2011) and Leech Barrett and Morgan (2005) if the result in the table of correlation matrices indicates at least some correlations of 0.30 or more. Furthermore, the statistically significant (significance value is less than 0,05) sphericity test by Bartlett indicates that the variables are strongly correlated to form an appropriate basis for the factor analysis. In addition, the Kaiser Meyer-Olkin value should be 0.50 and higher to consider data for factor analysis according to Leech, Barret, and Morgan (2005). Secondly, the number of components to be removed is determined. At this point, the researcher examined the total variance explained in the table to determine the number of extracting components. In addition, only components with an own value of 1.0 and higher were interested by the researchers, and they saw how this variable explain the overall difference (Pallant, 2011). Thirdly, the loading elements for each factor are evaluated. At this point, the researcher observed the component matrix in the table to check loads of individual components. The researcher was obviously interested in the item with a load of more than 0.30. In addition, to provide information about how well the variation has been clarified on each item, the group table might display a low value (e.g., less than 0.30) suggesting that the item does not match well with the other components in its portion.

The third step was to determine the reliability of each variable based on the alpha value of Cronbach. To assess its reliability, Cronbach's alpha value measures the internal consistency or average similarity of items in a test tool. The Alpha value of Cronbach varies between 0 and 1. The larger the resulting scale, the more accurate it is. Nunnaly (1978) has suggested an appropriate value of 0.70 and higher.

A descriptive analysis will be carried out in the fourth stage. The goal was to check the mean and standard deviation of each variable in descriptive statistics. Moreover, a correlation between the variables has also been explored at this point. This implies that there is a low likelihood of multicollinearity if correlations between these variables are less than 0.90 (Tabachnick & Fidell, 2007).

3.6.2 Inferential Analysis Techniques

The final step is to involved testing the hypotheses. The suggested hypotheses will be evaluated through a regression study. The regression analysis will produce the outcome, whether positive or negative, in relation to the relation between the variables and the direction of the relationship. In addition, the regression analysis allows to check each variable's significant level.

3.7 Summary

This chapter, which focuses on research design, has been built based on the research question of the report. Data collection, calculation and interpretation are focused on the research design that we create. In this research design, we also clarify the specifics of the intent of the study and the form of research that we are going to do with it. This exploratory study aims to explore how common issues faced by the healthcare industry and how they have been addressed in the past and present circumstances are the same or not, or whether the same problem has resulted in different outcomes or problem-solving.

In this topic area, the researcher also describes the specifics of the sample population and the sampling procedures, such as who the sampling is, why the researcher choose them as sampling, sampling area and sampling procedures, the data collection method has also been explained in detail to demonstrate the validity of the data and how each variable in this study was measured based on two main variables. Finally, in this chapter, the researcher identified the techniques of data analysis that we use in this research in order to fulfil our research and to achieve the objectives of this research.

CHAPTER 4

RESULT AND DISCUSSION

4.1 Introduction

This chapter addresses the survey results as well as the preliminary review of the pilot test prior to the final dissemination of questionnaires. The pilot test has been performed to ensure that respondents grasp the argument in the questionnaire, so that data are calculated in full by the full distribution of the questionnaires. This chapter also includes a description of the respondents as well as informative and inferential data analyses. The primary aim of this research was to explore what would affect the patient no show behaviour in healthcare industry. This chapter includes findings from the frequency distribution, the reliability evaluation, the correlation analysis, and the multiple regression analysis. The analysis is crucial in assessing the nature of a bond between an independent relationship and a dependent relationship.

4.2 Findings from SSPS

4.2.1 Customer Survey

i) Case summary

This case summary to ensure there are no missing data while entering in SPSS 26. Data in Table 5: Customer Case Summary shows all data are entered successfully.

Case Processing Summary[a]

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Gender * COMPUTE EB=MEAN(EB1,EB2,EB3,EB4,EB5) * COMPUTE PD=MEAN(PD1,PD2,PD3,PD4,PD5) * COMPUTE LOU=MEAN(LOU1,LOU2,LOU3,LOU4,LOU5) * COMPUTE AM=MEAN(AM1,AM2,AM3,AM4,AM5)	100	100.0%	0	0.0%	100	100.0%
Race * COMPUTE EB=MEAN(EB1,EB2,EB3,EB4,EB5) * COMPUTE PD=MEAN(PD1,PD2,PD3,PD4,PD5) * COMPUTE LOU=MEAN(LOU1,LOU2,LOU3,LOU4,LOU5) * COMPUTE AM=MEAN(AM1,AM2,AM3,AM4,AM5)	100	100.0%	0	0.0%	100	100.0%
Age * COMPUTE EB=MEAN(EB1,EB2,EB3,EB4,EB5) * COMPUTE PD=MEAN(PD1,PD2,PD3,PD4,PD5) * COMPUTE LOU=MEAN(LOU1,LOU2,LOU3,LOU4,LOU5) * COMPUTE AM=MEAN(AM1,AM2,AM3,AM4,AM5)	100	100.0%	0	0.0%	100	100.0%

a. Limited to first 100 cases.

Table 5: Customer Case Summary

ii) Demographic Data

The chart below shows a detailed respondent profile, and which includes include their gender, race and age group. Based on the response that I received most from 100 respondent, 63% are female and 37% are male. 71% respondent are Malay, Followed with Indian 19%, Chinese 8% and 2% for others. Most of the respondent between the ages of 26 to 54 which represents a total of 72%, the prime working age. Followed by the ages of 55 to 64 representing mature working age with 17% of the total sample.

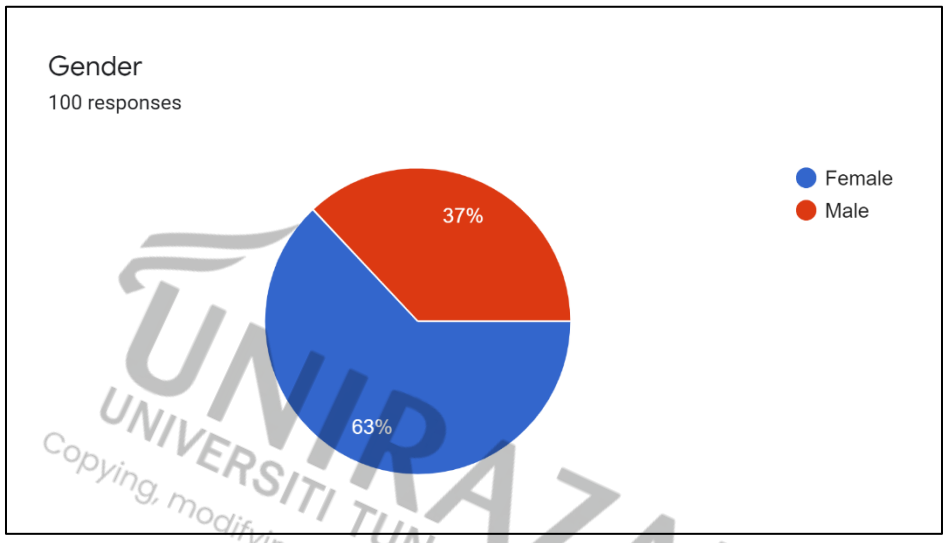


Figure 14: Customer Gender

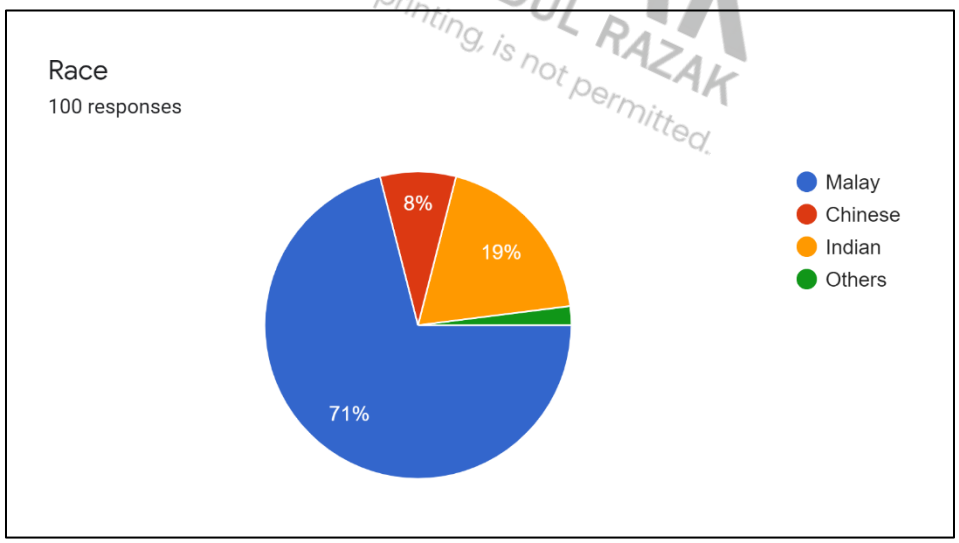


Figure 15: Customer Race

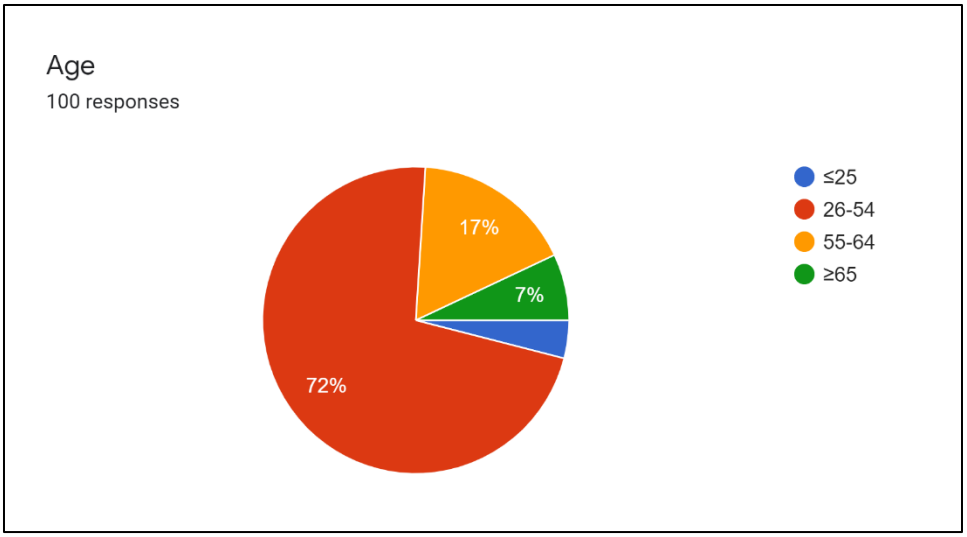


Figure 16: Customer Age

iii) Reliability Analysis

Cronbach's Alpha values were used to gauge the consistency of the items as per below:

Reliability Coefficient	Strength of Association
< 0.6	Poor
0.6 - 0.7	Acceptable
> 0.8	Good

Table 6: Cronbach's Alpha Range

Variables	Cronbach's Alpha	No of question
No show (Y)	0.771	7
Emotional barrier (X1)	0.773	5
Perceived disrespect (X2)	0.778	5
Lack of understanding (X3)	0.783	5
Appointment method (X4)	0.775	5

Table 7: Reliability Assessment of Final Instrument

Table 7 provides the Cronbach's Alpha values for the final data. For dependent variable (Y) is 0.771. Cronbach's Alpha for independent variables which are X1, X2, X3 and X4, are 0.773, 0.778, 0.783, and 0.775 respectively. Therefore, it can be concluded based on table 6 of Cronbach's Alpha range, alpha value 0.6 to 0.7 indicated the questions are acceptable for further analysis. Reliability analysis was run for all 100 data collected

iv) Reason for missed appointment.

The following graphs shows the reasons why patients missed their appointments. It could be summarized that a total of 61% respondent agree and strongly agree that working commitment prevent them from making their appointment.

