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Empirical Study of Quality Healthcare Services: Public and Private Healthcare in the United Arab Emirates

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Abstract: Using a unique dataset collected in Abu Dhabi and subshrubs through a SERVQUAL questionnaire, this paper investigates the quality of healthcare services in form of the public and private healthcare centers in the UAE. Overall results indicate a ready availability of quality healthcare services in support of the Emirates' leadership in medical tourism in the MENA region. The results also show that the local population (Emiratis) prefers public healthcare providers compare to expatriates choice in the private healthcare sector. Further investigation for the motives for such a choice it was revealed that the public healthcare providers are less efficient and the service less patient-friendly. In general, the public providers score lower on all variables measuring direct emotional services compared to the private healthcare providers. Also, the public healthcare services are free of charge whereas private healthcare involves patients shouldering some cost of treatments or at least a consultation fee. Our probit results indicated that those in favor of public healthcare are largely attracted to public healthcare providers for the sake of economic benefits. Furthermore, we concluded that the UAE grown into a hub of medical tourism and attracted thousands of foreign patients were based on the private healthcare providers. It is recommended that the authorities consider to standardize the healthcare services provided in the UAE. The government may benefit from adopting the strategies followed by the private healthcare providers or create a platform where private and public healthcare providers share policies in the core areas. In order to obtain more robust results suitable to justify the transformation of the existing policies additional research needs to be conducted on a larger scale across the Emirates.

Keywords: Healthcare, Services, Public and Private, Quality, United Arab Emirates

INTRODUCTION

Health is wealth!!! The healthcare industry has become a vital and indispensable driver of globalization. Due to its wide-scale coverage, public healthcare all around the world is regulated by the national governments

and complemented by the services of private healthcare providers. The performance rates of this industry, however, has been called into question. Thus, evaluating the quality of the services of the various healthcare providers has become a focus of research, be it by academics, research institutes, government agencies or others. According to Kleinman and Dougherty (2013), healthcare quality measurement constitutes the acceptable standard for evaluating the effectiveness of providing health care across the world. Sheingold (2014) states that measuring healthcare quality before 1960 was a fragmented collection of unrelated events or unorganized efforts that laid the foundation for healthcare quality improvement.

Wantonly ignoring the quality of healthcare reminds of the British Crimean War in 1854-56 in which thousands of British soldiers died of cholera and dysentery (Wakely & Carson, 2011). The US healthcare industry in the 20th century was described as "the quality of services motivated by economic interest of stakeholders and called for control of profit institutions" (Marjoua & Bozic, 2012). Both countries later adopted the same intervention measurement.

The British government sent Florence Nightingale, the pioneer of modern nursing accompanied by a group of trained nurses to care for the soldiers. Nightingale's role was decisive in decreasing the number of deaths (Wakely and Carson, 2011). She invented a statistical process control that helped improve the quality of healthcare in the military hospital (Zborowsky, 2014). In the US, hospital conditions were poor as recorded by Ernest Codman in 1910. Her report revealed the dire need to improve hospital conditions. She even tracked down former patients to verify that their care had been effective. Codman's initiative led to the introduction of the first Standardization Hospital Program in 1917 (Marjoua and Bozic, 2012). The hospital focused on five standards (later called the "minimum standards") which included the re-organization of the medical staff, recruitment of well-trained staff, specialists, licensed doctors and surgeons, setting up rules and regulations to ensure that the staff met the professional standards, keeping the patient records (history, physical examination, lab results), and specialized departments such us clinical laboratories and radiology (Marjoua & Bozic, 2012).

Schmaltz *et al.* (2011) argue that the standardization in the health sector was followed by the Joint Commission in 1951, the new symbol of the modern quality healthcare organization's commitment to specific standards. The group inherited all health standards and operated most of the hospitals in the US. In 1994, it was succeeded by the Joint Commission International (JCI) which is leading quality in global health care. JCI works to improve the quality of healthcare in more than 100 countries

Despite all efforts to provide quality healthcare services, many countries are yet to meet the expected global standards. For example, the reports on the Organisation for Economic Co-Operation and Development (OECD) flagged Japan's failure to meet the international standards based on the average length of stay in the hospital and the poor emergency services (OECD Reviews of Health Care Quality: Japan 2015). In response, Japan has established its strategic Healthcare Vision 2035 to address these issues, improve on its weak points, and ensure the quality of healthcare in the long run (Shibuya, 2015). Nevertheless, the World Health Organization (WHO) report of 2015 confirmed that the Japanese continue to enjoy the highest life expectancy in the world countries (World Health Organization, 2016).

