British Journal of Economics, Management & Trade
10(4): 1-8, 2015, Article no.BJEMT.21600
ISSN: 2278-098X

SCIENCEDOMAIN *international*
www.sciencedomain.org

Patient Satisfaction and Perception of Quality of Care in Outpatient Clinic in an Eye Specialist Hospital in Saudi Arabia

Mohammed Alahmari[1], Ibrahim Abdullah Aljasser[2*] and Bokkasam Sasidhar[2]

[1]Department of Hospital and Health Administration, College of Business Administration, King Saud University, Riyadh, Kingdom of Saudi Arabia.
[2]Quantitative Analysis Department, College of Business Administration, King Saud University, Riyadh, Kingdom of Saudi Arabia.

Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/BJEMT/2015/21600
Editor(s):
(1) Alfredo Jimenez Palmero, University of Burgos, Spain.
Reviewers:
(1) Nitin Gupta, Ivy Hospital, Hoshiarpur, India.
(2) Li-Na Chou, National Tainan Junior College of Nursing, Taiwan.
Complete Peer review History: http://sciencedomain.org/review-history/11772

Original Research Article

Received 25th August 2015
Accepted 23rd September 2015
Published 9th October 2015

ABSTRACT

Aims: This study tries to evaluate patients' satisfaction with a particular view of the specific perceptions of the quality of care in an outpatients department of tertiary care hospital provided by the doctors, nurses and receptionists, considering the waiting time as a separate factor of influence.
Study Design: This study was based on a questionnaire survey.
Methodology: This is a cross sectional study, whereby responses were collected from 300 patients who received treatment in the Eye Specialist Hospital in Saudi Arabia. Systematic sampling of patients was employed for selecting the samples. The data was collected by meeting the customers face to face. Every question was explained to respondents so that patient can understand the requirement of each factor considered. The data collected was analyzed using IBM SPSS Statistics 21.

**Corresponding author: E-mail: ialjasser@ksu.edu.sa;*

Results: The overall satisfaction level and the perception levels based on services provided by doctors, nurses and receptionists were observed to be significantly higher than the neutral perception level, at 1% level of significance. However, the perceptions of the patients regarding the waiting time for service was significantly lower than the neutral perception level, at 1% level of significance. The waiting time for consulting with the doctor was more than 30 minutes in about 70% of the cases. The study also reveals that the male patients and those having long standing health conditions perceive better satisfaction levels than others. However, other demographic factors such as age, education level, income and ethnic group are not significantly related to the overall satisfaction levels.

Keywords: Patient satisfaction; out-patient; eye specialist hospital; Saudi Arabia.

1. INTRODUCTION

Patient satisfaction is a key basis by which the quality of health care services is assessed. It can be characterized as a subjective assessment of the service received, measured against the individual's desires. Patients' judgment of the quality of clinic services and their feedback are vitally important when considering quality monitoring and change within a service. Patient satisfaction data are routinely gathered and utilized for persistent quality assessment by human services organizations along with doctor's own facilities across developing nations [1].

There are three reasons other than external governmental pressures, professional bodies and health authorities as to why health experts ought to consider patient satisfaction as important information to be obtained [2]. Firstly, research has demonstrated that satisfaction is an essential result of measure. Patient satisfaction may be an indicator of whether patients complete their prescribed treatments, the extent with which patients return for further treatment and the probability of patients changing their health care provider. Emerging research on patient satisfaction has illustrated improvement in health status of patients who report high rates of satisfaction with their health care providers. Secondly, patient satisfaction is an inexorably valuable measure in surveying consultations and examples of correspondence within the health care sector. Thirdly, patient feedback can be utilized efficiently in order to choose between techniques of organization and provision of human services [3].

