RELATIONSHIP BETWEEN CUSTOMER RELATIONSHIP MANAGEMENT, SERVICE QUALITY IMPROVEMENT AND ORGANIZATIONAL PERFORMANCE IN MALAYSIAN HEALTHCARE INDUSTRY

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ABSTRACT: Healthcare industry is one of the service industries that involving a high encounters and interaction between healthcare providers and patients. Customer relationship management (CRM) is viewed as a strategy for organization to manage and maintain the relationship with customers as well as keeping the entire of customer's record. The importance of CRM strategy has been highlighted in many previous studies as a tool to increase the Organizational Performance (OP). However, there is still a lack of understanding regarding the importance of CRM strategy in Malaysian healthcare context. Malaysian's consumer began to expect a higher quality of care from healthcare providers as they starting to care about their own healthcare. CRM strategy and Service Quality Improvement (SQI) is viewed as a strategy to meet the customer expectation and satisfaction. The achievement of SQI actually depends on an organization's competency to offer and provide the best quality of service delivery in order to increase OP. Thus, the main purpose of this study is to examine relationship between CRM, SQI and OP model in Malaysian healthcare industry. Next, four hypotheses were developed to be investigated. This area of research in the future is expected to be investigated structural relationship between CRM, SQI, and OP in Malaysian healthcare industry. This study ends with the suggestions for future work research.

KEYWORDS: Customer relationship management, service quality improvement, organizational performance, structural equation modeling, healthcare industry.

1 Introduction

Healthcare providers are striving to compete with each other in order to offer the excellent service to patients. Healthcare industry is one of the service industries that involving a high encounters and interaction between healthcare providers and patients. Interaction between healthcare providers and patients is recognized as a complex process [1]. This is because of different need, expectation and preference between patient and healthcare providers. Thus, customer relationship management (CRM) is viewed as a strategy for organization to manage and maintain the relationship with customers as well as keeping the entire of customer's record. Record of all contact and patients information is really important to be keep in ensuring healthcare providers can perform the treatment accurately.

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Previous authors are on consensus that organization tends to face a failure whilst implementing a CRM strategy [2], [3]. It is a common that any implementation strategy confronts a resistance and hindrance in making it successful. CRM is not an exception too. Thus, Dimitriadis and Stevens [4] suggested that CRM is still a high interest topic to be discussed currently.

Even though many studies focus on CRM, there is still a lack of research encounter about healthcare organization that implemented CRM in Malaysian healthcare industry. Rababah et al. [5] revealed that currently there are none of the private hospital in northern part of Malaysia has adopted the CRM strategy. This is because the implementation of CRM is viewed as a complex and difficult process. Thus, there is a need for researchers to investigate about CRM strategy.

Besides that, Rasiah et al. [6] stated that it is an importance to investigate healthcare services provided by private healthcare sector in Malaysia. Furthermore, healthcare consumer nowadays started to demand a higher quality of healthcare services. Therefore, it is essential for researcher to understand and investigated the details on how the service of healthcare is delivered, implementing process that assist the effective, efficient and high quality of care [7].

In addition, there is still considerable confusion and there is no clearly relation between the effect of CRM on SQI and OP especially in Malaysian healthcare industry. Thus, this study is going to explore and proposed CRM, SQI, and OP model for Malaysian healthcare industry. The rest of the study is organized as follows.

2 LITERATURE REVIEW

2.1 CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

An extensive literature review of CRM studies has been explored by many previous authors. Hence, various definitions for CRM are being created. For instant, Zablah et al. [8] defined CRM as a process, strategy, capability, or as a technological tool. In healthcare context, CRM is viewed as a strategy to maintain and retain the profitable customer in long term relationship between providers and patients. Besides, CRM can be used to find the right customer as well as to create a customer loyalty [9]. In short, it can be concluded that CRM strategy is an important tool for organization to maintain a healthy relationship with customer and to store customer information more systematically.

Walberg et al. [10] suggested that research on CRM with an organization resource is essential. CRM strategy refined depends on resources and capabilities of the organization. It is essential in order to achieve organizational goal as well as creating a customer value. Besides that, organization should consider customer expectations and needs before designing CRM strategy. This supported by Almunawar and Anshari [11] that healthcare providers need to redesign their strategy when they cannot achieve its strategic objectives to fit business processes. In order to achieve successful CRM implementation, organizations need to consider all the key factors before designing CRM strategy.

The success of CRM implementation can assist organization to improve their performance. The important thing to be considered by organization is the design of CRM strategy and how customer reacts to that strategy. Many previous authors are on consensus that technology deployment efforts and the organization capability are some of organizational factor that contribute to the success of CRM strategy implementation [12], [13], [14], [15], [16], [17].

