

# PHYSICAL ENVIRONMENT QUALITY DIMENSION TOWARDS PATIENTS SATISFACTION IN HOSPITAL RAJA PEREMPUAN ZAINAB II, KOTA BHARU

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**Abstract** : *Patients satisfaction become an important factors especially for healthcare providers due to improve in services based on expectation and needed by their customers. Consequently, the quality of physical environment is one of dimension to measure between service provider and patient or customer to get the result as a good service at healthcare services. Therefore the study to identify the level of customer satisfaction in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan based on physical environment quality with three sub-dimension ambient condition; tangible and social factor and the second objective for this study is to examine is it have significant relationship between patient satisfaction and physical environment quality. The result from this study shows the high level of patient satisfaction based on physical environment quality and the result for second objective is have significance relationship between patient satisfaction and physical environment quality. From this result, management team of Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan can know what the level of patient satisfaction and plan towards excellent service.*

**Keyword** : *Patient Satisfaction, Physical Environment Quality, Ambient Condition, Tangible And Social Factor*

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## INTRODUCTION

The potential high hospital quality services depends on customer satisfaction, which means its ability to effectively implement strategies by the top management to achieve their objective. Providers and patients also agree that high quality in hospital care is an essential component of a high performance health system. In Malaysia, Ministry of Health (MOH) is responsibility to assist an individual in achieving and sustaining as well as maintaining a certain level of health status to further facilitate them in leading a productive lifestyle, economically and social. The number of healthcare facilities under MOH is 135 hospitals, 9 Special Medical Institutions, 1090 health clinic, 1791 community clinic (Health Facts MOH, 2019). Other ministries also provide hospital services for patient such as Ministry Of Defence (Hospital Tuanku Mizan) and Ministry of Higher Education (Hospital UiTM Sungai Buloh, Hospital Canselor Tuanku Muhriz, UKM, University Malaya Medical Centre, Hospital Universiti Sains Malaysia). However, this ministries have limited services to its patients compared to public hospital.

## **RESEARCH OBJECTIVE**

The primary objective for this study is:

1. To identify the level of customer satisfaction in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan based on physical environment quality construct with three sub-dimension ambient condition, tangible factor and social factor.
2. To examine is it have significant relationship between customer satisfaction and physical environment quality construct.

## **RESEARCH QUESTION**

Research question will state of the specific component of the problem and researcher come out with two research question for this study. The research questions are following:

1. What level of customer satisfaction in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan based on physical environment quality construct with three sub-dimension ambient condition, tangible factor and social factor?
2. Is it have significant relationship between customer satisfaction and physical environment quality?

## **LITERATURE REVIEW**

### **Patient Satisfaction**

Patient satisfaction is defined as the perspective of the patient's experience (Lemke et al., 2011). It is not easy to measure is it service from healthcare organization have quality or not because concept of service quality to their patient is an abstract and usually evaluated by customers after received their services (Muslim, 2009). Since the delivery of healthcare is a public service in Malaysia, there is a lot of potential to increase the level of patient satisfaction with the service.

Based on Nor Azlinda Kasma (2011), if patients is satisfied with healthcare services, patients will give positive impression to that organization because they know need and expectation from their customers. Feeling satisfaction will influence visitors to come repeat at the same organization especially with healthcare services. Patients will continue get the health services provided and share their experiences by providing positive information to their family and friends. This satisfied customer will increase their loyalty to continue to get the services provided, while raising the image of a person health organization. However, dissatisfied patients will have an effect negative because they will change the decision to use the service other private hospital or any other hospital nearest in the future in order to achieve their satisfaction on the quality of services provided (Nik Raihan NM, Kadir A. Amirul SS, 2016).

Patient perception about service their received are important requirement for monitoring program, accreditation and improve quality for hospital services and for that planning from hospital management will more effectively and guarantee high patient satisfaction (Gholami, Kavosi Z, Khojastefar M, 2016).