Contemporary organizations perceive patient/customer satisfaction studies as having various advantages. However, understanding the client group and customer satisfaction surveys are not solely useful as a means of enabling patients to express their supposition; they are, additionally, a way in which patients can be educated about new data obtained about organizations or social insurance associations, for example, developments or changes and vehicles of securing clients' perspectives. Patient satisfaction has also found to be correlated with the degree to which general medical service needs are met [4]. Assessing to what degree patients are fulfilled by health services is clinically important, as satisfied patients are more inclined to agree to treatment, take a dynamic part in their own consideration, keep utilizing medical care services, remain with the same health care providers and maintain a particular treatment protocol.

A source of dissatisfaction with healthcare, frequently noted by patients, is waiting time; studies have illustrated the relationship between waiting time and general patient satisfaction, with longer waiting times being correlated with diminished patient satisfaction [5]. A relationship between waiting time and patient satisfaction has been particularly demonstrable in the emergency health care sector, where waiting time may be significant and the level of patient distress may be high. Results here may not impact upon conventional primary and specialty care settings, since subjective contrasts between situational emergency care and outpatient settings are generous. In light of this, the study will use a cross-sectional survey to assess the influence of services provided by doctors, nurses and receptionists, considering the waiting time as a separate factor of influence on patient satisfaction of primary care in an outpatients department of tertiary care hospital.

2. LITERATURE REVIEW

Discussions about how the quality of health care ought to be measured progressively incorporate

patient satisfaction as one of the vital measurements. However, a solitary clarification of why studies of patients' views have become such an integral part of the NHS would likely not refer to the effect of scientific arguments regarding the assessment of health services, rather, the powerhouse of NHS Management Inquiry. The inquiry crisply and earnestly censured the failure of the NHS to utilize well established techniques of statistical surveying to evoke the perspectives and encounters of its clients [3].

The patient satisfaction survey can be an extremely helpful device for a medical practice if utilized suitably. Conducting a survey requires a large amount of staff time; hence, it is useful to determine what you are attempting to measure before embarking on conducting a survey. Potential issues which may arise are not self-evident, yet taking the time to discuss them with the staff in their entirety will help to focus the surveying efforts so they can best utilize staff time efficiently [4].

Healthcare industries have recently seen developments being made towards consistent quality change, increasing the momentum since 1990. As per Donabedian's [6] model that provides a framework for examining health services and evaluating quality of health care, information about quality of care can be drawn from three categories: “structure,” “process,” and “outcomes." Structure describes the context in which care is delivered, including hospital buildings, staff, financing, and equipment. Process denotes the transactions between patients and providers throughout the delivery of healthcare. Finally, outcomes refer to the effects of healthcare on the health status of patients and populations. Medical services managers subsequently focused upon patient focused care as a significant factor in their health awareness mission. Healthcare managers attempting to accomplish excellence, consider patient recognition of services when outlining their methods for quality change in this sector. As of late, the medical service controllers have moved towards a business sector-driven methodology of transforming patient fulfillment overviews, into a quality change device for general authoritative execution [7].

One of the assumptions underlying England's National Health Service (NHS) approach is that, giving input about patients' experiences to medical services organizations will drive betterment. In particular, in 2000, the NHS Plan stated that a patient study would "secure year-on-year upgrades in patient fulfillment". Since 2002, the Inpatient Survey for Acute NHS Trusts has been directed towards all major NHS doctor's facilities in England, recruiting roughly 135,000 adult patients annually. The polls, sent by post, record waiting times, specialists' and attendants' patient rapport, staff responsiveness, health facility food and cleanliness, tolerance data and a co-appointment of consideration and patients' respect [8].

It is important to emphasize that there is no “gold standard” measure of patient satisfaction. It is conceivably less demanding to ask questions on patients' privacy, respect and emotions than to ask questions regarding correspondence of data or inclusion in healthcare. Overreliance on negative articulations to excite data regarding clients' recognitions and perspectives may result in a deceptive picture and henceforth, provide a poor foundation for illuminating strategy aimed at enhancing the quality of care [9].