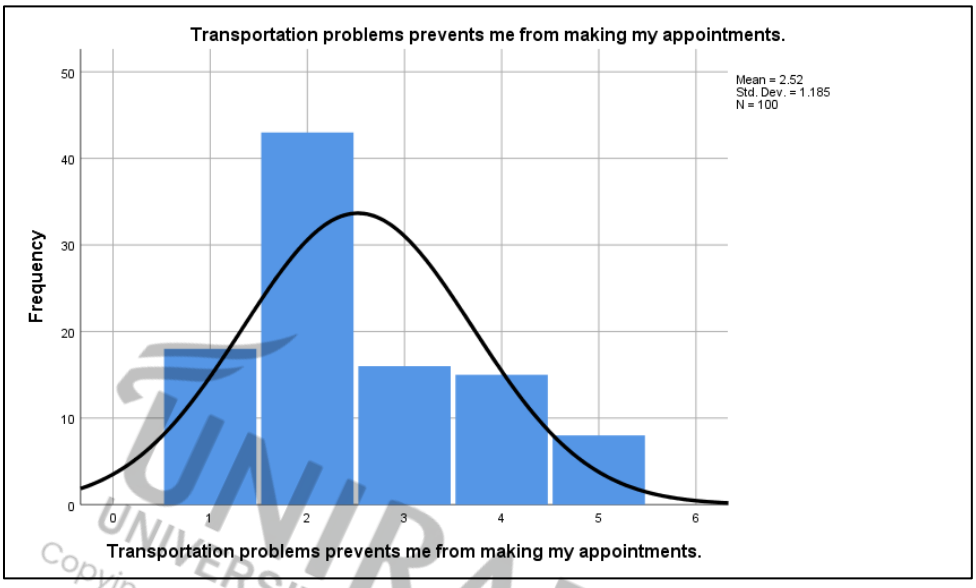


Figure 17: Customer - Transportation problem

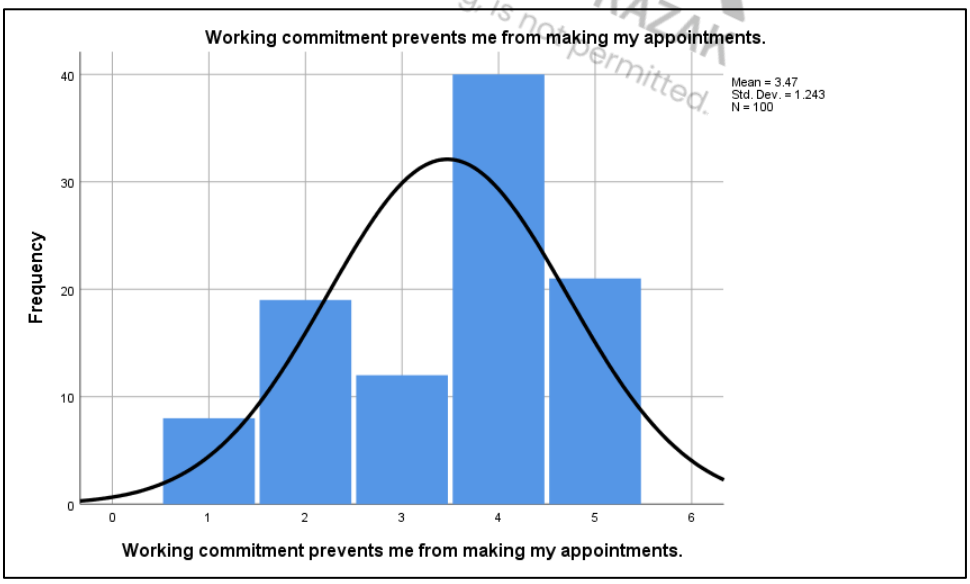


Figure 18: Customer - Working commitment

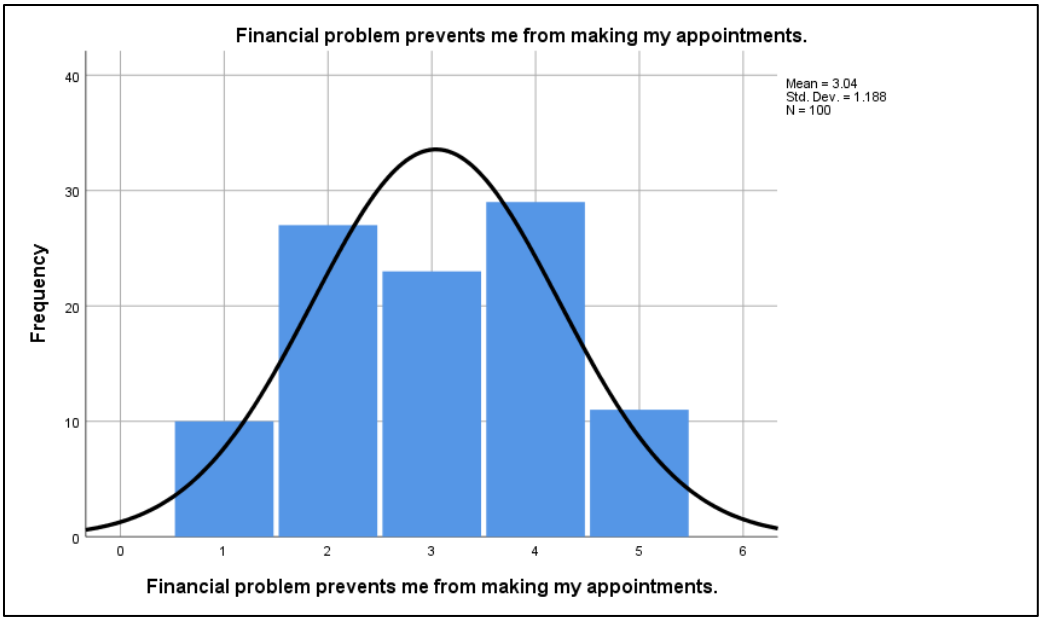


Figure 19: Customer - Financial problem

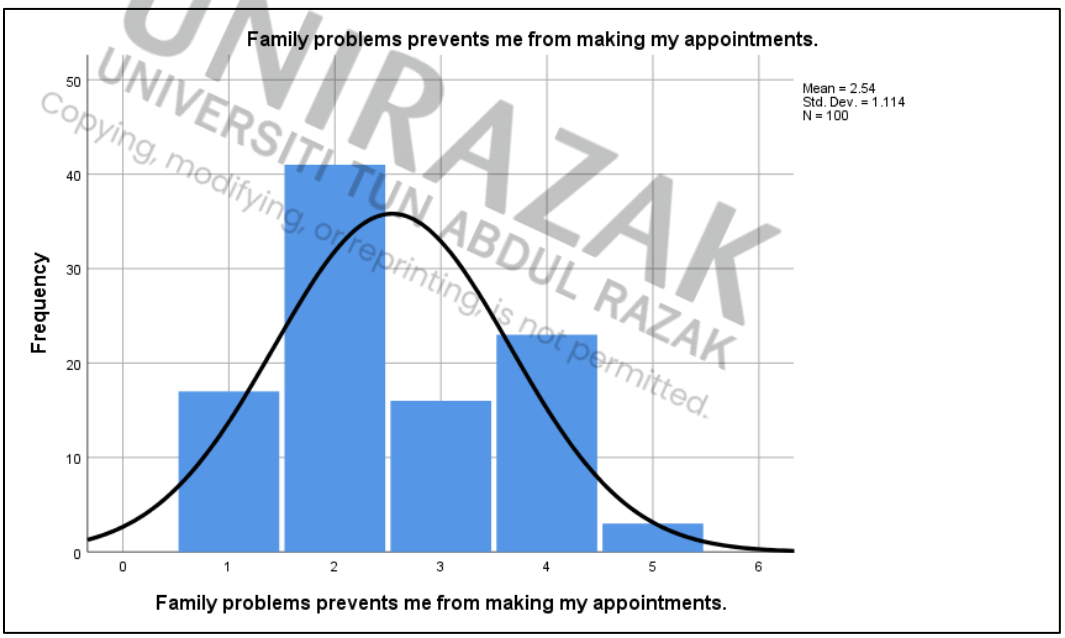


Figure 20: Customer - Family problem

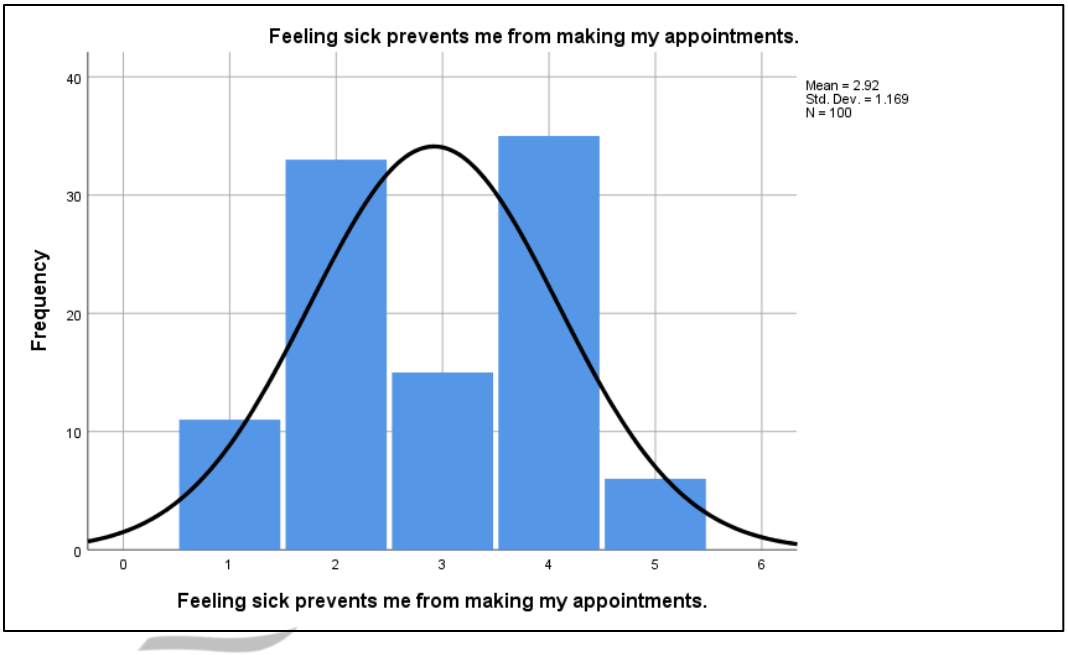


Figure 21: Customer - Feeling sick

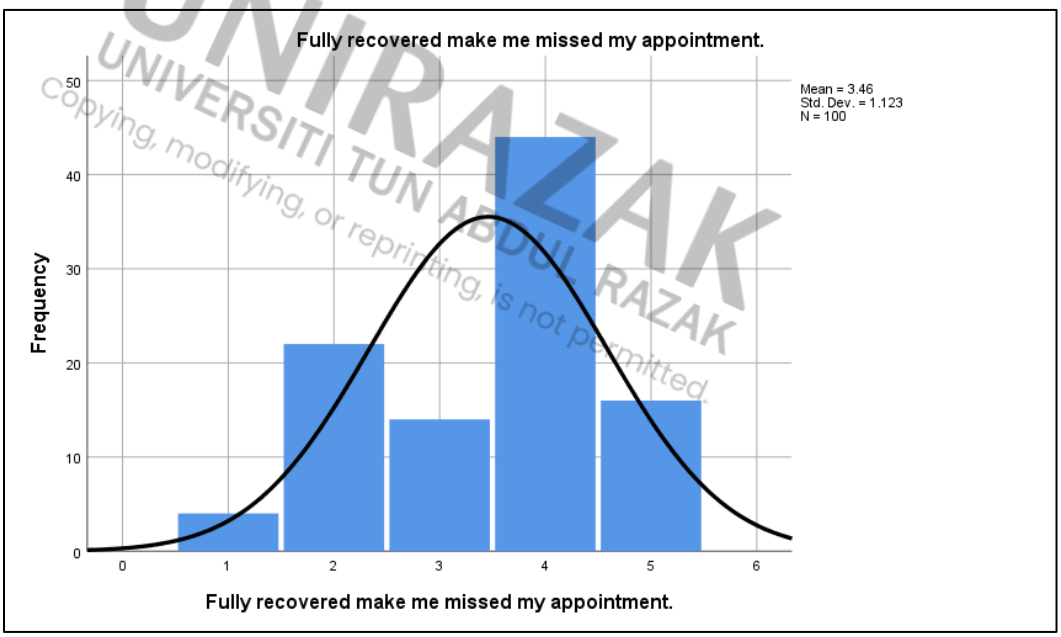


Figure 22: Customer - Fully recovered

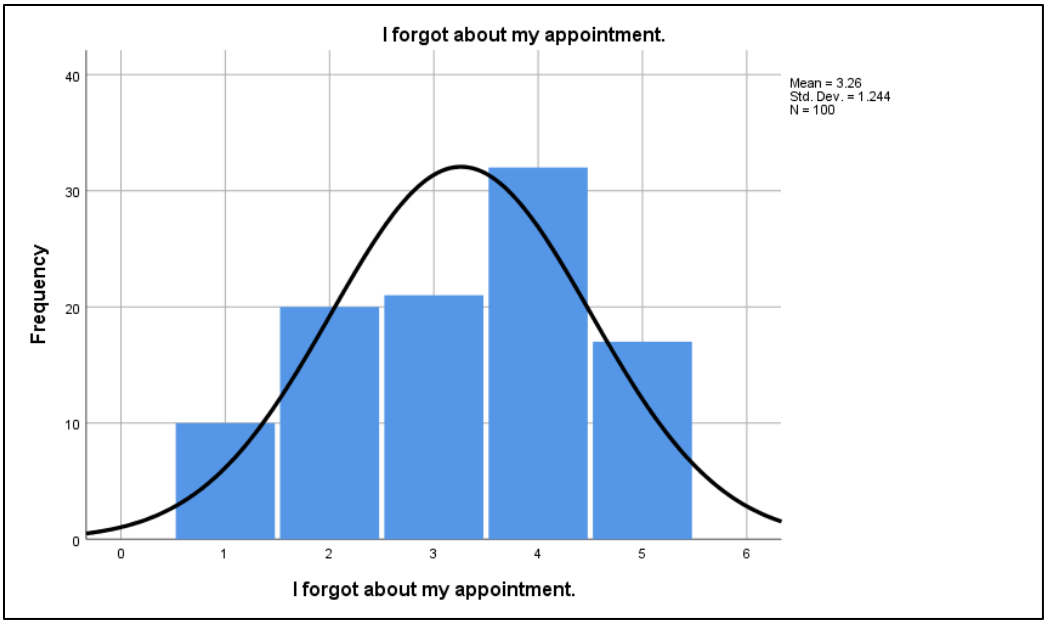


Figure 23: Customer - Forget

v) Independent variable

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
COMPUTE EB=MEAN(EB1,EB2,EB3,EB4,EB5)	100	100.0%	0	0.0%	100	100.0%
COMPUTE PD=MEAN(PD1,PD2,PD3,PD4,PD5)	100	100.0%	0	0.0%	100	100.0%
COMPUTE LOU=MEAN(LOU1,LOU2,LOU3,LOU4,LOU5)	100	100.0%	0	0.0%	100	100.0%
COMPUTE AM=MEAN(AM1,AM2,AM3,AM4,AM5)	100	100.0%	0	0.0%	100	100.0%

vi) Test distribution

This test is to check whether the data is normally distributed or not.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	4.73382126
Most Extreme Differences	Absolute	.066
	Positive	.066
	Negative	-.031
Test Statistic		.066
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Table 8: Independent variables - case summary

Result: The data shows it is normal distribution due to 0.200 > 0.05

vii) Test linearity relationship

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
NO SHOW * EMOTIONAL BARRIER	Between Groups	(Combined)	758.575	12	63.215	2.464	.0
		Linearity	569.667	1	569.667	22.205	.0
		Deviation from Linearity	188.909	11	17.174	.669	.7
	Within Groups		2232.015	87	25.655		
	Total		2990.590	99			

Table 9: ANOVA- No show and emotional barrier

Result: Significant value of deviation from linearity 0.7> 0.05 shows that emotional barrier and no show have linearity relationship

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
NO SHOW * PERCEIVED DISRESPECT	Between Groups	(Combined)	64.729	10	6.473	.197	.9
		Linearity	3.963	1	3.963	.121	.7
		Deviation from Linearity	60.766	9	6.752	.205	.9
	Within Groups		2925.861	89	32.875		
	Total		2990.590	99			

Table 10: ANOVA- No show and perceived disrespect

Result: Significant value of deviation from linearity 0.9> 0.05 shows that perceived disrespect and no show have linearity relationship

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
NO SHOW * LACK OF UNDERSTANDING	Between Groups	(Combined)	295.392	10	29.539	.975	.4
		Linearity	43.481	1	43.481	1.436	.2
		Deviation from Linearity	251.911	9	27.990	.924	.5
	Within Groups		2695.198	89	30.283		
	Total		2990.590	99			

Table 11: ANOVA- No show and lack of understanding

Result: Significant value of deviation from linearity 0.5> 0.05 shows that appointment method and lack of understanding have linearity relationship

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
NO SHOW * APPOINTMENT METHOD	Between Groups	(Combined)	592.099	13	45.546	1.633	.0
		Linearity	153.995	1	153.995	5.522	.0
		Deviation from Linearity	438.103	12	36.509	1.309	.2
	Within Groups		2398.491	86	27.889		
	Total		2990.590	99			

Table 12: ANOVA- No show and appointment method

Result: Significant value of deviation from linearity 0.2> 0.05 shows that appointment method and no show have linearity relationship

viii) Descriptive statistic

Descriptive Statistics

	Mean	Std. Deviation	N
NO SHOW	21.21	5.496	100
EMOTIONAL BARRIER	12.56	3.079	100
PERCEIVED DISRESPECT	21.17	2.704	100
LACK OF UNDERSTANDING	20.23	1.964	100
APPOINTMENT METHOD	18.63	2.873	100

Table 13: Customer - Descriptive statistic

Result: The value in the table indicates there are no extreme data because standard deviation value is lesser than mean value.

ix) Correlations

To achieve research objectives, correlation analysis was used to examine the strength of the relationship between independent variables towards no show behaviour. The correlations of a certain value were associated with a certain nominal degree of relationship as listed in table below.

Correlation	Relationship
0.80 - 1.00	Very strong
0.61 -0.80	Strong
0.41 - 0.60	Moderate
0.21 - 0.40	Weak
0.00 - 0.20	Very weak

Table 14: Rule of Thumb for Correlation Coefficient Size

Correlations

		NO SHOW	EMOTIONAL BARRIER	PERCEIVED DISRESPECT	LACK OF UNDERSTANDING	APPOINTMENT METHOD
Pearson Correlation	NO SHOW	1.000	.436	-.036	-.121	.227
	EMOTIONAL BARRIER	.436	1.000	.047	.124	.231
	PERCEIVED DISRESPECT	-.036	.047	1.000	.441	.282
	LACK OF UNDERSTANDING	-.121	.124	.441	1.000	.320
