

The impact of service quality perception on patient satisfaction in Government Hospitals in Southern Saudi Arabia

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ABSTRACT

Objectives: To examine the impact of service quality perception on patient satisfaction and determine which dimension from 5 dimensions (tangible, reliability, responsive, assurance, and empathy) has the greatest impact on patient satisfaction.

Methods: A total of 183 eligible patients participated in this study. This study was conducted in Al-Baha province, Saudi Arabia from June 2013 to August 2013. We utilized the cross-sectional method, using a modified Assessment of Service Quality questionnaire to collect the data.

Results: To test the study hypothesis, multiple regression analysis was carried out. Analysis of variance revealed that the overall result showed a statistically significant impact of health service quality on patient satisfaction ($p=0.000$). The beta-weights (beta) suggested that the empathy dimension had the greatest influence on patient satisfaction ($\beta=0.476$), followed by tangible ($\beta=0.198$) and responsiveness dimensions ($\beta=0.164$).

Conclusion: Patient satisfaction was influenced by health service quality, with the empathy dimension as the greatest influence on patient satisfaction. Therefore, it should be considered a priority by government hospitals to train doctors in interpersonal relationship skills to enhance the doctor-patient relationship.

Service providers are progressively facing a wide range of social, financial, political, regulatory and cultural challenges, associating with demands for greater efficiency, better quality, and lower costs.¹ Health care institutions have to go beyond a medical view and replace it with a holistic social approach to healthcare. Precise diagnosis and treatment are not enough, patients will be looking for performance for services they are rendered. It is argued that the focus on the patients is the first among 5 attributes of healthcare quality.² Some studies have been conducted to examine the impact of service quality in healthcare settings in Saudi Arabia on patient satisfaction; however, none of which was conducted in Al-Baha province. Al-Doghaither³ evaluated the

satisfaction of 400 inpatients with health services in Riyadh, and found that the highest mean satisfaction score was admission, and the lowest was communication. Another study⁴ was conducted to examine patient satisfaction in primary health care centers in different regions of Saudi Arabia. It indicated that 77.5% of the primary health care patients were satisfied with the services.⁴ Factors considered important in choosing a hospital were examined in Riyadh.⁵ The study found that the most important factor was medical services followed by accessibility and administrative services.⁵ Moreover, since the Saudi government provides 64.5% of healthcare and the rest is provided by the private sector, examining service quality in government hospitals and its impact on patient satisfaction is needed.⁶ Hence, the purpose of this study is to examine the impact of service quality in government hospitals in Al-Baha province on patient satisfaction, and to determine which dimension of the 5 dimensions reported by Parasuraman et al⁷ has the greatest impact on patient satisfaction.

Methods. This study was conducted in Al-Baha province, Saudi Arabia from June 2013 to August 2013, on 183 patients (91 males, 92 females). The ages ranged from 18-61 years. The study was reviewed and approved by the Scientific Research Committee of Al-Baha University, Al-Baha, Saudi Arabia. The criteria for sample selection were: an adult of 18 years or above and visiting government hospitals seeking health services in the past 12 months. In maintaining confidentiality for all participants, an informed consent was obtained from all participants before the process of collecting the data; and the anonymity of all participants was also preserved. A cover letter providing information on the importance of the study, participants' rights, as well as explaining how to respond to the questionnaire items was attached. The study sample was selected using the convenience sampling technique. There were 210 questionnaires distributed to the participants by trained employees working with the researcher, and all completed the questionnaires were collected. Of the 210, 183 were included in the study, with a response rate of 87%.