As continuity to that, there are several key factors that successfully support the implementations of CRM by organizations. Critical success factors (CSFs) of CRM are basically depends on this three root words. Integration of people, technology and process are the root factors that contribute to the successful CRM in business [9], [17], [18]. Many authors investigated and expanded this factor to ease the organization to understand more about CRM. For instance, Hadzagas [19] stated that a creative mix of three root factors that discussed earlier, strategies and information resources are required in order to find the right customers. After all, this study is going to review and explore five key factors that contribute to the success of CRM implementation. These are; top management, organizational culture, information technology, customer involvement and evolution path. The details of construct definition can be referred in Table 1 shown below.

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Table 1: Construct CSFs Definition of CRM

Constructs	Operational Definition
Top Management (TM)	Commitment from top management is really important in implementing CRM. It is said as a key factor that contributes to the success of CRM implementation [3].
Organizational Culture (OC)	Organizational culture is created from beliefs, expectations, attitudes, and common value of all the members involved in organization. It always changes as the time passed [20].
Information Technology (IT)	Organization's technology capability plays an important part in implementing CRM strategy. CRM cannot be implemented without proper support from information systems [10].
Customer Involvement (CI)	Understanding this behavior of patients can assist the providers to treat patients with more care and cautious [9].
Evolution Path (EP)	Evolution path has been viewed as one of the success factor in implementing CRM [21], [22] strategy in organization requires a few steps and process before can be successfully implemented.

Top management plays an important part in introducing CRM strategy to the employees. It is a key factor which is often said together with other success factor in implementing CRM strategy. According to Herington and Peterson [23], top management should have knowledge in setting the step of CRM strategy implementation. Next, they need to adjust it so that alignment of organization goal and objective is created. Besides that, any implementation of CRM strategy without top management commitment is usually leads to a failure.

On the other hand, organizational culture is a factor that always been debating over by researchers. Argue that, CRM implementation should be applicable with the current organization culture to avoid any unnecessary problem later. This is because organizational cultures may have to be changed in the future, and a readiness for change needs to be achieved by organization [24]. Next, implementing CRM without an excellent technology capability easily leads to a failure. In relation, according to Hung et al. [25], it is more difficult for healthcare organization in adopting CRM system because healthcare industry is left behind in term of IT adoption compared than other industry. Thus, a proper CRM strategy needs to be design before implementing accordingly to healthcare organization's technology capability.

Not only that, customer involvement also plays an important part in ensuring CRM strategy to be successfully implemented. Improvement initiative can be perform based on customer complains whether positive or negative perception on the services that they perceived. Hence, this feedback is essential for healthcare organization to make any improvement process in their management. CRM is expected to provide a variety ways in delivering information to customers and more systematic way to communicate between providers and customers in service organization [26].

2.2 Service Quality Improvement (SQI)

Service quality is defined as what are the services that consumer received and their respond about the quality of service they perceived [27]. As a matter of fact, many authors argued that service quality is a complex process and difficult to refine. It is true that actual quality of care is hard to define. For example, interpersonal aspects of service delivery such as empathy of the employees are probably the most trouble aspect to improve and measure [28]. Hence, it can be said that service quality is a complicated process to measure and thus the improvement of service quality is needed.

Ovretviet [29] stated that higher cost of healthcare treatment leads to an increasing number of patient dissatisfaction. Respond to that, it is a necessity for healthcare organization to improve their service quality to ensure that it's worthy for patient to pay more. Besides, it can't be denied that patients are able to pay a higher cost for a satisfactory of healthcare quality. Patients are willing to pay a higher cost for treatment in private healthcare organization compared to public healthcare. In fact, quality of service in private healthcare is more assuring and excellent. Therefore, the improvement of service quality in healthcare is critically needed to enhance organizational performance as well as assist to increase patients' satisfaction.

Zineldin [9] argued that healthcare providers are not necessary to spend high resource of organization in order to improve quality. There are several ways to improve quality of service without using high resources. Healthcare providers need to know and understand what are the customer needs and expectation at the first place. In addition, a benchmark or quality standard should be put by organization in order to please the customers need. Then, others quality framework can be added for assisting the providers to achieve targeted standard. The achievement of SQI actually depends on an organization's

competency to offer and provide the best quality of service delivery. Therefore, healthcare organization should understand patient's need and able to offer easy, friendly and faster service.