The United Arab Emirates (UAE) is a relatively young country with less than five decades of independence. It has since then earned its own reputation regarding the quality of its healthcare, yet seeks to further develop the medical sector and meeting the quality standards (Younies et al. 2016). The health

system in the UAE differs from one emirate to the other, however, all are funded and supervised by the Federal Health Ministry, except for the autonomous emirates of Dubai and Abu Dhabi. The healthcare system includes public and private healthcare providers.

This study aims to evaluate the quality of healthcare services provided in Abu Dhabi. In order to support the premise that the UAE is a world-class healthcare provider, it is important to empirically justify that both public and private healthcare providers achieve customer satisfaction (SERVQUAL) through public expectation and perception. The following section discusses the research methods, followed by the analysis of results and the conclusion.

METHODS

Sampling

The current study adopts Taro Yamamoto's random sampling formulae which is mostly used in states

$$*n = \frac{N}{1 + N(e)^2}$$

n = Sample sizeN = population sizee = error

Material

A refined service quality (SERVQUAL) questionnaire is adopted from Parasuraman et al. (1991). It is amended according to the objective of this study while maintaining the variables of Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding/ Knowing the Customer, and Tangibles. Originally designed in English, it is translated into Arabic to suit the linguistic needs of the target population. In order to verify its relevance, a pilot study is conducted resulting in a Cronbach alpha of 0.87 at the acceptable threshold. The final questionnaire is administered to 150 respondents across Abu Dhabi city and suburbs.

Participants

Since the United Arab Emirates is a diverse country, the participants are selected from among the residents of Abu Dhabi city and its surrounding areas. The target population are individuals between the age of 18 and 65, consistent with the characteristics of the UAE's demographic population distribution (Index Mundi 2016).

Procedure

The questionnaire is developed and administered to the respondent directly. The respondents are met with in person and a questionnaire is handed to each of them. The respondents are instructed accordingly and allowed sufficient time to complete it. Some respondents take up to a week or more to complete the questionnaire. All 150 distributed questionnaires are returned, however, only 149 are used in the analysis, one incomplete questionnaire being excluded.

Analysis of Results

The characteristics of the respondents as shown in the **Table 1** reveal that more than half are between 15 to 30 years of age with a Means and Standard Deviations range of 0.33, .28, .087 and .47, .45, and .28 respectively while the age group 40 and above accounts for about 20% with Mean .20 and Standard Deviation = .40% of the sample. Statistically, the data spread is right skewed. It further indicates that the majority of the respondents are local citizens. 112 respondents identified themselves as male and 27 as female, the participating men accounting for 81.88% (Mean 0.18; SD= 0.39) of the sample. This comes without surprise as the survey is conducted based first-come-first-serve basis and only a few female respondents are within access of the research assistant. More respondents have been to public hospitals. Altogether 52% of the respondents report to have visited public hospitals in the past year compared to 48% for private hospitals.

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Demographic Distribution of Healthcare Service Quality in Public/Private Hospital in UAE						
Variables	Frequency (%)	Mean	Standard deviation			
Age						
15-20:	50(33.33%)	0.333	0.47			
21-25:	42(28%)	0.280	0.45			
26-30:	13(8.67%)	0.087	0.28			
31-35:	4(2.67%)	0.027	0.16			
36-40:	9(6%)	0.060	0.24			
40-above	30(20%)	0.200	0.40			
Gender						
Male:	122(81.88%)	0.181	0.39			
Female:	27(18.12%)	0.819	0.39			
Ethnicity						
Middle-East:	112(75.17%)	0.76	0.43			
Asian:	13(8.72%)	0.087	0.28			
European	24(16.11%)	0.16	0.37			