It is generally perceived that there is a requirement for thorough systems, other than clinical discussions, to evoke patients' perspectives on such matters as treatment choices and the quality of care received. Much effort has, in this way, been dedicated to creating and assessing survey measures that inspire reports about particular care experiences, reflecting the nature of care, not amenities. Such questions are: less subjective; less impacted upon by patient attributes; more interpretable and, accordingly, may be followed up on for quality change purposes [10].

It is a moral and lawful tenet that patients are informed and included in their health care, to at least minimal standards, initial data demonstrates that a high proportion of patients wish to be involved in the choice processes. When the primary aim is to incorporate patients in the decision making process, it is the methodology of association, instead of its result, that is vital. The criteria of adequacy are consequently characterized by the moral standards and patients' inclinations. For example, imparted choice making can be assessed regarding data conveyed on treatment choices, checking of comprehension and inclinations, and settling on an imparted choice [5]. Patient inclusion can likewise bring about better methods and health outcomes. It could, for example, enable clinicians to be more receptive

to patients' desires, adding to better usage of clinical rules, enhancing safety by including patients in updating procedures and resulting in increased satisfaction with care. When included in this manner, patients can be seen as co-makers of health care, in light of the fact that their choices and conduct impact healthcare provision and its results. Result measures should mirror the consequences of the processes or results of care that is expected.

In the event that patient satisfaction is to take its place aside morbidity, mortality, and practical status, a few basic estimation issues must be addressed. To start with, scale developers and end-users need to be transparent regarding what they are measuring. 'Patient satisfaction' is not a unitary idea, rather, a refining of observations, patients' convictions about events and qualities. These observations reflect actual events, whereas qualities are the merits which patients apply to those events. These mirror the extent to which patients consider particular events to be alluring, expected or essential [11]. Most contemporary measures of patient satisfaction utilize hybrid questions that evaluate recognition and values simultaneously [12,13]. In answering a question, patients should first gauge wait time prior to consulting with a doctor, contrast it and determine an inner standard, prior to delivering a general judgment. Such hybrid questions hold the ideals of semantic economy, yet make it hard to distinguish observations from qualities. Given these semantic ideas, a patient who receives poor care, yet has low inner standards, may report the same level of satisfaction as a patient who receives exemplary care, whose benchmarks are exceptionally high.

2.1 Objectives of the Study

The aim of this paper is to present an original patient satisfaction survey conducted in the outpatient clinic of an Eye Specialist Hospital in Saudi Arabia. The objectives of the customer satisfaction survey are focused on the assessment of the critical satisfaction dimensions based on services provided by doctors, nurses, receptionists and waiting time and the relationship of the demographic factors with the overall satisfaction levels o the patients. Based on the findings of the exploratory investigations the following hypotheses were established for the quantitative study:

H_1: The overall satisfaction level and the perception levels based on services provided by doctors, nurses, receptionists and waiting time are significantly positive.

H_2: The demographic factors such as gender, age, education level, income, health history and ethnic group are not significantly related to the overall satisfaction levels.

3. METHODOLOGY

This paper adopts both the descriptive and explanatory survey design. Consequently, while the paper seeks to describe the characteristics of patients' behavior in terms of their overall satisfaction as well as the services provided by doctors, nurses, receptionists and waiting time. The population of this paper comprise of all the outpatients who attended the outpatient clinic.

3.1 Exploratory Survey / Questionnaire

Initial discussions were held with patients visiting the outpatient clinic of the eye specialist hospital to describe the characteristics contributing to their satisfaction. This was undertaken to identify the most relevant factors affecting the patients during their visits to the clinic. The inputs from the focused group discussions were used to establish the customer satisfaction model and to frame the questionnaire. The model consisting of four factors was sub defined as per the perception of the patients. All these four factors created clear sense of awareness in patients mind regarding satisfaction. The research included all four factors to promote distinct validation and any further evaluation, if required. The factors and the number of questions (indicated in the brackets) within the factors that were perceived by the patients to have some influence on the patient satisfaction are: Services provided by Doctors (11 questions), Services provided by Nurses (8 questions), Services provided by Receptionists (3 questions) and Waiting time for the service (4 questions). The structured questionnaire consisting of closed ended multiple choice questions were employed for the survey. Given that most of the items in the questionnaire were targeted to measuring the respondents' perceptions and attitudes, a five-point Likert-type scale is considered where the responses were coded 1 to 5 corresponding to very good, good, satisfactory, poor, very poor respectively. A Cronbach coefficient alpha test was found to be 0.893. The purpose is to determine internal consistency of the scale used. According to Sekaran [14] Cronbach alpha is a