On the other hand, patients' decision to visit the same healthcare providers again in the future are depends on the service given. Indeed, patient have the right to choose the best healthcare providers and the best providers win the heart of people. Patient usually obtained healthcare information from their own past experience and other consumer of healthcare. At present, patient expectation of quality service in healthcare organization is rapidly increasing because of a rising living cost and live quality. Moreover, healthcare consumers are starting to show a concern about quality cares of their own healthcare. Therefore, service quality perception from patient's point of view should be carefully considered by healthcare providers despite only referring to their own preference. Hadzagas [19] discovered that internal employees in healthcare organization did not realize that there is gap between patient expectation and service provided by them. Thus, it is needed for healthcare providers to maintain high service quality and at the same time trying to exceed the patient's expectation.

This study is adopting Parasuraman et al. [30] SERVQUAL dimension of service quality in order to understand the characteristics of service quality. Table 2 below shows the construct definition of five dimensions in service quality.

Constructs	Definitions
Tangibility	Tangibility as physical facilities, equipment for service requirement, and appearance of providers [30].
Responsibility	Responsibility as willingness of the providers to assist customers and provide prompt service [30].
Reliability	Ability to perform the promised service dependably and accurately [30].
Assurance	Zainol [31] stated that assurance dimension concerns the customers' trust and confidence towards skill and knowledge of the providers.
Empathy	Empathy as a caring attitude and individualized attention the organizations provide to their customers [30].

Table 2: Construct Definitions of Five Service Quality Dimensions

Five dimensions of service quality are viewed as a practice to assist the organization in providing an excellent quality of service. Sohail [32] investigated the quality of services provided in Malaysian private healthcare and found out that the tangibility aspect of the service provided is higher than what the patients' expected. It means that healthcare providers in Malaysia able to satisfy patients in regards to the physical facilities, modern equipment and appearance of providers. In relation to that, healthcare providers should always improve their service quality to a better performance concomitant with an increasing global competitive market in service sector. Henceforth, Jager and Plooy [33] suggested that instead of concentrated in performance outcomes, maintaining a high level of patient satisfaction is more required.

2.3 ORGANIZATIONAL PERFORMANCE (OP)

Organizational performance (OP) in this study is more focused to explore about patient satisfaction and employees' satisfaction as the measurement of the healthcare organizational performance. Satisfaction can be defined as an emotional response to the evaluation of a service perceived [34]. Neither patients' satisfaction nor employees' satisfaction plays a crucial part to assist the organization in achieving their goal and objective. The construct definition of patient satisfaction and employees' satisfaction is shown in Table 3 and discussed below.

Constructs

Patients satisfaction

Elleuch [35] explained satisfaction as a positive respond from patient when they receive healthcare services and appear to have more confidence in their healthcare providers based on past experiences.

Employees satisfaction

Employees' satisfaction is a term used to describe whether employees are happy or unhappy of their job and fulfill their needs at job [33].

Table 3: Construct Definitions of Organizational Performance

Patient nowadays increasingly shows an interest to their own health outcomes. Certainly, patient expected a higher quality of service and good management of healthcare organization. In fact, customer satisfaction is one of the desirable business outcomes for many organizations [36]. Customers are easily satisfied when the service they perceived is what they expected. This is supported by Tam [37] that suggested a major key point of satisfaction is what the patient's first

expectation about care and quality service provided by healthcare providers. Therefore, providers should approach their customers with an assuring strategy and the improvement of service quality. Hence, CRM as a strategy to manage relationship with patient and with SQI assisted, providers can enhance their organization performance.

Hung et al. [25] stated that patient satisfaction is a vital point in assisting the healthcare organization to maintain their profitability. This is because patients tend to frequently come to their favorable healthcare providers if they satisfied with the service perceived before. Not only that, experiences and health information from the other consumer also assist them to choose the most satisfactory healthcare providers. In regards to that, satisfaction plays an important part as a determinant for healthcare organization in achieving their goal as well as to compete with other providers. Therefore, providers need to ensure that they are providing a higher quality of service in order to satisfy their patients.

Equally important, healthcare providers need to ensure that their employees are satisfied with the surrounding and circumstance of healthcare workplace. This is because employees' satisfaction has been viewed as a key for organization to consider in improving service quality and customer satisfaction [38]. Employees' satisfaction is important as employees are the one who provided the service and treatment. Besides that, positive and motivated employees assist organization to enhance their quality improvement [39]. Therefore, a comfortable and positive workplace, proper accommodation and equipment are needed for their employees to deliver a sound service to patients.

3 RESEARCH HYPOTHESES

3.1 RELATIONSHIP BETWEEN CRM AND OP

Generally, good management of customer relationship assists organization to enhance patient satisfaction and employee satisfaction. According to Claycomb and Martin [40], a basic of business philosophy is to maintain a pleasant relationship management with existing customers that increase customer satisfaction and emphasized employees motivation to work. Thus, healthcare providers need to improve their CRM strategy to build a high quality of relationship and improve their organizational performance. Quality of relationship here can be viewed as correlated to trust attribute, commitment, and satisfaction [41].