	APPOINTMENT METHOD	.227	.231	.282	.320	1.000
Sig. (1-tailed)	NO SHOW	.	.000	.360	.116	.012
	EMOTIONAL BARRIER	.000	.	.322	.110	.010
	PERCEIVED DISRESPECT	.360	.322	.	.000	.002
	LACK OF UNDERSTANDING	.116	.110	.000	.	.001
	APPOINTMENT METHOD	.012	.010	.002	.001	.
N	NO SHOW	100	100	100	100	100
	EMOTIONAL BARRIER	100	100	100	100	100
	PERCEIVED DISRESPECT	100	100	100	100	100
	LACK OF UNDERSTANDING	100	100	100	100	100
	APPOINTMENT METHOD	100	100	100	100	100

Table 15: Customer - Correlations

Result: The are significant moderate relationship for emotional barrier and significant weak relationship for appointment method with no show behavior due to the value is less than 5%.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	APPOINTMENT METHOD, EMOTIONAL BARRIER, PERCEIVED DISRESPECT, LACK OF UNDERSTANDING[b]	.	Enter

a. Dependent Variable: NO SHOW

b. All requested variables entered.

Table 16: Customer - Variables entered

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.508[a]	.258	.227	4.832	.258	8.266	4	95	.000

a. Predictors: (Constant), APPOINTMENT METHOD, EMOTIONAL BARRIER, PERCEIVED DISRESPECT, LACK OF UNDERSTANDING

Table 17: Customer - Model summary

Appointment method, emotional barrier, perceived disrespect and lack of understanding have 0.258 influence on no show behavior. The correlation coefficient is 0.508 shows it has medium correlation.

Table 17 shows the Adjusted R-square value of 0.258 meaning that 25.8% of the changes in the dependent variable (no show) is contributed to changes in the independent variables (emotional barrier, perceived disrespect, lack of understanding and appointment method).

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	772.093	4	193.023	8.266	.000[b]
Residual	2218.497	95	23.353		
Total	2990.590	99			

a. Dependent Variable: NO SHOW

b. Predictors: (Constant), APPOINTMENT METHOD, EMOTIONAL BARRIER, PERCEIVED DISRESPECT, LACK OF UNDERSTANDING

Table 18: ANOVA - Customer

Result: 0.000 shows that the independent variables have influence simulant to no show behaviour.

Parameter Estimates

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Threshold	[Y = 7]	-2.449	2.257	1.176	1	.278	-6.873	1.976
	[Y = 9]	-1.958	2.207	.787	1	.375	-6.284	2.367
	[Y = 10]	-1.573	2.178	.521	1	.470	-5.842	2.697
	[Y = 12]	-1.276	2.161	.349	1	.555	-5.511	2.958
	[Y = 13]	-.833	2.140	.151	1	.697	-5.027	3.362
	[Y = 14]	-.252	2.120	.014	1	.905	-4.407	3.903
	[Y = 15]	.059	2.111	.001	1	.978	-4.079	4.197
	[Y = 16]	.539	2.101	.066	1	.798	-3.578	4.656
	[Y = 17]	.978	2.093	.218	1	.640	-3.124	5.081
	[Y = 18]	1.449	2.088	.482	1	.488	-2.643	5.541
	[Y = 19]	1.644	2.086	.621	1	.431	-2.445	5.732
	[Y = 20]	1.737	2.085	.694	1	.405	-2.350	5.825
	[Y = 21]	1.969	2.085	.892	1	.345	-2.117	6.054
	[Y = 22]	2.298	2.085	1.215	1	.270	-1.788	6.384
	[Y = 23]	2.543	2.086	1.487	1	.223	-1.545	6.632
	[Y = 24]	3.143	2.094	2.254	1	.133	-.961	7.247
	[Y = 25]	3.534	2.104	2.823	1	.093	-.589	7.657
	[Y = 26]	4.329	2.138	4.100	1	.043	.139	8.519

	[Y = 27]	4.856	2.173	4.995	1	.025	.598	9.115
	[Y = 28]	5.466	2.226	6.032	1	.014	1.104	9.829
	[Y = 29]	6.363	2.323	7.503	1	.006	1.810	10.916
	[Y = 30]	6.800	2.377	8.183	1	.004	2.141	11.460
	[Y = 33]	7.588	2.506	9.169	1	.002	2.676	12.499
Location	X1	.312	.065	22.668	1	.000	.183	.440
	X2	-.039	.073	.279	1	.598	-.182	.105
	X3	-.203	.105	3.748	1	.053	-.408	.003
	X4	.167	.068	6.009	1	.014	.034	.301

Link function: Logit.

Table 19: Customer - Parameter Estimates Route-One

Route-One Result

- Emotional barrier (X1) was a significant positive predictor of no show behaviour. For every 1 unit increase in emotional barrier, there is predicted increase of 0.312 in the log odds of being at a higher level on no show behaviour.
- Perceived disrespect (X2) was a significant negative predictor of no show behavior. The negative coefficient (value of -0.039) shows that for every 1 unit increase in perceived disrespect, there is predicted decrease of 0.039 in the log odds of being at a higher level on no show behaviour.
- Lack of understanding (X3) was a significant negative predictor of no show behavior. The negative coefficient (value of -0.203) shows that for every 1 unit increase in lack of understanding, there is predicted decrease of 0.203 in the log odds of being at a higher level on no show behavior.
- Appointment method (X4) was a significant positive predictor of no show behaviour. For every 1 unit increase in appointment method, there is predicted increase of 0.167 in the log odds of being at a higher level on no show behaviour.