Using a scale of 1 to 7 in **Table 2 and Table 3**, the respondents are asked a set of 22 questions regarding their expectations and perceptions of the two types of hospitals. In regard to the respondents' expectations of public hospitals, the statement "Excellent hospital with modern equipment" has the highest Mean = 6.190; SD = 1.38 scores whereas "Excellent hospital; never too busy to respond to patients' requests" received the lowest Mean = 5.614; SD = 1.63 scores. The responses to these two statements seem to indicate that public hospitals are favored by those who expect to be treated in a high-tech environment irrespective of the waiting time. These results are in contrast with the previous findings of Younies et al. (2016) which indicated that the UAE public hospitals have less sufficient facilities in providing healthcare services and that the private hospitals complement their weakness. The results can be interpreted in three ways. The Emiratis in general prefer public healthcare services since they are free of charge. Also, they

possess high-tech facilities but are insufficient which confirms the findings of Younies et al. Finally, our results could be an indication of the enormous reform efforts that have been undertaken by the government of Abu Dhabi (2005-2007), its two major health authorities being the Health Authority of Abu Dhabi (HAAD)¹ and the Abu Dhabi Health Services Company which is famously marketed and trademarked as SEHA².

Furthermore, five of the 22 statements were ranked 6 and above on a scale of 1 to 7, with 7 being the highest score. The highly ranked statements pertained to the equipment and the hospital's willingness to assist the patients. As indicated by the lowest scores assigned to expectation statements 2, 3, 5, 13 and 19, with Means 5.662651, 5.654762, 5.654762, 5.614458, 5.714286 and SDs 1.355001, 1.516925, 1.579187, 1.629240, and 1.556730 respectively. This shows that the respondents do not perceive the doctor's presence or the time convenience to be a deterrent to their willingness to patronize public hospitals. Again, our results may be due to the fact that the medical services at public healthcare centers are free of charge for the locals. Another important motivational aspect can be familiarity. Since the staff employed at public institutions are strictly locals thus, communication in the local language makes the respondents feel more comfortable and at ease.

As expected, the respondents who report having visited private hospitals have a different list of priorities and motivations for their choices. For instance, the statement "When you have a problem, the hospital shows a sincere interest in solving it" has the highest Mean 6.596491; SD = 0.70 scores amongst the set of 22 statements. This result is not surprising since the majority of patients in private hospitals are expatriates. As expected, the respondents are more concerned with responsiveness, empathy, and communication of the hospital staff. Most private hospital staff are expatriates and speak multiple foreign languages. As international employees, they are expected to excel in the quality of their customer care and be able to handle complex cultural differences when attending to their patients. Furthermore, the major criteria for the human resource managers during recruiting are self-orientation, others-orientation and cultural flexibility. The highest mean score may be the result of private hospital employees being expected to possess adequate others-orientation which is the ability to reason and understand the views of others and cultural flexibility which is ability to navigate and adapt to international cultural differences.

Moreover, 19 out of the 22 questions obtained a mean score of 6 and above on a scale of 1 to 7. Comparatively, statements 2 "The hospital equipment are visually appealing" with Mean = 5.719298 and SD = 1.423707, 3 "The hospital doctors are neat-appearing" with Mean = 5.803571; SD = 1.354046 and 4 "Materials of treatments such as reception, laboratory, consultation rooms are visually appealing in the hospital" with Mean = 5.719298; SD = 1.372620. These results indicate that both private and public respondents are not fooled by the physical appearance of a hospital. Furthermore, it is an indication that the respondents who have visited private hospitals have very high expectations, yet do not consider the physical appearance of the equipment and staff. Compared to the respondents of public hospitals, private hospitals seem to attract more demanding patients, as indicated by the results of their expectations regarding the two types of hospitals. Generally speaking, people who favor efficiency find the private sector more appealing than the public sector. Since the private hospitals are profit-oriented organizations with high expatriate customer rates, sophistication in the delivery of successful services is paramount to both patients and healthcare providers. Particularly being in a foreign environment away from home and family makes physical appearance less important compared to their emotional need of feeling attended to and cared for

("Appearance is sometime deceptive"). The expatriates usually expect services which are equal better than those provided in their home countries.