reliability coefficient that indicates how well the items are positively correlated to one another. The closer the Cronbach alpha is to 1, the higher the internal consistency. Based on the guidelines by Sekaran [14], a scale of 0.6 is considered to be poor, 0.7 ranges are acceptable and those over 0.8 are good.

The combination of both descriptive and inferential statistics was used as methods of data analysis.

3.2 Data Collection

The inputs received from the focused group discussions were used to frame the questionnaire, both in English and Arabic, which incorporated the factors and the questions that were perceived by the patients to have influence on the patient satisfaction. The questionnaire was distributed to 300 patients who received treatment in the Eye Specialist Hospital. Systematic sampling of patients (time interval of 15 minutes) was employed for selecting the samples. The data was collected by meeting the customers face to face, who participated voluntarily in the survey. To make sure the questionnaire were fully understood, every question was explained one by one to respondents so that patient can easily understand the requirement of each factor considered.

Since the analysis is based on one-sample t-tests, the effective power of the test will be almost 1.00, as shown in the Fig. 1 and analysis below, using GPower software.

t tests - Means: Difference from constant (one sample case)

Analysis:	Post hoc: Compute achieved power		
Input:	Tail(s)	=	One
	Effect size d	=	0.5
	α err prob	=	0.01
	Total sample size	=	300
Output:	Critical t	=	2.338884
	Df	=	299
	Power (1-β err prob)	=	1.000000

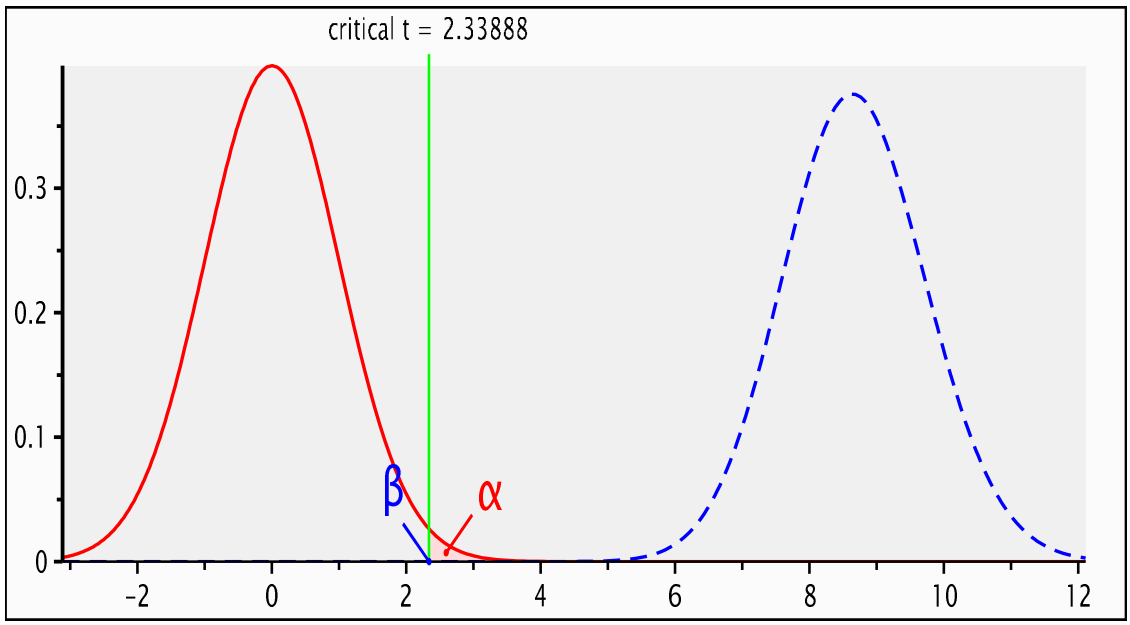

Fig. 1. The power of the t tests

4. DATA ANALYSIS AND FINDINGS OF THE STUDY

The data collected were analyzed using IBM SPSS Statistics 21.