The current study utilized a cross-sectional method. A modified Assessment of Service Quality (SERVQUAL) questionnaire was applied to measure the quality of hospital services.⁸ It has been empirically evaluated in the hospital setting; hence, it is proven to be a reliable and valid method in a hospital service environment.² This method includes 5 dimensions: tangible (physical facilities, equipment, and appearance of the personnel), reliability (the ability to perform the promised service

dependably and accurately), responsiveness (the willingness to help customers and provide prompt services), assurance (employee knowledge and courtesy and their ability to convey trust and confidence), and empathy (caring, individualized attention a hospital provides to its customers). The response was recorded on a 5-point scale wherein “one” indicates “strongly disagree” and “5” indicates “strongly agree”. In addition to these items, global satisfaction was measured by a single item asking participants how they felt after the delivery of health services.⁷

The Cronbach alpha of internal consistency was calculated in order to demonstrate the reliability of the survey’s scale using the Statistical Package for Social Sciences for Windows version 16 (SPSS Inc., Chicago, IL, USA). Multiple regression analysis was used to examine the impact of health service quality on patient satisfaction, and to determine which dimension from 5 dimensions (tangible, reliability, responsiveness, assurance, and empathy) has the greatest impact on patient satisfaction. The significant level was set at the 1% level ($p < 0.01$).

Results. The Cronbach alpha of internal consistency was calculated in order to demonstrate the reliability of the survey’s scale. The analysis indicated that reliability for subscales ranged from 0.74-0.86. The summed scale showed a 0.92 coefficient. Hence, the internal consistency for the survey’s scales deemed sufficient. To test the study hypothesis, multiple regression analysis was carried out. Analysis of variance revealed that the overall result was statistically significant ($p = 0.000$) (Table 1). Therefore, the study hypothesis, stating that there is a statistically significant impact of health service quality on patient satisfaction was supported. Moreover, the beta-weights (Beta) suggested that the empathy dimension had the greatest influence on patient satisfaction ($\beta = 0.476$), followed by tangible ($\beta = 0.198$), and responsiveness dimensions ($\beta = 0.164$) (Table 2).

Discussion. The results of the current study support the emerging literature regarding health service quality and patient satisfaction, especially in Saudi Arabia.^{1,6,9} The recent efforts made by the Saudi government to improve health care quality may, to some extent, contribute to the study results. Patients rendered a high level of service quality would report a high satisfaction rate when filling out an ad hoc survey and vice versa.¹⁰ The empathy dimension had the greatest influence on patient satisfaction, followed by tangible and responsiveness dimensions. This study suggested that when patients perceived that the healthcare provider

cares for them and pays special attention to them, there would be a higher level of satisfaction. Physical facilities, equipment, and appearance of the doctors and other staff also contributes to patient satisfaction. As study proposed, the willingness to help patients and provide prompt services would make patients more satisfied with health services. This finding is consistent with previous studies.¹¹⁻¹⁴ Interestingly, knowledge, courtesy, and ability of doctors and other staff to convey trust and confidence (assurance dimension), as well as the ability to provide the promised services dependably and accurately (reliability dimension), had the lowest influence on patient satisfaction. This result is in line with the study carried out in group versus solo practice clinics.¹⁵ While the effects of assurance and reliability dimensions were comparatively lower than the effects of empathy and tangible dimensions, this does not imply that they are not important and should be ignored in improving service quality in the hospitals. This only proposes that greater gains in patient satisfaction can be realized through attending to empathy and tangible dimensions in the government hospitals’ environment.

The limitations of this study center on the fact that patient satisfaction may change overtime; hence, a cross-sectional design may not be suitable for tracking such variables. Additionally, other variables may be more important in determining patients satisfaction than those presented in this study. Finally, using a

Table 1 - The overall impact of health service quality on patient satisfaction among 183 participants from Southern Saudi Arabia.

Model	Sum of squares	df	Mean square	F	Sig.
Regression	224.569	5	44.914	143.496	0.000 ^a
Residual	55.401	177	0.313		
Total	279.970	182			

^aPredictors: (Constant), empathy, tangibility, responsive, assurance, reliability, Dependent variable: Satisfaction

Table 2 - The dimensions showing the greatest impact on patients satisfaction among 183 participants.