Nos	Public & Private Hosp. Expectation Variables	Public hosp. Mean	SD	Private Hosp. Mean	SD
1	Excellent hospital will have modern equipment	6.190476	1.383867	6.368421	0.858395
2	The physical structure of the equipment appealing	5.662651	1.355001	5.719298	1.423707
3	Doctor of excellent hospital will be neat appearing	5.654762	1.516925	5.803571	1.354046
4	Materials of hospital such as reception, information on the wall will be appealing in the hospital	5.819277	1.415460	5.719298	1.372620
5	When excellent hospital will promise to do something such as quick services, fulfilling it	5.654762	1.579187	6.263158	1.044139
6	When patient have a problem, excellent hospital will show a sincere interest in solving it	5.857143	1.465613	6.596491	0.703553
7	Excellent hospital will be punctual in delivering adequate treatments	5.963855	1.409426	6.438596	0.802174
8	Excellent hospital's doctors will be at the consultation rooms at the appropriate time of their duties	5.714286	1.579778	6.263158	0.935917
9	Excellent hospital will insist non-failure of the objective of the hospital	5.845238	1.548369	6.134615	1.085174
10	Excellent hospital will inform the patient exactly when treatments such as doctor consultation will be done	5.773810	1.674408	6.385965	0.839949
11	Excellent hospital will give prompt notice and information regarding the consultation to the patients	6.011905	1.460269	6.357143	0.942503
12	Excellent hospital will always be willing to help patients	6.072289	1.446469	6.403509	0.820706
13	Excellent hospital never too busy to respond to patients' requests.	5.614458	1.629240	6.000000	1.085620
14	The behavior of the staff in the hospital will instill confidence in the patients	5.976190	1.344119	6.491228	0.804514
15	Patients will feel safe in its services and relationships	5.833333	1.527525	6.454545	0.856742
16	The hospital will be consistently courteous with patients	6.036145	1.365478	6.263158	0.896946
17	The hospital will have the knowledge to answer patients' questions	5.916667	1.538332	6.333333	0.988024
18	Excellent hospital will give patients equal individual attention	5.869048	1.604059	6.175439	1.135826
19	Excellent hospital will have consultation hours convenient to all patients	5.714286	1.556730	6.122807	1.053399
20	Excellent hospital will have flexible attention to the patient personal attention	5.821429	1.473956	6.018182	1.062682
21	Excellent hospital will have the patients' best interests at heart	5.952381	1.543777	6.250000	1.115999
22	The hospital will understand the specific needs of its patients	6.059524	1.467324	6.192982	1.059626

Table 2	
Public & Private Healthcare Quality Services Expectations in UAE	ļ

Based on the questionnaire (see Appendix), the respondents are asked about their experience in public and private hospitals. They are asked to assess a set of 22 statements (henceforth referred to as

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perception statements) using a Likert scale with values ranging from 1 to 7. The results are summarized in Table 3 below. It appears that the perceptions of those participants who favor public hospitals are consistent with their corresponding expectations on issues like hospital staff punctuality, prompt intervention, ready access and availability, own preference, convenient appointment time, and best interest of the patients with variables 5, 7, 8, 13, and 19-21 obtain lower mean scores ranging between 4.45 and 4.975. Table 3 also reveals a sharp contrast in the respondents' perceptions of public and private hospitals. The private hospital score highly in 21 out of 22 statements, the lowest mean score being 5.29 for the statement "The hospital insists on the non-failure of the consultation objectives" and the highest mean score being 6.03 for the statement "The hospital has modern equipment". It follows that the respondents perceive private hospitals more positively, yet favor public hospitals and expect more from them. Hence, there has to be another factor that prompts the participants to opt for the public hospitals. It seems unreasonable that they would prefer public hospitals over private hospitals knowing that the former lacks basic customer care. This result confirms Younies *et al.* (2016) insofar as public hospitals in UAE have serious issues that call for immediate intervention.