Parameter Estimates

Parameter		B	Std. Error	95% Wald Confidence Interval		Hypothesis Test			Exp(B)	95% Wald Confidence Interval for Exp(B)	
				Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
Threshold	[NO SHOW=7]	-2.449	2.3907	-7.134	2.237	1.049	1	.306	.086	.001	9.367
	[NO SHOW=9]	-1.958	2.3364	-6.538	2.621	.703	1	.402	.141	.001	13.748
	[NO SHOW=10]	-1.573	2.2980	-6.077	2.931	.468	1	.494	.207	.002	18.754
	[NO SHOW=12]	-1.276	2.2721	-5.730	3.177	.316	1	.574	.279	.003	23.970
	[NO SHOW=13]	-.833	2.2383	-5.220	3.554	.138	1	.710	.435	.005	34.966
	[NO SHOW=14]	-.252	2.2080	-4.580	4.076	.013	1	.909	.777	.010	58.881
	[NO SHOW=15]	.059	2.1969	-4.247	4.365	.001	1	.979	1.060	.014	78.623
	[NO SHOW=16]	.539	2.1845	-3.743	4.820	.061	1	.805	1.714	.024	124.018
	[NO SHOW=17]	.978	2.1762	-3.287	5.244	.202	1	.653	2.660	.037	189.369
	[NO SHOW=18]	1.449	2.1709	-2.806	5.704	.446	1	.504	4.259	.060	300.037
	[NO SHOW=19]	1.644	2.1708	-2.611	5.898	.573	1	.449	5.175	.073	364.478
	[NO SHOW=20]	1.737	2.1717	-2.519	5.994	.640	1	.424	5.682	.081	400.920
	[NO SHOW=21]	1.969	2.1732	-2.291	6.228	.821	1	.365	7.160	.101	506.677
	[NO SHOW=22]	2.298	2.1739	-1.963	6.559	1.117	1	.290	9.955	.140	705.500
	[NO SHOW=23]	2.543	2.1755	-1.720	6.807	1.367	1	.242	12.723	.179	904.439
	[NO SHOW=24]	3.143	2.1862	-1.141	7.428	2.067	1	.150	23.184	.319	1683.017
	[NO SHOW=25]	3.534	2.1974	-.772	7.841	2.587	1	.108	34.276	.462	2543.394
	[NO SHOW=26]	4.329	2.2377	-.057	8.715	3.743	1	.053	75.881	.945	6093.047
	[NO SHOW=27]	4.856	2.2823	.383	9.330	4.528	1	.033	128.560	1.467	11266.535
	[NO SHOW=28]	5.466	2.3241	.911	10.022	5.532	1	.019	236.620	2.487	22508.719
	[NO SHOW=29]	6.363	2.3781	1.702	11.024	7.159	1	.007	579.957	5.484	61329.682
	[NO SHOW=30]	6.800	2.4263	2.045	11.556	7.856	1	.005	898.185	7.729	104376.411
	[NO SHOW=33]	7.588	2.5701	2.550	12.625	8.716	1	.003	1973.665	12.811	304065.945
EMOTIONAL BARRIER		.312	.0647	.185	.439	23.192	1	.000	1.366	1.203	1.550
PERCEIVED DISRESPECT		-.039	.0703	-.176	.099	.303	1	.582	.962	.838	1.104
LACK OF UNDERSTANDING		-.203	.1048	-.408	.003	3.736	1	.053	.817	.665	1.003
APPOINTMENT METHOD		.167	.0671	.036	.299	6.223	1	.013	1.182	1.037	1.348
(Scale)		1[a]									

Dependent Variable: NO SHOW
Model: (Threshold), EMOTIONAL BARRIER, PERCEIVED DISRESPECT, LACK OF UNDERSTANDING, APPOINTMENT METHOD

a. Fixed at the displayed value.

Table 20: Customer - Parameter Estimates Route-Two

Route -Two Result

- Odd ratio for emotional barrier (X1) indicates that the odds of being in a higher level on no show increases by a factor of 1.366 for every 1 unit increase on emotional barrier.
- The odds ratio for perceived disrespect (X2) indicates that the odds of being in a higher level on no show behaviour increases by a factor of 0.962 for every 1 unit increases on perceived disrespect. Given that the odds ratio is <1, this indicates a decreasing probability of being in a higher level on the no show as values increases on perceived disrespect.

- The odds ratio for lack of understanding (X3) indicates that the odds of being in a higher level on no show behaviour increases by a factor of 0.817 for every 1 unit increases on perceived disrespect. Given that the odds ratio is <1, this indicates a decreasing probability of being in a higher level on the no show as values increases on lack of understanding.
- Odd ratio for appointment method (X4) indicates that the odds of being in a higher level on no show increases by a factor of 1.182 for every 1 unit increase on appointment method.

x) Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	18.157	5.617		3.233	.002
	EMOTIONAL BARRIER	.746	.163	.418	4.588	.000
	PERCEIVED DISRESPECT	-.023	.203	-.012	-.115	.909
	LACK OF UNDERSTANDING	-.654	.284	-.234	-2.307	.023
	APPOINTMENT METHOD	.398	.185	.208	2.153	.034

a. Dependent Variable: NO SHOW

Table 21: Customer - Coefficients

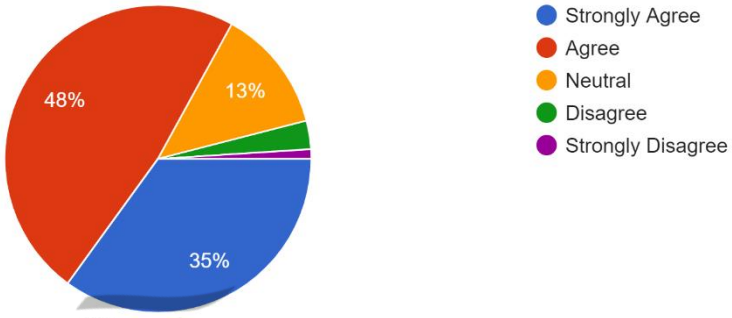
Interpretation:

- X1 accepted due to the p-value < 0.05 and t table < t value which is 1.98525 < 4.588
- X2 rejected due to the p-value >0.05 and t table > t value which 1.98525 > -2.307
- X3 rejected due to t table > t value which 1.98525 > -0.115
- X4 accepted due to the p-value < 0.05 and t table < t value which is 1.98525 < 2.153

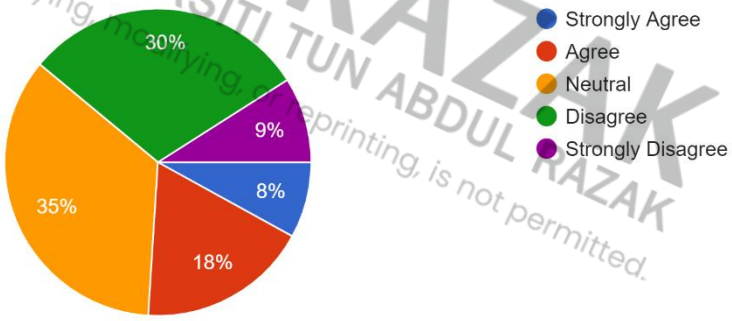
xi) Preferable appointment method

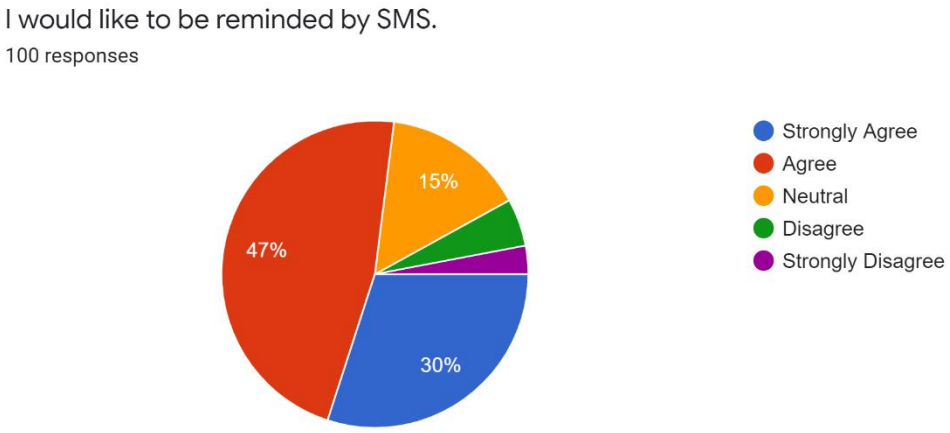
A total of 83% respondent agrees and strongly agree that they prefer automated reminder system compare to other methods.

I prefer automated reminder system.
100 responses



I would like to be reminded by e-mail.
100 responses





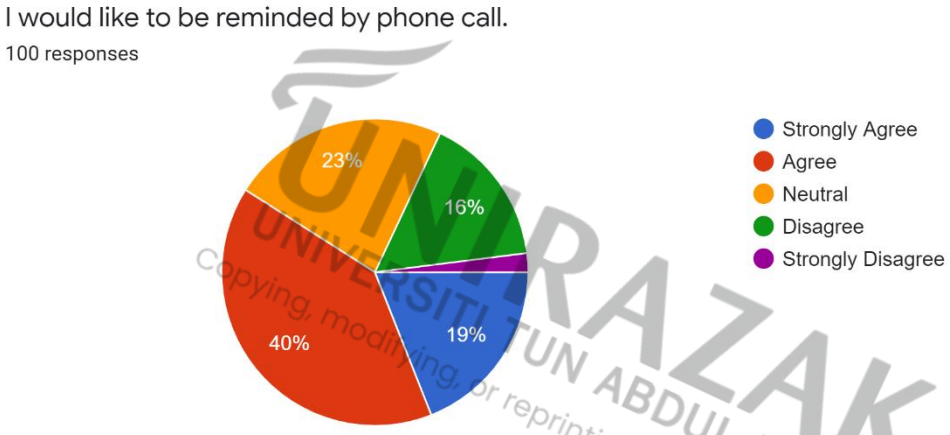


Figure 24: Preferable appointment method by customer

4.2.2 Physiotherapist Survey

Same method used to analyze responds from the physiotherapists.

a) Case summary

Case Processing Summary[a]

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Gender	5	100.0%	0	0.0%	5	100.0%
Race	5	100.0%	0	0.0%	5	100.0%

Age	5	100.0%	0	0.0%	5	100.0%
Transportation problems prevents patient from making his/her appointments.	5	100.0%	0	0.0%	5	100.0%
Working commitment prevents patient from making his/her appointments.	5	100.0%	0	0.0%	5	100.0%
Financial problem prevents patient from making his/her appointments.	5	100.0%	0	0.0%	5	100.0%
Family problems prevents patient from making his/her appointments.	5	100.0%	0	0.0%	5	100.0%
Feeling sick prevents patient from making his/her appointments.	5	100.0%	0	0.0%	5	100.0%
Fully recovered make patient missed his/her appointment.	5	100.0%	0	0.0%	5	100.0%
Patient forgot about his/her appointment.	5	100.0%	0	0.0%	5	100.0%
Patient feels uncomfortable communicating with the physiotherapist.	5	100.0%	0	0.0%	5	100.0%
Patient was not informed about the purpose of therapy given to them.	5	100.0%	0	0.0%	5	100.0%
Patient has felt tense, anxious, or nervous during physiotherapy session.	5	100.0%	0	0.0%	5	100.0%
Patients are confused with the treatment given to them during physiotherapy session.	5	100.0%	0	0.0%	5	100.0%
Patient is confidence and trust with the physiotherapist.	5	100.0%	0	0.0%	5	100.0%
Patient received privacy during treatment.	5	100.0%	0	0.0%	5	100.0%
Patient was treated with respect.	5	100.0%	0	0.0%	5	100.0%

Patient was given the right to refuse the treatment.	5	100.0%	0	0.0%	5	100.0%
Patient was given the right to choose his/her physiotherapist.	5	100.0%	0	0.0%	5	100.0%
Patient was treated in timely manner.	5	100.0%	0	0.0%	5	100.0%
The appointment instructions are clear.	5	100.0%	0	0.0%	5	100.0%
Patients are aware that they must notify physiotherapy staff if they can't attend physiotherapy session.	5	100.0%	0	0.0%	5	100.0%
Patient is aware the importance of keeping appointment.	5	100.0%	0	0.0%	5	100.0%
Patients are aware that their absence can cause lost opportunity to other patients.	5	100.0%	0	0.0%	5	100.0%
Patients belief their absence giving positive event to physiotherapy.	5	100.0%	0	0.0%	5	100.0%
Patient like current scheduling system.	5	100.0%	0	0.0%	5	100.0%
Patient prefers automated reminder system.	5	100.0%	0	0.0%	5	100.0%
Patient would like to be reminded by e-mail.	5	100.0%	0	0.0%	5	100.0%
Patient would like to be reminded by SMS.	5	100.0%	0	0.0%	5	100.0%
Patient would like to be reminded by phone call.	5	100.0%	0	0.0%	5	100.0%

a. Limited to first 100 cases.