Based on literature review, many previous authors discovered that CRM positively increase an organization performance. CRM strategy assist the organization to manage everyday business operation thus contributes to organizational performance improvement [42]. This supported by Hadzagas [19] that found CRM implementation support service organization to improve customer satisfaction. However, organizational performance achievement depends on how well the CRM implementation process is going. This is because although CRM is widely viewed as strategy that can increase organizational performance, unsuccessful of CRM implementation leads to unwisely of cost utilization. Henceforth, healthcare providers should ensure to successfully implemented CRM in order to increase an organizational performance. Thus, hypothesis is being proposed here in order to investigate CRM and OP in Malaysian healthcare industry.

H₁: There is a positive and direct significant relationship between CRM and OP in Malaysian healthcare industry.

3.2 RELATIONSHIP BETWEEN CRM AND SQI

Healthcare providers strived to deliver a high quality of service for patient in order to satisfy patients' need and expectation. Besides that, competition among healthcare providers is rapidly increasing in healthcare industry. Therefore, improved service quality is needed by organization to compete with other. SQI is not an easy task to perform because it involves commitment from all employees in a healthcare organization. Thus, healthcare providers should ensure that they have an excellent customer strategy such CRM to maintain a high quality of service as well as able to compete with other competitor. This is supported by Yang [23] that stated CRM emphasized service quality in order to improve organization competitiveness.

Likewise, CRM strategy can't successfully be implemented without an assuring service quality provided by healthcare providers. Payton and Zahay [43] discovered that in adoption of data warehousing technology for CRM applications, trust and quality play an important part in making CRM a success. As discussed earlier in this study, trust and quality is roughly included in five dimensions of service quality. It can be said that service quality assist healthcare providers to implement a successful of CRM strategy. In addition, Zineldin [9] suggested that keys for organization to compete and survive in service industry are only through CRM and service quality. This showed that CRM and service quality are completing with each other and cannot be separated.

According to Hung et al. [25] customer information and details are definitely required by healthcare providers then stored in various databases. It is important for healthcare organization to know their patients as they often confront with them. CRM strategy is learned as a strategy to keep customers' data in a systematic way and improve the healthcare management. Previous research by Zineldin [9] emphasized that organization need to build a quality customer relationship by adding a practice value such as tangibility into the services provided. Thus, service quality can assist and enhancing CRM to create a long term relationship with patients.

At present, there is still lack of research found about relationship between CRM and SQI in Malaysian healthcare industry. Thus, this study is attempting to explore the relationship between CRM and SQI in Malaysian healthcare industry by proposing its model as a first step. Next, hypothesis 2 is going to be investigated.

H₂: There is a positive and direct significant relationship between customer relationship management and service quality improvement in Malaysian healthcare industry

3.3 RELATIONSHIP BETWEEN SQI AND OP

Interaction between organization and customer becomes a primary importance in service context [44]. Customer expectation plays an important part in determine service quality offered by providers. The perspective thereby requires organization to improve their service quality in order to enhance organizational performance. Hence, SQI is important for healthcare organization to maintain their position in the competitive healthcare market. For instance, Ovretviet [45] suggested that the improvement of service quality is required in order to increase the efficiency of healthcare management. Healthcare management is referred as how the company manages their employees, customer, resources, technology, and organizational goal. Thus, it can be said that SQI can assist healthcare organization to successfully implemented CRM strategy.

Besides that, patient satisfaction is important for healthcare providers as a quality indicator as well as an outcome to compete with other providers in healthcare industry. Tam [37] suggests that mutual trust and respect attitude between patient and healthcare providers are important in achieving an understanding relationship and bring a satisfactory deal for both of them. Therefore, SQI can be assist the organization to succeed in competitive healthcare environment and believed to enhance and increase patient satisfaction.

Based on previous review of literature, service quality has been found to be a competitive tool for many organizations in order to compete with others [46]. Healthcare organization need to improve their service quality exceed far from others as to be a strong competitor in this service market. In addressing the problem, how far the improvement of service quality can enhance and improve organizational performance in Malaysia healthcare industry context is need to be investigated. Therefore, hypothesis 3 below is being proposed.