The public health institutions are less interested in customer retention as they are not primarily interested in making profit. Equally, the customers are less concerned with poor customer care since most of the services are provided free of charge. Public hospital staff are not concerned with attending to every patient's wish and fulfilling his or her high expectations since they know that there will always be a supply of new customers who come for the free services. Given the falling crude oil prices which have affected the UAE economy it is expected that the public hospitals are going to remain in favor. However, there were consistencies between their expectations and perceptions regarding hospitals' equipment with Means above 5.14 and SD=1.5 on other variables.

No	Public & Private Hospital Perception Variables	Public Hosp. Mean	SD	Private Hosp. Mean	SD
1	The hospital has modern equipment	5.642857	1.587928	6.035088	0.999373
2	The hospital equipment are visually appealing	5.333333	1.539311	5.690909	1.317584
3	The hospital doctors are neat-appearing	5.238095	1.595317	5.789474	1.278068
4	Materials of treatments such as reception, laboratory, consultation rooms are visually appealing in the hospital	5.144578	1.725932	5.596491	1.251565
5	When the hospital promise to do something such as quick and prompt attendance, reducing waiting time it do it	4.452381	1.922628	5.392857	1.473136
6	When you have a problem, the hospital shows a sincere interest in solving it	5.000000	1.803611	5.357143	1.470047
7	The hospital's doctors and staff are punctual in delivering the duties	4.857143	1.791162	5.421053	1.400859
8	The hospital's doctors and staff are at the hospital at the appropriate time of their duty	4.976190	1.849625	5.535714	1.334361
9	The hospital insist non-failure of the objectives of the consultations	5.369048	1.677489	5.294118	1.487200

Table 3	
Public & Private Healthcare Quality Ser	rvice Perceptions in UAE

contd. table 3

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No	Public & Private Hospital Perception Variables	Public Hosp. Mean	SD	Private Hosp. Mean	SD
10	The hospital informs you exactly when treatments and consultation will be done.	5.108434	1.773876	5.684211	1.453541
11	The hospital gives prompt notice and information regarding the treatment to you.	5.337349	1.684051	5.714286	1.384515
12	The hospital is always willing to you.	5.256098	1.631563	5.462963	1.423694
13	The hospital's doctors and staff never too busy to respond to your requests.	4.638554	1.922767	5.245614	1.379450
14	The behavior of the hospital's staff instill confidence in the patients	5.180723	1.726017	5.500000	1.334848
15	Patients will feel safe in their consultations and relationships with the doctors and staff	5.337349	1.594787	5.543860	1.570602
16	The hospital is consistently courteous with patients	5.192771	1.678107	5.543860	1.500835
17	The hospital's doctors and staff have the knowledge to answer your questions	5.216867	1.704000	5.491228	1.501461
18	The hospital gives you individual attention	5.024390	1.742537	5.589286	1.372149
19	The hospital has consultation hours convenient to all its patients	4.975904	1.794136	5.263158	1.631458
20	The hospital has flexible time to your personal attention	4.457831	1.914650	5.140351	1.652256
21	The hospital has your best interests at heart	4.853659	1.846732	5.315789	1.649219
22	The hospital understands your specific needs	5.240964	1.890866	5.210526	1.578164

In contrast, those respondents who favor the private hospitals are consistent in their expectations and perceptions. The private hospitals strive to retain their customers and make customer care their priority. They heavily invest in the newest equipment which ensures that the expected treatment results are achieved. Specifically, question 1 on modernized equipment scored the highest Mean = 6.03 with SD = 0.99. Private hospitals in the UAE are mostly owned by foreign investors and are profit-oriented and thus market driven. Their existence rests on patronizing their customers and retaining them in the long run. This sharp contrast between public and private hospitals is highlighted in the correlation matrix which summarizes the results as shown in **Table 4** below.