Table 22: Physiotherapist Case Summary

b) Demographic Data

i) Gender

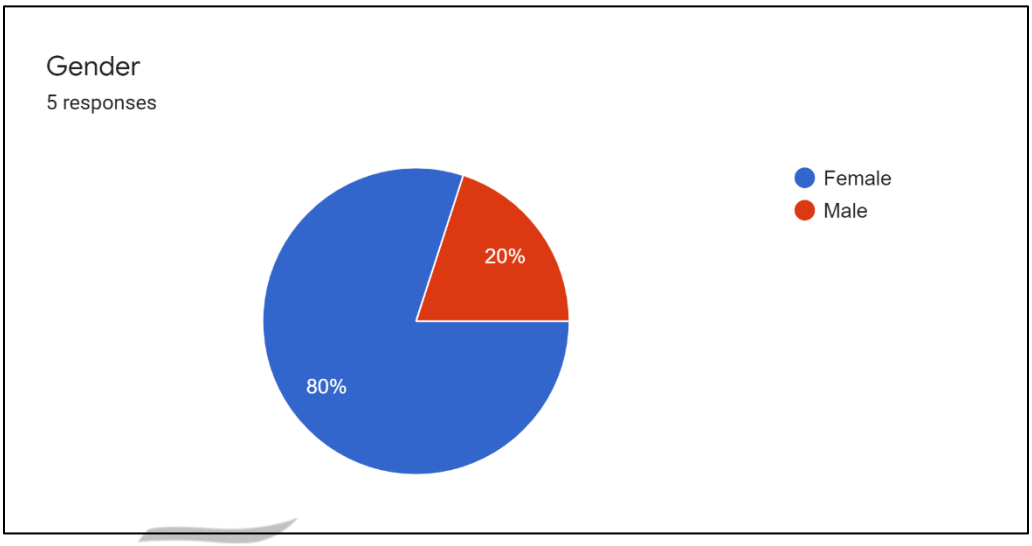


Figure 25: Physiotherapist Gender

ii) Age

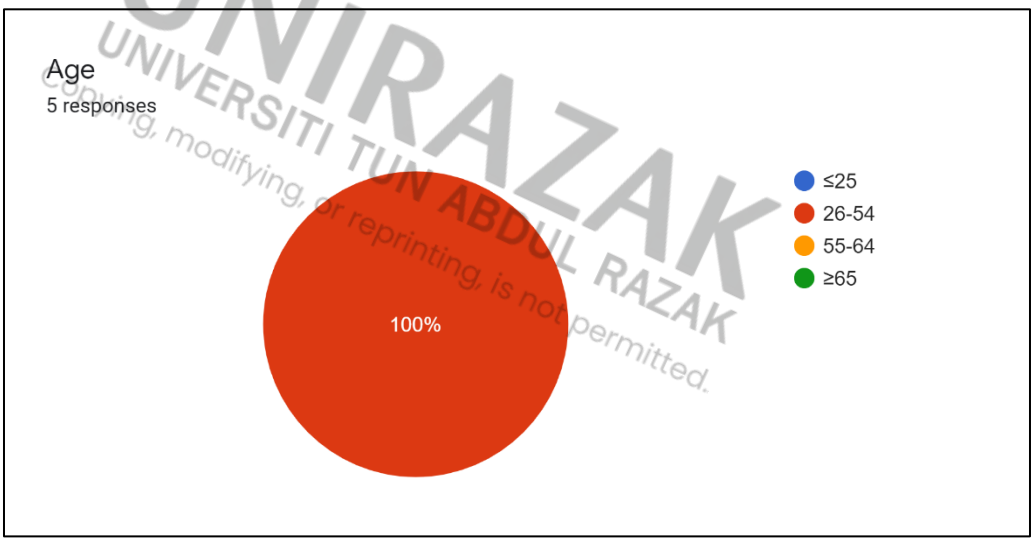


Figure 26: Physiotherapist Age

iii) Race

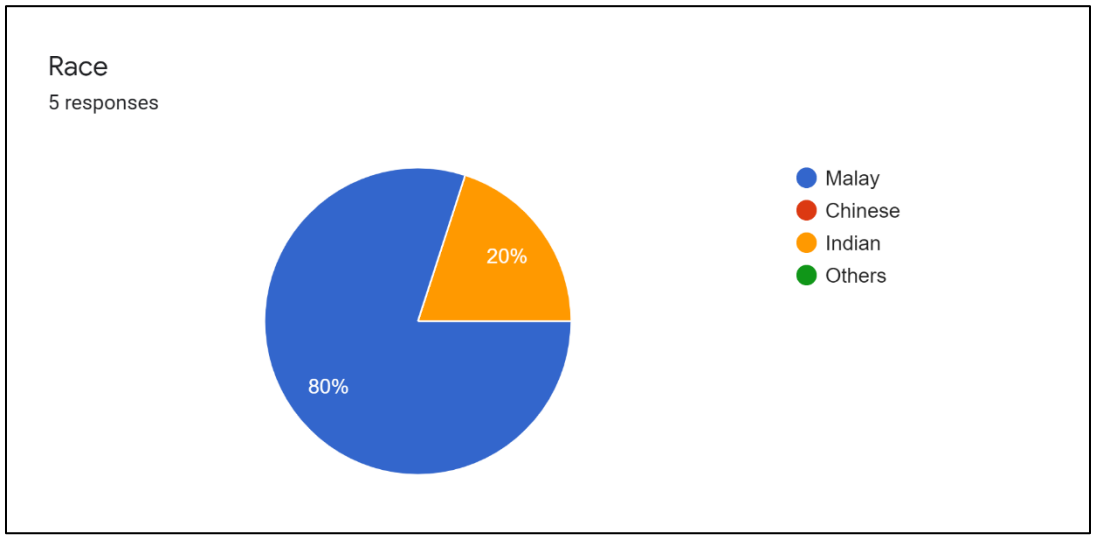


Figure 27: Physiotherapist Race

c) Reason for missed appointment.

Physiotherapist agrees and strongly agree by 100% that their patients missed appointment due to working commitment, feeling sick and forget.