4.1 Respondents' Profile

The questionnaire includes a section on socio-demographic characteristics. The study of demographics of the respondents provided the guidance to analyze the individual perception towards patient satisfaction. Demographic factors included gender, nationality, age-group, education level, income and occupation. Further the data regarding health history of the patient for presence of long standing health problems. It is observed that 85% of the respondents were male Saudi nationals, about 94% are below 45 years of age and almost the entire group of patients was employed. It is observed that about 72% of them had long standing health problem.

4.2 Significance of Patient Satisfaction Factors

One Sample t-test is applied on patient satisfaction data. The descriptive statistics of Table 1 displays the 300 respondents' mean, standard deviation and standard error against each satisfaction factor.

Satisfaction factors can be categorized as per their mean disperse. As per data analysis that has ranked the satisfaction factor's mean as to which factor is giving highest level of customer satisfaction, the services rendered by doctors has the highest level of patient satisfaction.

Table 2 shows the results of the one-sample "t-test" applied on patient satisfaction data. It can be observed that the overall satisfaction level and the perception levels based on services provided by doctors, nurses and receptionists were observed to be significantly higher than the neutral perception level of 3 (on a five point scale), at 1% level of significance. However, the perceptions of the patients regarding the waiting time for service was significantly lower than the neutral perception level, at 1% level.

Further, as shown in Fig. 2, the waiting time for consulting with the doctor was more than 30 minutes in about 70% of the cases.

4.3 Influence of Demographic Factors on Patient Satisfaction

Chi-Square tests were conducted to find whether the demographic factors have any influence on patient satisfaction. Table 3 provides the Chi-Square values and its two-tailed levels of significance for significant variables.

Table 1. Descriptive statistics

Satisfaction factor	N	Mean	Std. deviation	Std. error mean
Overall	300	2.4167	1.12574	.06499
Doctor	300	2.1733	.60968	.03520
Receptionist	300	2.5208	.11649	.00673
Waiting Time	300	3.7967	.40315	.02328
Nurses	300	2.6521	.52103	.03008

Table 2. One-sample t-test results

Satisfaction factor	Test value = 3					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Overall	-8.975	299	.000	-.58333	-.7112	-.4554
Doctor	-23.485	299	.000	-.82667	-.8959	-.7574
Receptionist	-71.247	299	.000	-.47917	-.4924	-.4659
Waiting time	34.227	299	.000	.79667	.7509	.8425
Nurses	-11.566	299	.000	-.34792	-.4071	-.2887

Table 3. Results of Chi-square tests for significant variables

Variable	Pearson Chi-square	Significance (two-tailed)
Gender	16.112	0.013
Having long standing health problem	112.439	0.000

Fig. 2. Waiting time for consultation

It is observed that the male patients and those having long standing health conditions perceive better satisfaction levels than others. However, other demographic factors such as age, education level, income and ethnic group are not significantly related to the overall satisfaction levels.

5. SUMMARY AND CONCLUSIONS

This paper presents an original patient satisfaction survey conducted with a particular view of the specific perceptions of the quality of care provided by the doctors, nurses, hospital staff and waiting time for consultation as an additional important factor as perceived by the patients of the outpatient clinic of the eye specialist hospital.

Results indicated that the patients' perception about the quality of the service they received, and their satisfaction level regarding physician's behavior are significantly high. Majority of patients were satisfied with the positive attitude of doctors in 'listening to patients' and the extent to which their doctor demonstrated high levels of capability and the time allocated for the patents consultation. Nurse's abilities to provide treatment or arrange for it to be provided were rated especially high, with all patients stating that this was very good.