Table 4
Public & Private Healthcare Quality Services Correlation Matrix in UAE Public Private Public Private

Hospital	Correlation P-value	1	1	Hospital	Correlation P-value	1	1
ExpectationQ1	Correlation	-0.073	0.073	PerceptionQ1	Correlation	-0.139	0.139
	P-value	0.389	0.389		P-value	0.100	0.100
ExpectationQ2	Correlation	-0.020	0.020	PerceptionQ2	Correlation	-0.120	0.120
	P-value	0.812	0.812		P-value	0.159	0.159
ExpectationQ3	Correlation	-0.050	0.050	PerceptionQ3	Correlation	182*	.182*
	P-value	0.554	0.554		P-value	0.031	0.031

contd. table 4

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Hospital	Correlation P-value	1	1	Hospital	Correlation P-value	1	1
ExpectationQ4	Correlation	0.035	-0.035	PerceptionQ4	Correlation	-0.143	0.143
1 1	P-value	0.678	0.678	1	P-value	0.093	0.093
ExpectationQ5	Correlation	212*	.212*	PerceptionQ5	Correlation	255**	.255**
1 1	P-value	0.012	0.012	1 1	P-value	0.002	0.002
ExpectationQ6	Correlation	288**	.288**	PerceptionQ6	Correlation	-0.104	0.104
1 1	P-value	0.001	0.001	1 1	P-value	0.220	0.220
ExpectationQ7	Correlation	192*	.192*	PerceptionQ7	Correlation	167*	.167*
1 1	P-value	0.023	0.023	1 1	P-value	0.048	0.048
ExpectationQ8	Correlation	196*	.196*	PerceptionQ8	Correlation	-0.164	0.164
1 1	P-value	0.020	0.020	1	P-value	0.053	0.053
ExpectationQ9	Correlation	-0.101	0.101	PerceptionQ9	Correlation	0.023	-0.023
1 1	P-value	0.240	0.240	1 1	P-value	0.793	0.793
ExpectationQ10	Correlation	211*	.211*	PerceptionQ10	Correlation	170*	.170*
1 1	P-value	0.012	0.012	1	P-value	0.045	0.045
ExpectationQ11	Correlation	-0.132	0.132	PerceptionQ11	Correlation	-0.118	0.118
1 4	P-value	0.120	0.120	1	P-value	0.167	0.167
ExpectationQ12	Correlation	-0.132	0.132	PerceptionQ12	Correlation	-0.066	0.066
1 4	P-value	0.120	0.120	1	P-value	0.448	0.448
ExpectationQ13	Correlation	-0.132	0.132	PerceptionQ13	Correlation	172*	.172*
1 1	P-value	0.120	0.120	1 1	P-value	0.042	0.042
ExpectationQ14	Correlation	215*	.215*	PerceptionQ14	Correlation	-0.099	0.099
1 4	P-value	0.011	0.011	1	P-value	0.245	0.245
ExpectationQ15	Correlation	228**	.228**	PerceptionQ15	Correlation	-0.064	0.064
1 4	P-value	0.007	0.007	1	P-value	0.450	0.450
ExpectationQ16	Correlation	-0.093	0.093	PerceptionQ16	Correlation	-0.107	0.107
1 4	P-value	0.272	0.272	1	P-value	0.207	0.207
ExpectationQ17	Correlation	-0.151	0.151	PerceptionQ17	Correlation	-0.083	0.083
1 4	P-value	0.073	0.073	1	P-value	0.328	0.328
ExpectationQ18	Correlation	-0.105	0.105	PerceptionQ18	Correlation	172*	.172*
1 4	P-value	0.215	0.215	1	P-value	0.044	0.044
ExpectationQ19	Correlation	-0.145	0.145	PerceptionQ19	Correlation	-0.082	0.082
1 4	P-value	0.086	0.086	1	P-value	0.336	0.336
ExpectationQ20	Correlation	-0.073	0.073	PerceptionQ20	Correlation	183*	.183*
1 🔍	P-value	0.394	0.394	1 🔍	P-value	0.030	0.030
ExpectationO21	Correlation	-0.105	0.105	PerceptionO21	Correlation	-0.128	0.128
1	P-value	0.216	0.216	1	P-value	0.132	0.132
ExpectationQ22	Correlation	-0.050	0.050	PerceptionQ22	Correlation	0.009	-0.009
1	P-value	0.556	0.556		P-value	0.921	0.921

Table 4 indicates that 21 out of the 22 statements are positively associated with the respondents' expectations of private hospitals. In effect, the respondents do not find the materials displayed in public

hospitals as appealing indicating how little attention they pay to appearance. Rather, they expect the hospital to deliver concrete treatment results. In order to further investigate the respondents' expectations, a probit estimation is run as shown in **Table 5** below:

Table 5 Customers Expectation Probit of Public & Private Healthcare Quality Services in UAE

Dependent Variable: TYPEOFHOSPITAL = 1 if Private hospital

Method: ML - Binary Probit (Newton-Raphson / Marquardt steps)

Sample (adjusted): 4 149

Included observations: 123 after adjustments

Convergence achieved after 7 iterations

Coefficient covariance computed using observed Hessian

GLM adjusted covariance (variance factor =0.755872390862)

Variable	Coefficient	Std. Error	Prob.
ARAB	-1.169563	0.503881	0.0203
MALE	0.274627	0.398797	0.4910
AGE15_20	-1.303999	0.446267	0.0035
AGE21_25	-1.198730	0.435240	0.0059
EXPECTATIONQ1	-0.067217	0.190248	0.7239
EXPECTATIONQ2	0.390868	0.141669	0.0058
EXPECTATIONQ3	-0.078768	0.158365	0.6189
EXPECTATIONQ4	-0.367356	0.220925	0.0964
EXPECTATIONQ5	-0.029669	0.231634	0.8981
EXPECTATIONQ6	0.370885	0.280946	0.1868
EXPECTATIONQ7	0.325755	0.299262	0.2764
EXPECTATIONQ8	0.031302	0.205571	0.8790
EXPECTATIONQ9	-0.300617	0.211222	0.1547
EXPECTATIONQ10	0.295825	0.229167	0.1967
EXPECTATIONQ11	-0.431306	0.253466	0.0888
EXPECTATIONQ12	-0.261092	0.231155	0.2587
EXPECTATIONQ13	0.543398	0.212740	0.0106
EXPECTATIONQ14	0.089601	0.308459	0.7714
EXPECTATIONQ15	0.126930	0.268356	0.6362
EXPECTATIONQ16	-0.023535	0.251225	0.9254
EXPECTATIONQ17	0.012379	0.278100	0.9645
EXPECTATIONQ18	0.063495	0.226379	0.7791
EXPECTATIONQ19	0.104844	0.184631	0.5701
EXPECTATIONQ20	-0.337661	0.244317	0.1670
EXPECTATIONQ21	-0.430253	0.273131	0.1152
EXPECTATIONQ22	0.159856	0.253790	0.5288
<u>C</u>	0.080166	1.208940	0.9471
McFadden R-squared	0.441830	Mean dependent var	0.382114
LR statistic	72.28872	Log likelihood-45.66164	
Prob(LR statistic)	0.000003		

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Three major observations can be made based on the result shown in **Table 5**. First, young people are least likely to choose private hospitals; second, the local Arab population is least likely to visit private hospitals compared to other ethnic groups in the sample; third, private hospitals are appealing to those respondents who trust in the hospital's equipment compared those who think that excellent hospitals are never too busy to respond to patients' requests. There are two possible explanations for the above result. With regards to the first two observations, it is important to recall that health care is free of charge for the local Emiratis when they seek the services of the public hospitals while a small fee is charged by the private hospitals. The third observation can be explained by the high standards of private health care in the UAE, which makes Dubai and Abu Dhabi the preferred destinations for international health care tourists. These results are consistent with findings in the field of clinical psychology which has identified 10 basic needs that motivate customers and influence their choices (Reisberg, 1996). Reisberg states, "Customers want their suppliers to be friendly and warm, which engenders trust and confidence", a statement that echoes the statistically positive coefficient estimate on our variable "The hospital staff are never too busy to respond to the patient's requests."

CONCLUSION

The UAE is currently the leading medical tourism center in the GCC. Indisputably, hospitals in the UAE are well-equipped in terms of skillful healthcare professionals and sophisticated technology. However, the availability of the latest and most advanced technical equipment does not constitute the most decisive factor in determining the patients' choice given the fact that the public hospitals are favored due to economic reasons. Our results justify the conclusion that the present growth in the UAE healthcare industry is a direct result of the good practices adopted by the private hospitals. Our conclusion is based on the fact that achieving recognized status of "best medical tourism hub" rests primarily on international visitor rates. We further conclude that most medical tourists sought treatment in the private hospitals across the country who were willing to pay for excellent customer care services and ready to return for subsequent treatments in the future.