H₃: There is a positive and direct significant relationship between service quality improvement and organizational performance in Malaysian healthcare industry

3.4 RELATIONSHIP BETWEEN CRM, SQI, AND OP

CRM strategy implementation should base on customers' point of view for creating a quality relationship. Indeed, a good relationship means customers believe and trust the healthcare providers and vice versa. In addition, services in healthcare always change according to the situation as healthcare providers depend on patient's specific health condition and their own preference before providing a service [47]. Besides that, patient may expect a higher quality of service provided by healthcare providers. As patients nowadays are high educated, they can comfortably choose healthcare providers they require as information about healthcare organization is ease to find. Technology plays an important part in here. Manaf [48] stipulated that Malaysian government has experienced an excessive cost in public healthcare expenditure to ensure the quality of healthcare is excellent. Therefore, healthcare providers should maximized technology to the fullest and properly implementing CRM strategy in order to satisfy patients.

As mentioned earlier, CRM strategy is able to keep the information about customer need and expectation. In regards to that, CRM strategy can assist healthcare providers for increasing and enhancing patient satisfaction with the improvement of ongoing service quality [25]. Thus, perhaps with SQI support, CRM can improve the organization's performance. Besides that, there is still lack of research found about the linkages of CRM, SQI and OP in Malaysia. Therefore, hypothesis 4 is being proposed.

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H₄: The impact of CRM implementation on Organizational performance increase with a mediating of service quality improvement in Malaysian healthcare industry.

4 METHODOLOGY

The main goal of this study is to increase the understanding about CRM, SQI and OP measures in Malaysian healthcare industry. This study also proposed a research model through the path analysis by Structural Equation Modeling (SEM) technique. For mediator model, SQI construct be analyzed as whether they mediate the relationship between CRM and OP. Besides that, four related hypotheses are developed and will be tested in Malaysian healthcare industry.

Research design is viewed as a structure or plan that explicates the number of research entities or variables and their relationship to one another [49]. SEM technique was utilized to perform the required statistical analysis of the data from the survey. This is because the requirement to improve method of quality initiative and performance measurement is very important in healthcare industry [50]. Exploratory factor analysis, reliability analysis and confirmatory factor analysis to test for construct validity, reliability, and measurements loading were performed. Having analysed the measurement model, the structural model was then tested and confirmed.

Other than that, planning for respondents is essential for empirical studies. In this study, sampling method is used by using structured questionnaire. The study is going to use quantitative survey in the Malaysian healthcare industry. The population of this study comprised in Malaysian healthcare industry. Questionnaires will distribute to healthcare's manager in Malaysian healthcare industry. To analyse the data, two statistical techniques were adopted. Next, the statistical package for the Social Sciences (SPSS) version 17 was used to analyse the preliminary data and provide descriptive analysis about thesis sample such as means, standard deviations, and frequencies. SEM using AMOS 18 will be as a guide to test the measurement model.

5 A PROPOSED RESEARCH MODEL

Based on the extensive review of CRM, SQI and OP in earlier section in this study, it can be said that there are still lack of research found about CRM, SQI and OP in Malaysian healthcare industry respectively. In doing so, this study is going to propose a model of CRM, SQI and OP for Malaysian healthcare industry. The proposed research model can be seen as shown in Figure 1 below.

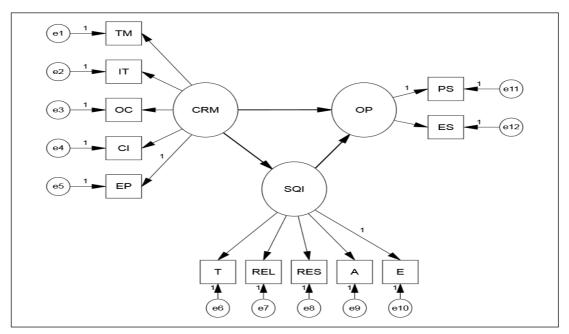


Fig. 1. Proposed Model for CRM, SQI, OP for Malaysian Healthcare Industry

Notes*: TM= Top Management, OC= Organizational Culture, IT= Information Technology, CI= Customer Involvement, EP= Evolution Path, CRM= Customer Relationship Management, SQI= Service Quality Improvement, OP= Organizational Performance, T= Tangibility, RE= Reliability, RS= Responsibility, A= Assurance, E= Empathy, CS= Customer Satisfaction, ES= Employee Satisfaction

6 CONCLUSIONS

Healthcare providers interact with patients through multiple of ways. CRM is viewed as one of the organization strategy to manage the relationship between healthcare providers and patient. Based on extensive review of CRM strategy, many authors found that there is a gap between CRM and organizational performance. Therefore, perhaps with the support from service quality improvement as a mediator, organization can improve their organizational performance to a better quality. Thus, this area of research in the future is expected to be investigated structural relationship between CRM, SQI, and OP in Malaysian healthcare industry.

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