### **Physical Environment Quality**

Physical environment quality or built environment has influence on customers satisfaction base on their evaluation (Crane and Clarke, 1988; McAlexander et al., 1994). The surrounding environment have a significant to perceptions of customer during their use the company services and it is clear that physical environment quality is the important factos to influence the good service quality (Hussain Kashif & Ekiz, 2009; Clemes et al., 2010). Based on Brady and Cronin (2001) mention that the important dimension in physical environment quality based on literature studies is ambient condition, tangible and social factor. In this research, sub-dimension divide to three aspect such as:

a) Ambient condition

Ambient Conditions are a particular set of standard can be used by designers, operators or industries to perform their operations in an optimal and efficient way (Douglas Chiguvi, 2017). It's also defined for everything such as equipment, or any operational process of an industry and surface preparation. The parameters that are included in the ambient conditions generally refer to temperature, pressure and humidity. In this study, researcher defined ambient condition is related to non-visual factor such as music, scent and temperature (Bitner,1992); natural light and fresh air (Chahal and Sharma, 2004); and peaceful atmosphere (Brady and Cronin, 2001).

b) Tangible factor

The tangible factors is defined as the physical quality such as personnel appearance, facilities and equipment by service provider (Parasuraman et al., 1988). Customers perception about physical quality is the important and they will expect all facilities well-furnished and trained personnel to influence service quality (Yator, 2012). For this study, tangible factor is related to seating arrangements (Kang & Jeffrey, 2004); technical services (Chahal & Sharma, 2004); amenities (Choi et al., 2005); physical facilities, equipment, and appearance of personnel (Conway & Willcocks, 1997).

c) Social factor

The third aspect that affects physical environment quality is social factor. It is related to refer to all person involved in the health-care services such as Medical Officers, Nurses, paramedic team, non-paramedic team and others person (Bitner, 1992); transparency, integrity and honesty practices from service provider (Sardana, 2003).

### **Methodology**

This study is an empirical study of outpatients deal with the Outpatient Department and Specialist Clinic at Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan and these studies see relationship between the dependent variable and the independent variables. The dependent variable is customer satisfaction of Outpatient Department and Specialist Clinic at Raja Perempuan Zainab II, Kota Bharu Kelantan while the independent variable is physical environment quality with three sub-dimension a) ambient codition; b) tangible factor; and c) social factor.

The feedback from respondents is shows the level of customer satisfaction in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan based on physical environment quality construct with three sub-dimension ambient condition, tangible factor and social factor. This survey involved 100 samples on 1<sup>st</sup> November to 30<sup>st</sup> November 2020 based on the patients deal with

the Outpatient Department and Specialist Clinic at Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan and represent the true population's perception and level of satisfaction about customer satisfaction in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan. Table 1 shows the analysis of the reliability of the questionnaire based on Cronbach Alpha for each independent variable and dependent variable. Overall score is 0.8 above which is the best result based on the level of patient satisfaction three sub-dimension of physical environment quality quality a) ambient condition ; b) tangible factor; and c) social factor without being influenced by any third party. In addition, the information provided by respondents is confidential and the feedback given is truthful.

Variable	Alpha Cronbach	No of item
Ambient condition	0.923	7
Tangible factor	0.820	7
Social factor	0.878	5
Customer satisfaction	0.969	21

Source : Researcher output SPSS

## RESULT AND FINDING

### a. Demographic Profile of Respondent

From this study, 100 respondent involve as a research sample and use the service of outpatient department and specialist clinic, Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan. Based on table 3 until table 9 show that the demographic profile or respondent based on gender, age, race, occupation, monthly income, education background of respondent and frequency of visit hospital for this study.

Table 3 in this study show that based on percentage, the majority respondent group based on gender is female (80%) while gender for male respondent only the small size is (20%). Table 4 in this study show that based on age, respondent from 31 y/o - 40 y/o is the high respond (1%) and followed by respondent 21 y/o – 30 y/o (3%), 31 y/o – 40 y/o (33%), 41 y/o- 50 y/o and above (50%) and more than 50 y/o (8%). Table 5 in this study show that based on race, majority respondent from Malay is the high respond (87%) and followed by respondent others (10%), India (2%), and chinese (1%). Based on table 6, the highest occupation of respondent from not working respondent (56%), followed by government and private sector (14%), self-employed (12%), and student (4%). Table 7 shows frequency of monthly income, 62 (62%) from 100 respondent is below than RM1000 and based on frequency of background education in table 8 shows that the majority respondent have SPM/MCE only (55%). Lastly, table 9 shows the frequency of visiting to get the treatment at Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan, majority respondent (64%) is first time visit compare to small group of respondent just (36%) more than two time visit to this hospital.