Thus, in terms of the study's implications for policy making, it is recommended that the UAE government is best advised to create a link between the public and private hospitals, for example by converting some public hospitals into semi-private hospitals co-owned by private investors. The superior mode of operations run by the private hospitals should be adopted to improve the services and achieve better customer satisfaction while the government is able to maintain its subsidies.

This study is not without certain limitations. One of the major limitations of this study is that only a relatively small number of individuals confined to the area in and around Abu Dhabi participated in the survey. Thus, we recommend future research should consider a nationwide survey which includes the entire UAE region. The information obtained would form the solid basis for a sustained and satisfactory policy development and application in the UAE.

NOTES

^{1.} For further information kindly refer to Health Authority in Abu Dhabi (HAAD) website. Health Authority in Abu Dhabi. HAAD. Retrieved 10 October 2016, from *http://www.haad.ae/haad/tabid/59/Default.aspx*

^{2.} For further information kindly refer to SEHA *website*. *Introducing SEHA.SEHA*. Retrieved 10 October 2016, from *https://www.seha.ae/English/aboutus/pages/formation-of-seha.aspx*

REFERENCE

- World Health Organization (2016). Global Health Observatory data.. Retrieved 27 September 2016, http://www.who.int/gho/ mortality_burden_disease/life_tables/situation_trends/en/
- Index Mundi (2016). United Arab Emirates Demographics Profile. Retrieved April 17, 2017. http://www.indexmundi.com/ united_arab_emirates/demographics_profile.html
- Kleinman, L. C., & Dougherty, D. (2013). Assessing quality improvement in health care: Theory for practice. Retrieved from *http://web.a.ebscohost.com.ezproxy.hct.ac.ae*
- Marjoua, Y. & Bozic, K. (2012). Brief history of quality movement in US healthcare. Current Reviews in Musculoskeletal Medicine, 5(4), 265-273. Retrieved from http://dx.doi.org/10.1007/s12178-012-9137-8
- Parasuraman, A., Zeithaml, Valerie A. & Berry, Leonard L. (1991) "Refinement and reassessment of the SERVQUAL scale," Journal of Retailing, vol. 67(4), p. 420-50
- Reisberg, M. (1996). "Customer Satisfaction in Health Care", Perspectives on Administration and Supervision, Vol. 6, No. 2, pp. 12-15, available at *http://www.asha.org/uploadedFiles/aud/CustSat11v6n2.pdf*
- Schmaltz, S. P., Williams, S. C., Chassin, M. R., Loeb, J. M., & Wachter, R. M. (2011). Hospital performance trends on national quality measures and the association with joint commission accreditation. *Journal of Hospital Medicine*. Retrieved from http://hct.summon.serialssolutions.com/
- Sheingold, H. (2014, June 10). International Journal of Africa Nursing Sciences. Retrieved from http://dx.doi.org/10.1016/ s2214-1391(14)000110
- Shibuya, K. (2015). Future of Japan's Health Care. Tokyo. Retrieved from http://wnw.dijtokyo.org/doc/dij-forum_160518_shibuya.pdf
- Wakely, E., & Carson, J. (2011). Historical recovery heroes florence nightingale. Mental Health and Social Inclusion. Retrieved from doi: http://dx.doi.org/10.5042/mbsi.2011.0055
- Younies, H., Elzenaty, R. J. K., Gantasala, S., & Nwagwu, E. (2016). Healthcare Forecasting in the United Arab Emirates (UAE). Journal of Health and Human Services Administration, 39(1), 3-14. Retrieved from http://search.proquest.com/ docview/1794836220?accountid=1215
- Zborowsky, T. (2014). The legacy of florence nightingale's environmental theory: Nursing research focusing on the impact of healthcare environments. *HERD: Health Environments Research & Design Journal*, 7(4), 19-34. Retrieved from *http://search.proquest.com/docview/1551503625?accountid=1215*.