The overall patient satisfaction level has been observed to be 2.41, on a five point scale (with reverse codification), which is significantly higher than the neutral perception level, at 1% level of significance. Further, the satisfaction perceptions of patients regarding the services rendered by doctors, nurses and receptionists were significantly higher than the neutral perception level, at 1% level of significance.

However, the study reveals that the perceptions based on waiting time was significantly lower than the neutral perception level, at 1% level of significance. The waiting times have impacted upon patient satisfaction and perceptions of quality of care. These findings are in line with the findings of the research by Camacho, et al. [2]. It is observed that the waiting time for consulting doctors exceeded 30 minutes in about 70% of the cases.

The male patients and those having long standing health conditions perceive better satisfaction levels than others. However, other demographic factors such as age, education level, income and ethnic group are not significantly related to the overall satisfaction levels.

In response to these findings, the health care facility should aim to set targets for quality change in the current areas which are in need of improvements. The study provides the eye specialist hospital with insights into the kinds of service patients find most appropriate for their needs. However, the governmental expense of intercession mirrors the need for more general interventions.

It must be noted that this study includes only the investigation for the patients attending a particular eye specialist hospital in Saudi Arabia.

Sample size limits the scope of large scale applicability of the results. Data gathered from a larger sample size may be useful to further validate the results. Further there is ample scope to test the results using data from other hospitals.

ACKNOWLEDGEMENTS

This paper is supported by the Research Center at the College of Business Administration and the Deanship of Scientific Research at King Saud University, Riyadh.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Juliet Nabbuye-Sekandi FE, Tugumisirize J, Nshimye E, Mbabali S, Peters DH. Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda. DOI:http://dx.doi.org/10.1093/intqhc/mzr040 516-523 (First published online: 20 July 2011)
2. White B. Measuring patient satisfaction: How to do it and why to bother. Family Practice Management. 1999;6:40-44.
3. Fitzpatrick R. Surveys of patient satisfaction: I-Important general considerations. BMJ. 1991;302:887-9.
4. Ilioudi S, Lazakidou A, Tsironi M. Importance of patient satisfaction measurement and electronic surveys: Methodology and potential benefits. International Journal of Health Research and Innovation. 2013;1(1):67-87.
5. Camacho F, Anderson R, Safrit A, Jones AS, Hoffmann P. The relationship between patient's perceived waiting time and office-based practice satisfaction. NC Med J. 2006;67(6).
6. Donabedian A. The quality of care: How can it be assessed? JAMA. 1988;121(11): 1145–1150.
7. Al-Abri R, Al-Balushi A. Patient satisfaction survey as a tool towards quality improvement. Oman Med J. 2014;29(1):3–7.
8. Reeves R, West E, Barron D. Facilitated patient experience feedback can improve nursing care: A pilot study for a phase III cluster randomised controlled trial. BMC Health Serv Res. 2013;13:259.
9. Cohen G, Forbes J, Garraway M. Can different patient satisfaction survey methods yield consistent results? Comparison of three surveys. BMJ. 1996; 313:841.
10. Cleary PD. The increasing importance of patient surveys. Now that sound methods exist, patient surveys can facilitate improvement. BMJ. 1999;319(7212):720–721.
11. Kravitz R. patient satisfaction with health care, critical outcome or trivial pursuit? J Gen Intern Med. 1998;13(4):280–282.
12. Wensing M, Elwyn G. Methods for incorporating patients' views in health care. BMJ. 2003;326(7394):877–879.
13. Massachusetts Medical Society. Patient Satisfaction Surveys, Physician Practice Resource Center; 2004. Available:http://www.massmed.org/physicians/practice-management/patient-satisfaction-surveys-%28pdf%29/ (Retrieved April 6, 2015)
14. Sekaran U. Research methods for business: A skill –building approach. New York: John Wiley & sons. Inc. 2000;308-313.

Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/11772