*Demographic Profile of Respondent*

Table 3 : Frequency based on gender

	<i>N</i>	Percent (%)
Male	20	20.0
Female	80	80.0
TOTAL	100	100

Table 4 : Frequency based on age

	<i>N</i>	Percent (%)
18 – 20	1	1.0
21 – 30	3	3.0
31 – 40	33	33.0
41 - 50	50	50.0
More than 50	8	8.0
TOTAL	5	5.0

Table 5 : Frequency based on race

	<i>N</i>	Percent (%)
Malay	87	87.0
Chinese	1	1.0
India	2	2.0
Others	10	10.0
Total	100	100.0

Table 6 : Frequency based on occupation

	<i>N</i>	Percent (%)
Government sector	14	14.0
Private sector	14	14.0
Student	4	4.0
Self-employed	12	12.0
Not working	56	56.0
Total	100	100.0

Table 7 : Frequency based on monthly income (RM)

	<i>N</i>	Percent (%)
Below 1000	62	62.0
1001 - 2000	21	21.0
2001 - 3000	7	7.0
3001 - 4000	4	4.0
4001 - 5000	3	3.0
5001 and above	3	3.0
Total	100	100.0

Table 8 : Frequency based on education background

	<i>N</i>	Percent (%)
UPSR	2	2.0
SRP/PMR/LCE	7	7.0
SPM/MCE	55	55.0
STPM or diploma	24	24.0
Bachelor Degree	10	10.0

Others	2	2.0
Total	100	100.0

Table 9 : Frequency based on visit hospital

	<i>N</i>	Percent (%)
First time	64	64.0
More than 2 times	36	36.0
Total	100	100.0

Source : output from researcher (SPSS)

#### b. Analysis

To test the level of customer satisfaction based on physical environment quality, researcher use mean score analysis by Mohd Majid Konting (1990). The interpretation value of mean score is 1.00-2.33 (low), 2.34-3.67 (medium) and 3.68-5.00 (high). For main objective to identify the level of customer satisfaction in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan. based on physical environment quality dimension with three sub-dimension ambient condition, tangible factor and social factor, table 10 shows that ambient condition (4.17) is the highest dimension of physical environment quality that contribute to customer satisfaction at Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan and followed by social factor (4.09) and tangible factor (3.67).

Table 10

Mean score for each sub-dimension

	<i>N</i>	Mean	Std. Deviation	Value
Ambient Condition	100	4.17	.418	High
Tangible Factor	100	3.67	.530	Medium
Social Factor	100	4.09	.488	High

Based on table 10, mean score to test the level of customer satisfaction based on physical environment quality dimension is the high and medium score interpretation. That means, all respondent satisfied with service by Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan.

Table 11

*Correlations*

		Customer Satisfaction	Physical Environment Quality
Customer satisfaction	Pearson Correlation	1	.772**
	Sig. (2-tailed)		.000
	<i>N</i>	100	100
Physical Environment Quality	Pearson Correlation	.772**	1
	Sig. (2-tailed)	.000	
	<i>N</i>	100	100

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The second objective in this research is to examine is it have significant relationship between customer satisfaction and physical environment quality dimension. Table 11 shows that have positive and significant relationship between customer satisfaction and physical environment quality dimension in Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan. All sub dimension for physical environment quality which is ambient condition, tangible factor and social factors are the attributes that contributes to customer satisfaction at Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan. From this analysis found that by provide good facilities to all patients or customers deal with hospital can influence good experience, positive feedback and all customers will satisfied by hospital services.

## CONCLUSION

This study can help the management team Hospital Raja Perempuan Zainab II, Kota Bharu Kelantan to know the lack in their service and can improve their quality of services based on patient respond. From this research, hospital management team can plan how to reduce complaint from patient about the physical environment quality and can be effective strategies to increase patient's positive perception. Hence, the two objective to test the level of customer satisfaction and examine relationship between customer satisfaction and physical environment quality dimension have been measured and have produced significant results. For future research, it is recommended to evaluate the customer satisfaction level based on other factor leads the highest complaint among patient in this hospital and can expend this research to other public hospital in Malaysia for more effective findings.

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