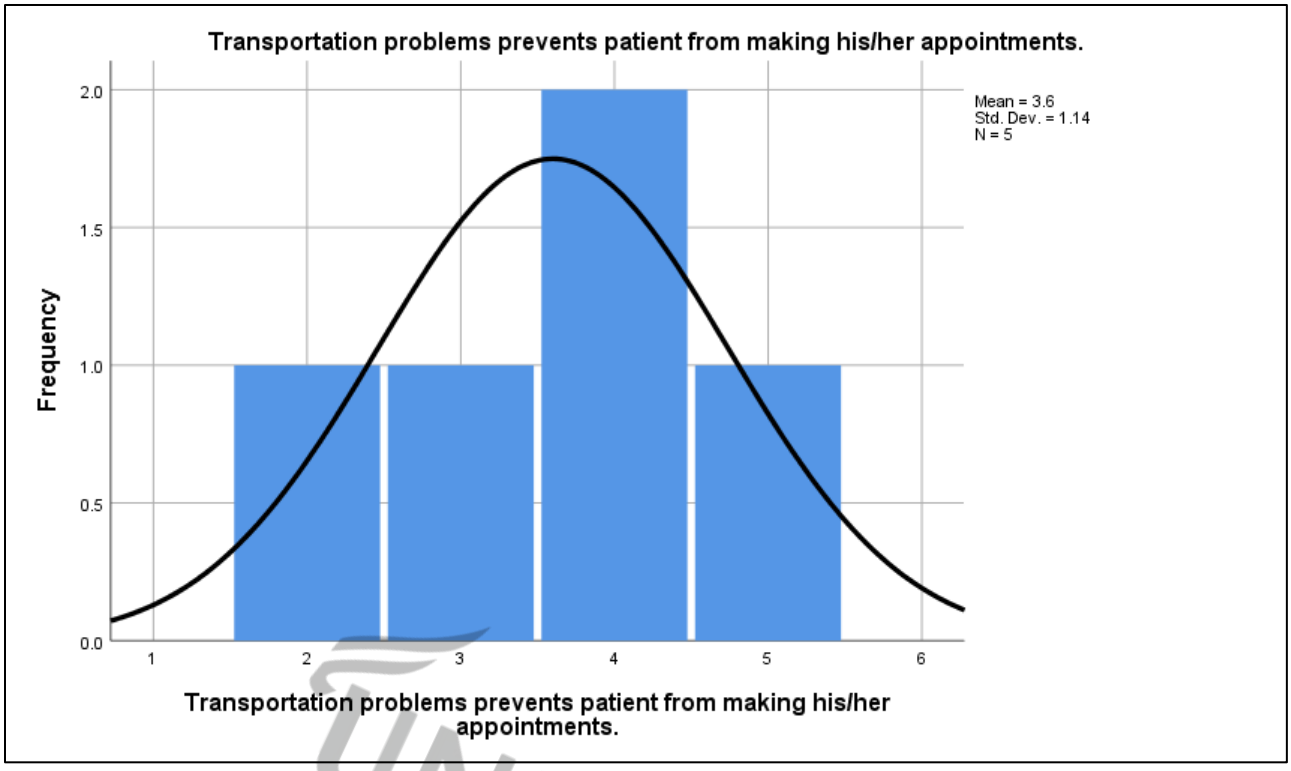


Figure 28: Physiotherapist prediction - Transportation problem

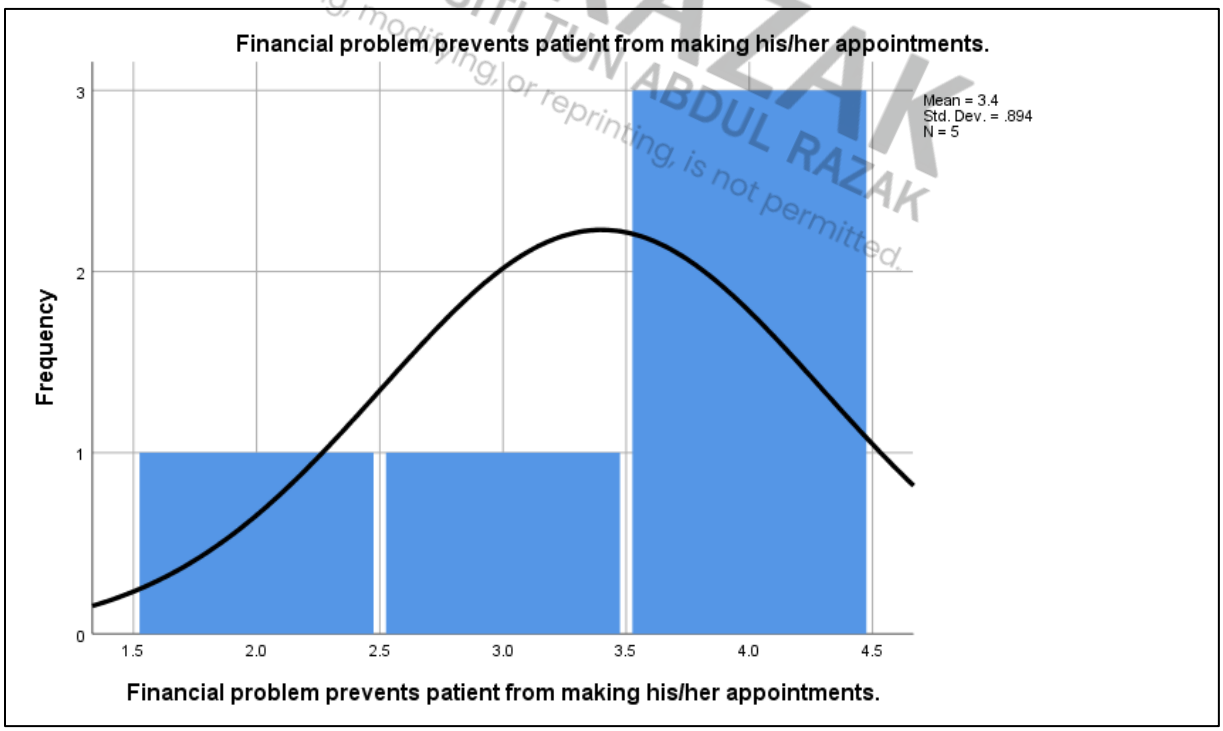


Figure 29: Physiotherapist prediction - Financial problem

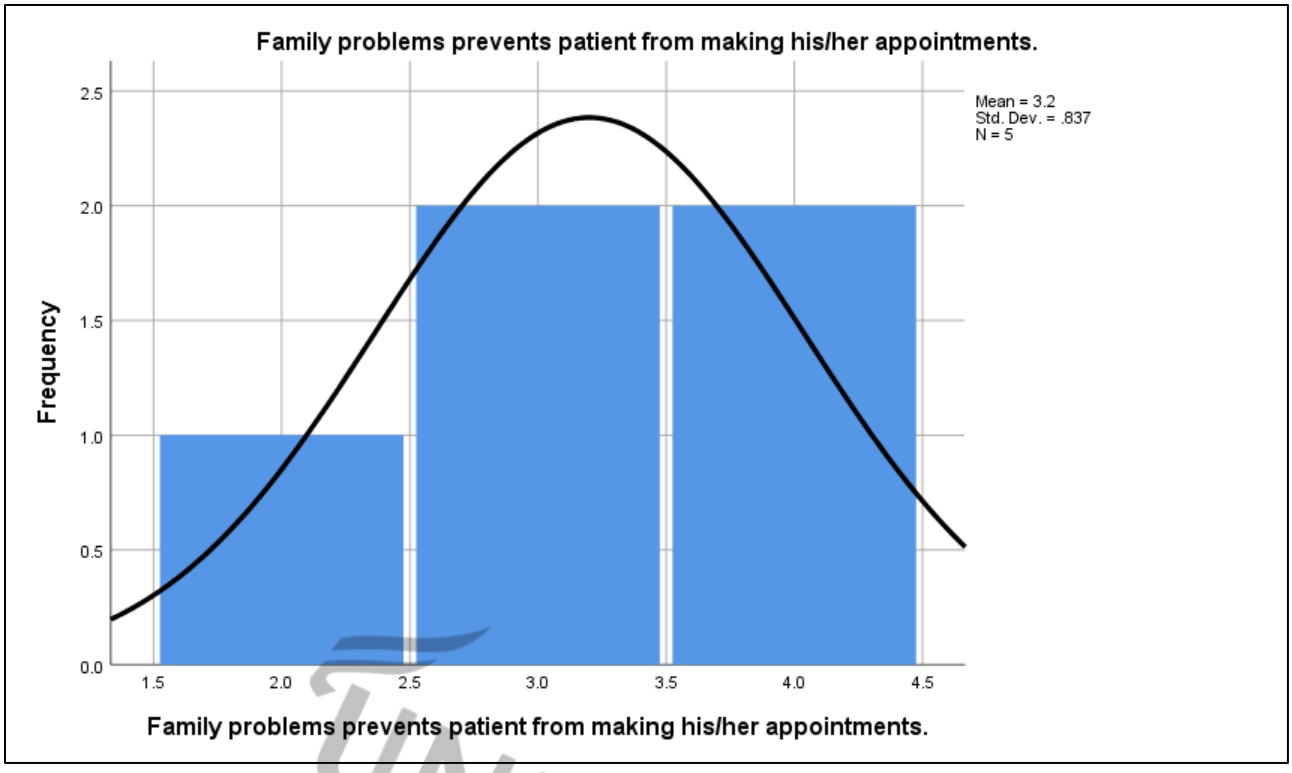


Figure 30: Physiotherapist prediction - Family problem

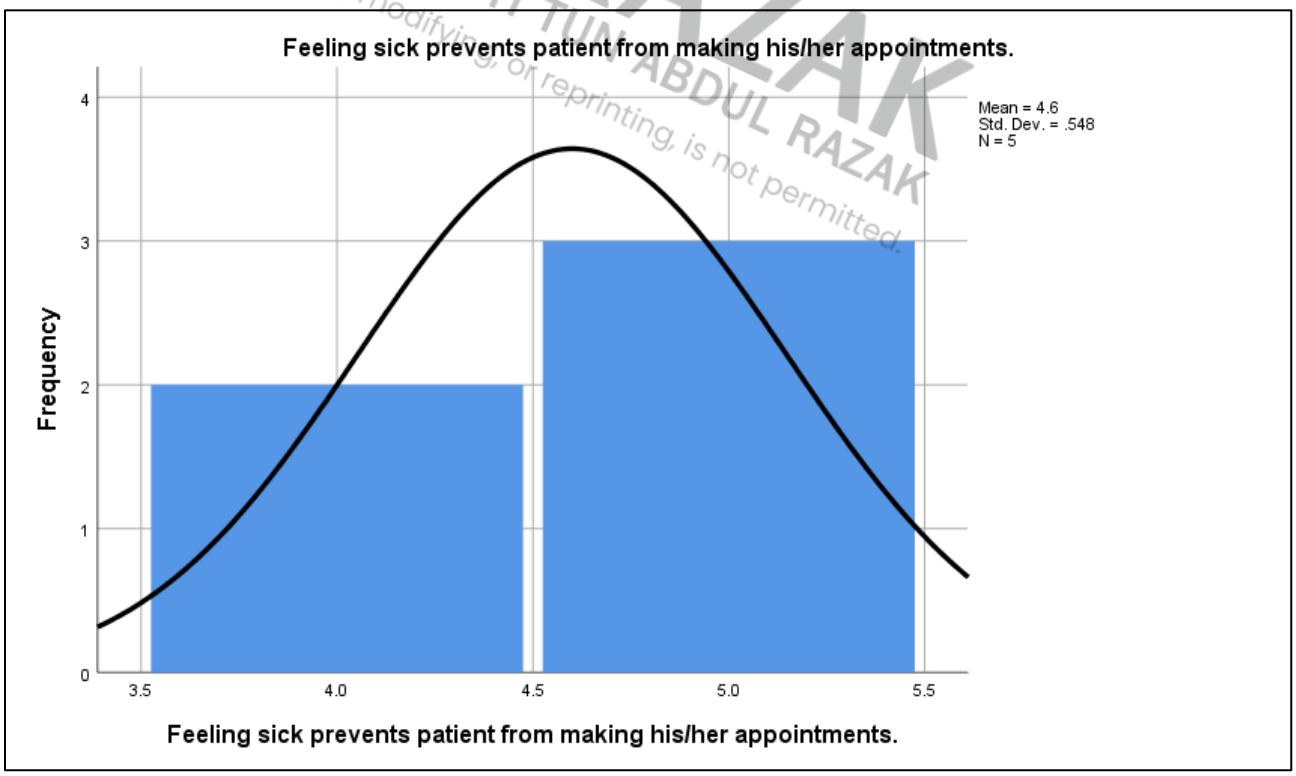


Figure 31: Physiotherapist prediction - Feeling sick

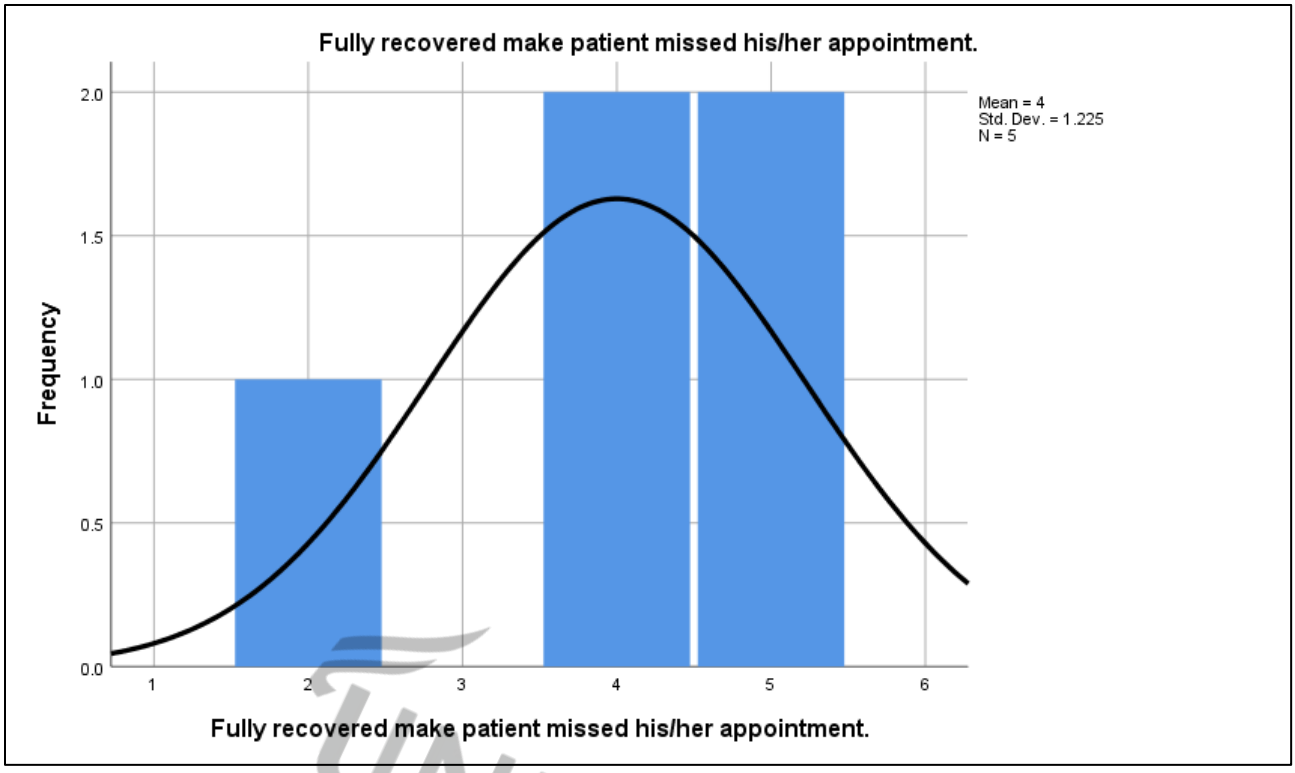


Figure 32: Physiotherapist prediction - Fully recovered

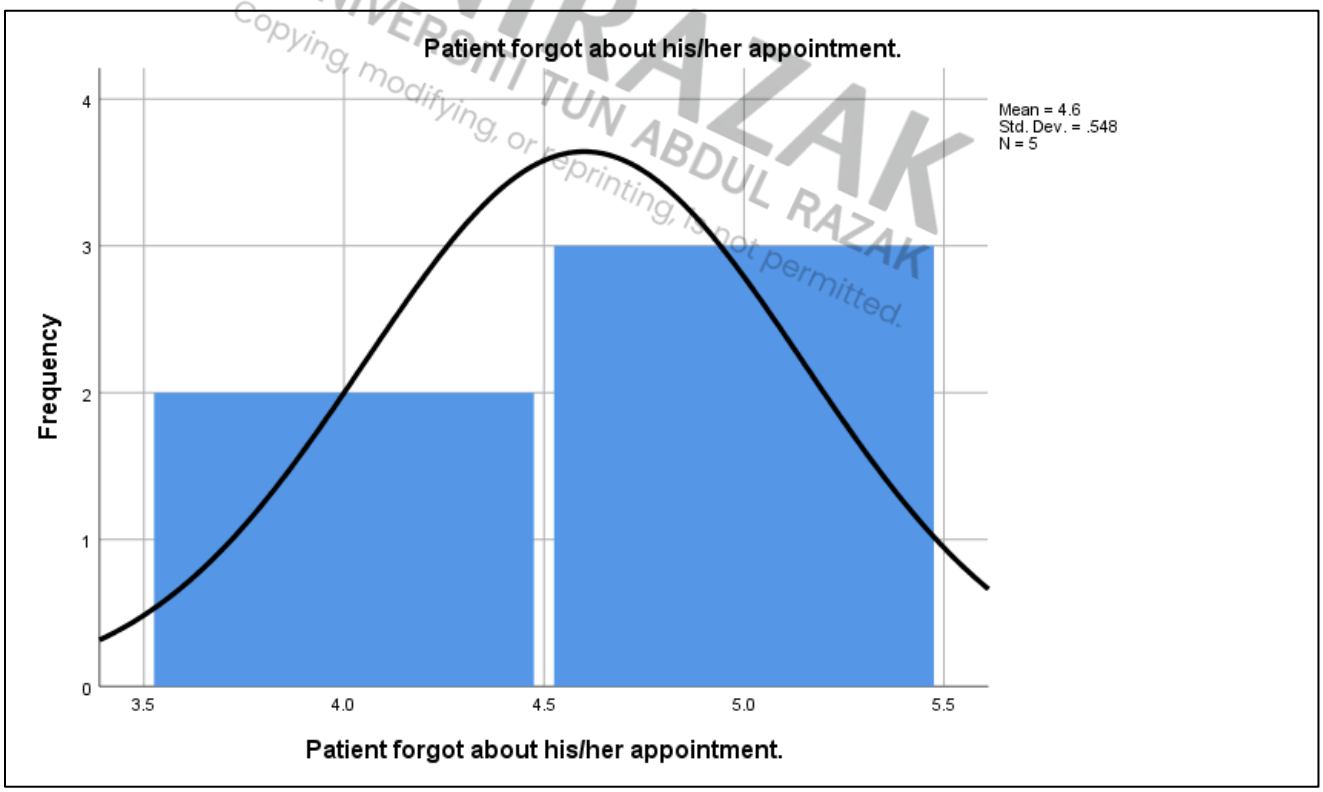


Figure 33: Physiotherapist prediction - Forget

d) Residual value

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		5
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.00000000
Most Extreme Differences	Absolute	.250
	Positive	.150
	Negative	-.250
Test Statistic		.250
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Table 23: Physiotherapist One sample Kolmogorov-Smirnov Test

Result: The data residual shows it is normal distribution due to 0.200 > 0.05

e) Linearity relationship

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
NO SHOW * PERCEIVED DISRESPECT	Between Groups	(Combined)	45.333	2	22.667	5.231	.160
		Linearity	1.720	1	1.720	.397	.593
		Deviation from Linearity	43.613	1	43.613	10.065	.087
	Within Groups		8.667	2	4.333		
	Total		54.000	4			

Table 24: Physiotherapist ANOVA Table - No show and perceived disrespect

Result: Significant value of deviation from linearity 0.087> 0.05 shows that perceived disrespect and no show has linearity relationship

ANOVA Table[a]

a. Too few cases - statistics for NO SHOW * LACK OF UNDERSTANDING cannot be computed.