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.929	0.185		-5.008	0.000
Tangibility	0.295	0.077	0.198	3.810	0.000
Reliability	0.095	0.089	0.071	1.063	0.289
Responsive	0.214	0.074	0.164	2.913	0.004
Assurance	0.120	0.071	0.095	1.698	0.091
Empathy	0.498	0.065	0.476	7.630	0.000

Dependent variable: Satisfaction

convenience sampling technique may limit the ability to generalize our results.

In conclusion, government hospitals and policymakers need to turn their attention to the fact that more efforts should be made to train doctors and other staff for different interpersonal skills to deal with patients, especially paying individual attention, listening effectively, communicating well, and responding to their requests kindly and politely. Without any additional costs, showing truthful interest in patients would greatly reap benefits. In terms of tangible dimension, an improvement of physical facilities, equipment and appearance of doctors and other staff should be given priority. It is important to note that a stronger modern managerial orientation should be introduced in the hospitals to assist delivering quality services and patient satisfaction.

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References

1. Rose RC, Uli J, Abdul M, Ng KL. Hospital service quality: a managerial challenge. *Int J Health Care Qual Assur Inc Leadersh Health Serv* 2004; 17: 146-159.
2. Elleuch A. Patient satisfaction in Japan. *Int J Health Care Qual Assur* 2008; 21: 692-705.
3. Al-Doghaither AH. Inpatient satisfaction with physician services at King Khalid University Hospital, Riyadh, Saudi Arabia. *East Mediterr Health J* 2004; 10: 358-364.
4. Alahmadi A. Study of patient satisfaction in primary health care centers in different regions of Saudi Arabia. *The Egyptian Journal of Community Medicine* 2004; 22: 49-60.
5. Al-Doghaither AH, Abdelrhman BM, Saeed AA, Magzoub ME. Factors influencing patient choice of hospitals in Riyadh, Saudi Arabia. *J R Soc Promot Health* 2003; 123: 105-109.
6. Alhashem AM, Alquraini H, Chowdhury RI. Factors influencing patient satisfaction in primary healthcare clinics in Kuwait. *Int J Health Care Qual Assur* 2011; 24: 249-262.
7. Parasuraman A, Zeithaml V, Berry L. Servqual. Alternative scales for measuring service quality? A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing* 1994; 70: 193-199.
8. Arasli H, Ahmadeva L. "No more tears!" A local TQM formula for health promotion. *Int J Health Care Qual Assur Inc Leadersh Health Serv* 2004; 17: 135-145.
9. Zamil A, Areiqat A, Tailakh W. The impact of health service quality on patients' satisfaction over private and public hospitals in Jordan: a comparative study. *International Journal of Marketing Studies* 2012; 4: 123-137.
10. Almalki M, Fitzgerald G, Clark M. Health care system in Saudi Arabia: an overview. *East Mediterr Health J* 2011; 17: 784-793.
11. Ramez W. Patients' perception of health care quality, satisfaction and behavioral intention: an empirical study in Bahrain. *International Journal of Business and Social Science* 2012; 18: 131-141.
12. Raposo M, Alves H, Duarte P. Dimensions of service quality and satisfaction in healthcare: a patient's satisfaction index. *Service Business* 2009; 3: 85-100.
13. Zebiene E, Razgauskas E, Basys V, Baubiniene A, Gurevicius R, Padaiga Z, et al. Meeting patients' expectations in primary care consultations in Lithuania. *Int J Qual Health Care* 2004; 16: 83-89.
14. Mostafa M. An empirical study of patients' expectations and satisfactions in Egyptian hospitals. *Int J Health Care Qual Assur Inc Leadersh Health Serv* 2005; 18: 516-532.
15. Lin HC, Xirasagar S, Laditka JN. Patient perceptions of service quality in group versus solo practice clinics. *Int J Qual Health Care* 2004; 16: 437-445.