Table 25: Physiotherapist ANOVA Table - No show and lack of understanding

ANOVA Table[a]

a. Too few cases - statistics for NO SHOW * EMOTIONAL BARRIER cannot be computed.

Table 26: Physiotherapist ANOVA Table - No show and emotional barrier

Result: Emotional barrier and lack of understanding unable to compute due to few cases

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
NO SHOW * APPOINTMENT METHOD	Between Groups	(Combined)	53.500	3	17.833	35.667	.122
		Linearity	15.648	1	15.648	31.296	.113
		Deviation from Linearity	37.852	2	18.926	37.852	.114
	Within Groups		.500	1	.500		
	Total		54.000	4			

Table 27: Physiotherapist ANOVA Table - No show and appointment method

Result: Significant value of deviation from linearity 0.114> 0.05 shows that appointment method and no show have linearity relationship.

f) Descriptive statistics

Descriptive Statistics

	Mean	Std. Deviation	N
NO SHOW	28.00	3.674	5
EMOTIONAL BARRIER	12.60	2.881	5
PERCEIVED DISRESPECT	20.20	6.099	5
LACK OF UNDERSTANDING	17.60	4.037	5
APPOINTMENT METHOD	17.20	1.643	5

Table 28: Physiotherapist Descriptive Statistic

Result: The value in the table indicates there are no extreme data because standard deviation is lesser than mean.

Correlations

		NO SHOW	EMOTIONAL BARRIER	PERCEIVED DISRESPECT	LACK OF UNDERSTANDING	APPOINTMENT METHOD
Pearson Correlation	NO SHOW	1.000	.449	.178	.522	.538
	EMOTIONAL BARRIER	.449	1.000	-.563	.026	.866
	PERCEIVED DISRESPECT	.178	-.563	1.000	.735	-.130
	LACK OF UNDERSTANDING	.522	.026	.735	1.000	.317
	APPOINTMENT METHOD	.538	.866	-.130	.317	1.000
Sig. (1-tailed)	NO SHOW	.	.224	.387	.183	.175
	EMOTIONAL BARRIER	.224	.	.161	.484	.029
	PERCEIVED DISRESPECT	.387	.161	.	.079	.418
	LACK OF UNDERSTANDING	.183	.484	.079	.	.302
	APPOINTMENT METHOD	.175	.029	.418	.302	.
N	NO SHOW	5	5	5	5	5
	EMOTIONAL BARRIER	5	5	5	5	5
	PERCEIVED DISRESPECT	5	5	5	5	5
	LACK OF UNDERSTANDING	5	5	5	5	5
	APPOINTMENT METHOD	5	5	5	5	5

Table 29: Physiotherapist - Correlations

Result: The are significant negative relationship for all predictors with no show behavior due to the value is more than 5%.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	APPOINTMENT METHOD, PERCEIVED DISRESPECT, LACK OF UNDERSTANDING, EMOTIONAL BARRIER[b]	.	Enter

a. Dependent Variable: NO SHOW

b. All requested variables entered.

Table 30:Physiotherapist - Variables entered

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	1.000[a]	1.000	.	.	1.000	.	4	0	.

a. Predictors: (Constant), APPOINTMENT METHOD, PERCEIVED DISRESPECT, LACK OF UNDERSTANDING, EMOTIONAL BARRIER

Table 31: Physiotherapist - Model Summary

Result: R1 indicates perfect fit. Appointment method, emotional barrier, perceived disrespect and lack of understanding have zero influence to no show behavior. The correlation coefficient is 0 shows it has weak correlation.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	93.286	.000		.	.

	EMOTIONAL BARRIER	18.929	.000	14.842	.	.
	PERCEIVED DISRESPECT	6.643	.000	11.027	.	.
	LACK OF UNDERSTANDING	-4.571	.000	-5.023	.	.
	APPOINTMENT METHOD	-20.786	.000	-9.296	.	.

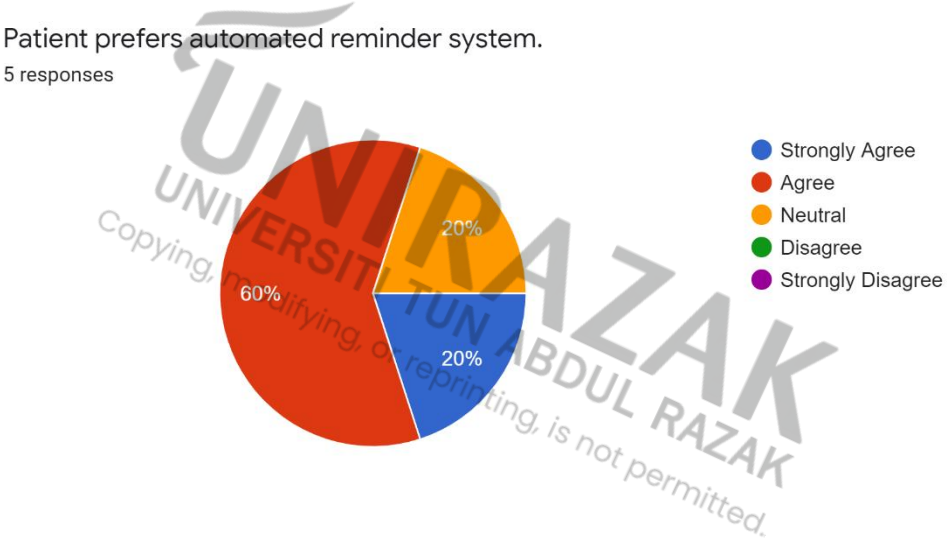
a. Dependent Variable: NO SHOW

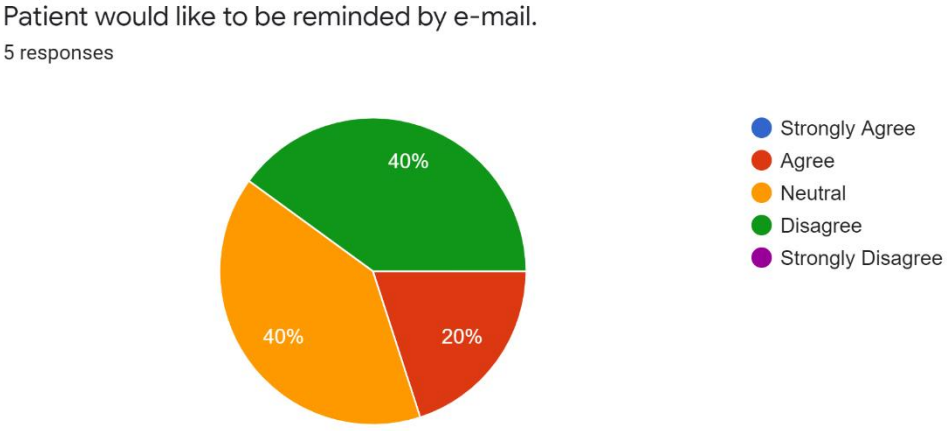
Table 32: Physiotherapist - Coefficients

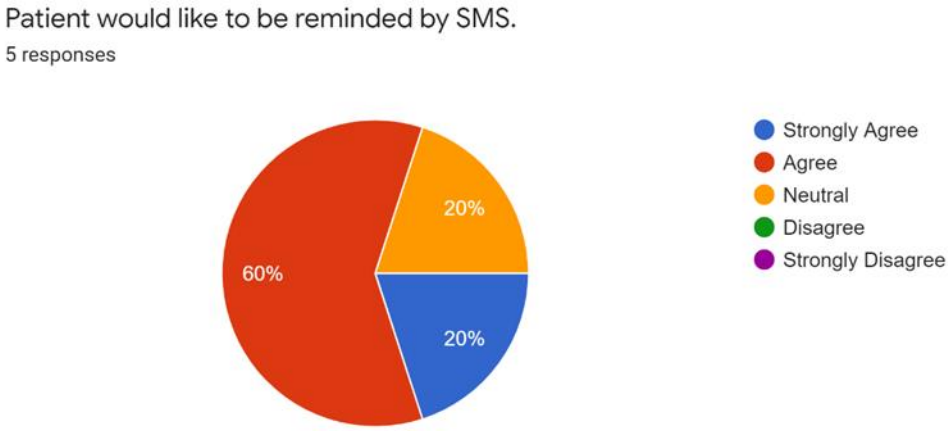
Result: p value is 0 for all independent variables. It indicates the null hypothesis can be rejected.

g) Physiotherapist prediction of appointment method preferred by customer.

Physiotherapists agree and strongly agree by 80% that patient prefer automated reminder system and would like to be reminded by SMS.







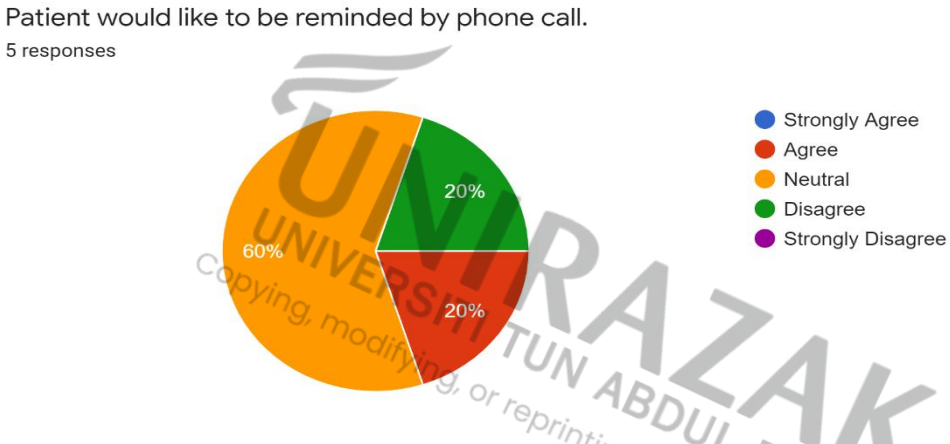


Figure 34: Physiotherapist prediction of appointment method preferred by customer.

4.2.3 Summary

As sum, Chapter Four discussed the finding from SPSS namely reliability, frequency, descriptive, correlation and regression analysis. Therefore, the survey conducts with very clear question which is respondent able to answer in no show behavior in Physiotherapy, CAHT. Through google form, some questionnaire respondent still has difficulties in defining in different aspect, but they were directly contacted researcher for explanation. Based on all the findings from SPSS analysis, it was found that 2 independent variables were having a significant relationship with dependent variables that influence the no show. All these findings help researcher to answer the research questions and met all the research objectives and many things can be improved.

CHAPTER 5

CONCLUSION

5.1 Recap of major finding

The objectives are threefold:

RO1: To increase healthcare provider knowledge about potential factors that influencing patient no show behaviour.

Physiotherapists prediction on patient missed appointment reason is align with patients reasoning, working commitment is thee one prevents them to attend physiotherapy sessions. This is due to most of physiotherapy patients is from prime working age category. From physiotherapist survey, the data shows that physiotherapists did not believe that the independent variables able to influence no show behavior. However, from patient survey, the analysis indicate 2 hypotheses were acceptable with significant medium and weak relationship towards no show behavior which are emotional barrier and appointment method. Both physiotherapist and patient group agree that automated appointment systems and SMS are the best method in reducing missed appointment rate.

RO2: To identify whether those factors are the actual factors that influencing patient no show behaviour.

The analysis indicate 2 hypotheses were acceptable with significant medium and weak relationship towards no show behavior which are emotional barrier and appointment method.

RO3: To determine the relationship between appointment reminder system and patient no show behaviour and to offer which method is the most preferred by patients.

Appointment reminder system accepted due to the p-value < 0.05 and t table < t value which is 1.98525 < 2.153. Patients agreed that automated appointment systems and SMS are the best method in reducing missed appointment rate.

5.2 Implication of the study

Appointment-keeping is an area that merits further investigation. Respect, fear, lack of understanding, and appointments method offer a potentially fertile ground for developing new solutions. The findings of this study have many consequences for future practise and analysis and recommendations. The reports provide a significant insight into personal and social barriers that influence quality healthcare for patients, while the quantitative findings provide context for the patient's experience. The results allow the researcher to suggest interventions using the findings of this study accurately. Given that the aim of the study is to identify the reasons behind the no-show phenomenon, measures that increase the high level of no-shows and overall physiotherapy functionality should also be discussed. The proposals include the introduction of automatic appointment systems, enhanced physiotherapy-based accessibility to health services, informing patients as to the value of maintaining appointments, minimum changes in facilities and future study.

There is a likelihood that an emotional obstacle and appointment method could influence no-show conduct. The key is for the healthcare provider to comprehend why the patient missed his or her appointment. For instance, the healthcare provider should take notice of the patient's motional obstacle to appointment keeping, such as anxiety. Anxiety has a detrimental effect on the portion of the brain that is responsible for imagination and communication. Constant worry will make it difficult for the patient to focus on the details they are providing or getting. Managing the patient's anxiety can help the situation. In the other hand, the healthcare provider should consider an intervention, such as using an electronic alert device, to inform the patient of his or her appointment.

This evidence-based descriptive research contributes to the project's goals. The evaluation of obstacles identified by patients that have resulted in missed appointments will provide information to key stakeholders in the creation and implementation of potential scheduling and appointment choices. Following the introduction of the patient survey, many statistically important results concerning appointment method and missed appointments were discovered. These results should be presented as evidence-based recommendations for approaches to eliminate obstacles, such as the introduction of patient reminder systems.

5.3 Limitation of the study

This is the first study to look at no show behaviour among outpatients at Columbia Asia Hospital Taiping hence the researcher aware there are certain limitations to this research. The procedure was time-consuming, and the explanation for no-show recorded may not be correct because patients may be unable to reveal the specific reason for no-show. Also, such voluntary explorations are always prejudicial. Some people always refuse to respond to these questions; selective data are inevitably only collected. This problem cannot be solved realistically because it must be answered voluntarily. However, questionnaire could be improved.

5.4 Recommendation for future research

Respondents bias is the propensity of participants to provide responses in a way that they believe a researcher wants them to react. When a person knows that reactions are recorded, the patient is still at risk of not giving true answers for fear of ostracization. Missed appointment is more than what we think. Future research on patient no show behavior should be explore with addition of qualitative study. Respondents might express their feeling and reason better with qualitative study.

Besides that, the future research must be prepared with sources from previous researchers which show all variables relationship with the dependent variable. Since the sources are low, the future researcher should find an alternative way to implement the study and strongly recommend many more research involved in no show behavior in Malaysia.

This study will probably lead to the healthcare taking the results of this study and enabling them to prompt future research studies. With the results of this study as the basis for future studies, the limitations that this study had faced could change and a more rigorous study in nature could be carried out. Also, data from this study may be used by the clinic to assess the efficacy of methods to fight the no show in future. Future research will expand the sample size to recognize new obstacles facing patients, and also discover other techniques for increasing patient satisfaction and reducing no-show rates.

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APPENDICES

APPENDIX A

Cover Page: Customer Survey / Tinjauan Kaji Selidik Pelanggan

In order to find out why patients miss appointments, you are invited to take part in a research survey. Both involved outpatients and existing physiotherapists in Physiotherapy Columbia Asia Hospital Taiping are welcome to take part in the study. This section is just to give the opportunity for you to understand the purpose study before deciding whether to participate. This study is being conducted by Nur Izwa Binti Mohd Mukhtar, Physiotherapy Manager, who is a Master of Business Administration student at UNIRAZAK, Kuala Lumpur. You will be asked, on a voluntary basis, to complete an anonymous customer survey for the researcher to complete her final thesis and to gather data to better support you as an asset in this hospital. No name or identity card number is needed to protect your privacy.

Anda dijemput untuk mengambil bahagian dalam tinjauan penyelidikan untuk mengetahui mengapa pesakit tidak menepati temujanji. Pesakit luar yang terlibat dan fisioterapis di Fisioterapi Columbia Asia Hospital Taiping di alu-alukan untuk mengambil bahagian dalam kajian ini. Bahagian ini hanya untuk memberi peluang kepada anda untuk memahami tujuan kajian sebelum memutuskan sama ada akan mengambil bahagian. Kajian dijalankan oleh Nur Izwa Binti Mohd Mukhtar, Pengurus Fisioterapi, yang merupakan pelajar Sarjana Pentadbiran Perniagaan di UNIRAZAK, Kuala Lumpur. Memandangkan anda adalah asset hospital ini, anda akan diminta, secara sukarela, untuk melengkapkan tinjauan pelanggan tanpa nama untuk penyelidik menyelesaikan kertas kerja terakhirnya dan juga umtuk pengumpulan data untuk penambahbaikan servis. Nama atau nombor kad pengenalan tidak diperlukan bagi melindungi privasi anda

Background Information / Maklumat latar belakang kajian:

The purpose of this study is to understand why patients sometimes do not attend appointments and to find a way of reducing patients' shows.

Tujuan kajian ini adalah untuk memahami mengapa pesakit kadang-kadang tidak menghadiri temu janji dan mencari cara untuk mengurangkan ketidak hadiran pesakit.

Procedures / Prosedur:

An anonymous patient survey, with no personal identifiers, will be sent to the respondent at any convenient time.

Tinjauan kaji selidik pesakit tanpa memerlukan nama, pengecaman peribadi, akan dihantar kepada responden pada bila-bila masa yang sesuai.

Voluntary Nature of the Study / Kajian Sukarela:

This is a volunteer survey. The researcher will respect your decision to be involve or not.

Ini adalah kajian secara sukarela. Penyelidik akan menghormati keputusan anda untuk terlibat atau tidak.

Research Risks and Benefits / Risiko dan Faedah Penyelidikan:

No risks or low risks were involved, although the benefits included increased patient satisfaction, lessened long wait times and improved health outcomes for patients.

Tidak ada risiko atau risiko rendah yang terlibat, walaupun manfaatnya termasuk peningkatan kepuasan pesakit, pengurangan waktu menunggu yang lama dan peningkatan hasil kesihatan bagi pesakit.

Confidentiality / Kerahsiaan:

Any details that you provide remains confidential. / Segala maklumat yang anda berikan kekal rahsia.

APPENDIX B

Survey Questionnaire for Patient / Soalan Kaji Selidik Pesakit

Thank you so much for your interest in this research. Please tick (√) the corresponding boxes for your answer.

Terima kasih kerana berminat dalam penyelidikan ini. Sila tanda (√) untuk jawapan pilihan anda.

Demographic information / Info Demografik

a) Gender / Jantina: □ Female / Perempuan □ Male / Lelaki

b) Race / Bangsa: □ Malay/ Melayu □ Chinese / Cina
□ Indian / India □ Others / Lain-lain

c) Age / Umur: □ ≤25 □ 26-54 □ 55-64 □ ≥65

No	Statements / Kenyataan	Strongly Agree / Sangat Setuju	Agree / Setuju	Neutral	Disagree / Tidak Setuju	Strongly Disagree / Sangat Tidak Setuju
1.Reason for miss appointment / Punca ketidakhadiran						
1.1	Transportation problems prevents me from making my appointments. Masalah pengangkutan menyebabkan saya tidak hadir temujanji.					
1.2	Working commitment prevents me from making my appointments. Komitmen kerja menyebabkan saya tidak hadir temujanji.					
1.3	Financial problem prevents me from making my appointments. Masalah kewangan menyebabkan saya tidak hadir temujanji.					
1.4	Family problems prevents me from making my appointments. Masalah keluarga menyebabkan saya tidak hadir temujanji.					
1.5	Feeling sick prevents me from					

	making my appointments. Sakit menyebabkan saya tidak hadir temujanji.					
1.6	Fully recovered make me missed my appointment. Sembuh sepenuhnya menyebabkan saya tidak hadir temujanji.					
1.7	I forgot about my appointment. Saya lupa temujanji saya.					
2.Emotional Barriers / Halangan Emosi						
2.1	I feel uncomfortable communicating with the physiotherapist. Saya rasa tidak selesa berkomunikasi dengan fisioterapis.					
2.2	I was not informed about the purpose of therapy given to me. Saya tidak diberitahu tentang tujuan terapi yang diberikan.					
2.3	I have felt tense, anxious, or nervous during physiotherapy session. Saya rasa tegang, cemas atau gugup semasa sesi fisioterapi.					
2.4	I am confused with the treatment given to me during physiotherapy session. Saya keliru tentang rawatan yang diberikan semasa sesi fisioterapi.					
2.5	I am confidence and trust with the physiotherapist. Saya yakin dan percaya dengan fisioterapis.					
3.Perceived Disrespect of Patient's Belief / Rasa Tidak hormat terhadap Kepercayaan Pesakit						
3.1	I received privacy during treatment. Saya menerima privasi semasa rawatan.					
3.2	I was treated with respect. Saya dilayan dengan hormat.					
3.3	I am given the right to refuse the					

	treatment. Saya diberi hak untuk menolak rawatan.					
3.4	I am given the right to choose my physiotherapist. Saya diberi hak untuk memilih fisioterapis.					
3.5	I was treated in timely manner. Saya dilayan tepat pada masanya.					
4.Lack of Understanding of the Scheduling System / Kurangnya Pemahaman Sistem Penjadualan						
4.1	The appointment instructions are clear. Arahan temujanji adalah jelas.					
4.2	I am aware that I must notify physiotherapy staff if I cannot attend physiotherapy session. Saya sedar bahawa saya mesti memberitahu kakitangan fisioterapi sekiranya saya tidak dapat hadir temujanji.					
4.3	I am aware the importance of keeping appointment. Saya sedar kepentingan menepati temujanji.					
4.4	I am aware that my absence can cause lost opportunity to other patients. Saya sedar ketidakhadiran saya memberi menyebabkan pesakit lain hilang peluang untuk mendapat rawatan.					
4.5	I belief my absence giving positive event to physiotherapy. Saya sedar ketidakhadiran saya memberi kesan positif kepada fisioterapi.					
5.Appointment Method / Kaedah Temujanji						
5.1	I like current scheduling system. Saya suka system temujanji sekarang.					

5.2	I prefer automated reminder system. Saya lebih suka system peringatan otomatik.					
5.3	I would like to be reminded by e-mail. Saya lebih suka diingatkan melalui e-mel.					
5.4	I would like to be reminded by SMS. Saya lebih suka diingatkan melalui SMS.					
5.5	I would like to be reminded by phone call. Saya lebih suka diingatkan melalui panggilan telefon.					

APPENDIX C

Survey Questionnaire for Physiotherapist

Thank you so much for your interest in this research. Please tick (√) the corresponding boxes for your answer.

Demographic information

a) Gender: □ Female □ Male

b) Race: □ Malay □ Chinese □ Indian □ Others

c) Age: □ ≤25 □ 26-54 □ 55-64 □ ≥65

No	Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.Reason for miss appointment						
1.1	Transportation problems prevents patient from making his/her appointments					
1.2	Working commitment prevents patient from making his/her appointments					
1.3	Financial problem prevents patient from making his/her appointments					
1.4	Family problems prevents patient from making his/her appointments					
1.5	Feeling sick prevents patient from making his/her appointments					
1.6	Fully recovered make patient missed his/her appointment					
1.7	Patient forgot about his/her appointment					
2.Emotional Barriers						
2.1	Patient feels uncomfortable communicating with the physiotherapist					
2.2	Patient was not informed about the purpose of therapy given to them					
2.3	Patient has felt tense, anxious, or nervous during physiotherapy session					
2.4	Patients are confused with the treatment given to them during					

	physiotherapy session.					
2.5	Patient is confidence and trust with the physiotherapist					
3.Perceived Disrespect of Patient's Belief						
3.1	Patient received privacy during treatment					
3.2	Patient was treated with respect					
3.3	Patient was given the right to refuse the treatment					
3.4	Patient was given the right to choose his/her physiotherapist					
3.5	Patient was treated in timely manner					
4.Lack of Understanding of the Scheduling System						
4.1	The appointment instructions are clear.					
4.2	Patients are aware that they must notify physiotherapy staff if they cannot attend physiotherapy session.					
4.3	Patient is aware the importance of keeping appointment.					
4.4	Patients are aware that their absence can cause lost opportunity to other patients.					
4.5	Patients belief their absence giving positive event to physiotherapy					
5.Appointment Method						
5.1	Patient like current scheduling system					
5.2	Patient prefers automated reminder system					
5.3	Patient would like to be reminded by e-mail					
5.4	Patient would like to be reminded by SMS					
5.5	Patient would like to be reminded by phone call					

APPROVAL PAGE

TITLE OF PROJECT PAPER: **ACTORS AFFECTING NO-SHOW BEHAVIOUR: A STUDY ON MISSED APPOINTMENT OF COLUMBIA ASIA HOSPITAL TAIPING PATIENTS**

NAME OF AUTHOR: **NUR IZWA BINTI MOHD MUKHTAR**

The undersigned certify that the above candidate has fulfilled the condition of the project paper prepared in partial fulfillment for the degree of Master of Business Administration.

SUPERVISOR

Signature : _____

Name :

Date :

ENDORSED BY:

_____

Dean

Graduate School of Business

Date: