

Comparative analysis of patients' satisfaction in private hospitals in an Upazilla area, Bangladesh.

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Abstract:

This article attempts to measure the state of satisfaction of patients over the quality of health care as well as identify the crucial

factors that affect the patients' satisfaction in Upazila Health Complex (UHC). The quantitative approach was used following a

structured questionnaire survey method. Four hundred visitors of 2 UHCs in Meherpur district were randomly selected as

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This study is to measure the crucial factors that affect the patients' satisfaction and compare the rate of satisfaction of patients over the provided services of selected health care organizations in Upazila areas in Bangladesh. A structured questionnaire was used to collect quantitative data for survey method. Hundreds of visitors of seven hospitals of Laksham Upazilla, Cumilla district, Chittagong division were randomly selected as respondents for the study. It is expected that continuous monitoring and feedback of various types of patients will help an evaluation of care of hospital services. **Objective:** The purpose of the study is an attempt to assess the level of satisfaction among patients from the perspective of different dimensions. The present study yet, the findings of the survey are quite helpful if they are transformed into actions for improving the quality of health care. **Materials and Methods:** The study was conducted in secondary level hospital in Laksham Upazilla. A questionnaire was designed based on the literature review, standardized by a small-scale pilot study on 31 patients. The questionnaire contained questions on 42 items that measure eight dimensions on patient satisfaction. SPSS is used to measure the result. **Results:** The dimensions i.e. information, exception and billing have influence on satisfaction patient based on various hospitals. **Conclusions:** The current study is specifically useful for the assessment of the Bangladeshi health care system because the system is commonly allied with a lack of patient/ customer satisfaction especially for private hospitals. The purpose of the study is an attempt to assess the level of satisfaction among seven hospitals from the perspective of different dimensions. The findings of the survey are quite helpful if they are transformed into actions for improving the quality of health care.

Keywords: Patients satisfaction; dimensions of services; comparative service quality.

Introduction

Healthcare system is not structured in rural areas in Bangladesh. So far physicians are pursuing quality in diagnosis basis treatment but rural areas often do not have proper healthcare facilities like urban areas. Although government is working to improve the healthcare system and set up many government-funded hospitals in rural areas that provide cheaper treatment for rural citizens. But these hospitals are often poorly funded, understaffed and overly crowded due to a limited number of healthcare options. In that case, privately owned hospitals have greater importance on healthcare system in Bangladesh. According to Flower of Service concept the interaction between supplementary services existing in the form of facilitating services and enhancing services within the core product. The concept presents the facilitating services and enhancing services within the scope of their interaction to complete service marketing goals by Lovelock & Wirtz (2011). This study assesses the private Hospitals of Laksham Upazilla, Cumilla, District of Bangladesh. The current study is specifically useful for the assessment of the Bangladeshi health care system because the system is commonly allied with a lack of patient/ customer satisfaction especially for private hospitals.

Patients satisfaction

Previous studies in health care have focused upon analysis of customer satisfaction surveys to assist management in the application of service models to improve service delivery for patients as well as operational efficiency (Descombe and Eccles 1998; Fottler et al. 2006; Randall and Senior 1994). Yet it is suggested that patients are often more concerned with how they are spoken to and communicated with rather than with elements of their medical care (Patten 1994). Add to this fact, it is reported that more than one-third of the patients are dissatisfied with the service they receive from different health care facilities (Biresaw H et. al. 2021). Patients do not only evaluate their clinical results but instead assess and remember hospital experiences as a whole rather than as separate services (Kelly et al., 2016; Poksinska et, al. 2017). Service providers can significantly enhance the quality of patients' experiences by expressing positive attitudes. Patients' satisfaction levels are influenced by health professionals' emotional support and in-person interactions. However, the way that each patient gets pleasure from the same hospital experiences is always different since satisfaction has been shown not to be a

universal phenomenon. The hospital staff's perceptions of patient satisfaction thus may or may not correspond to the reality of each situation (Hartwell et al., 2006).

Literature Review:

Naipaul & Parsa (2000), investigated Supplementary services as a differentiation strategy of Lovelock's model on tourism. This paper contends that supplementary services add value to core services, which gives firms competitive advantage over their competition. They were to rate the host-city on several criteria including overall satisfaction, meeting their expectations, and satisfaction with the hospitality and non-hospitality services.

Sandro Magaldi and Edson Crescitelli (2008) discussed on their research about the importance of supplementary services in the service sector on customer satisfaction. It was investigated with a theoretical review about rendering services and customer satisfaction. Results obtained indicated that the influence of supplementary services is strongly related to overall customer satisfaction with the service rendered by any institution.

Zaim, Bayyurt and Zaim (2010) analyzed the service quality and determinants of customer satisfaction in Turkish hospitals. To gather the idea of the influence of quality of service on the customer satisfaction within private hospitals, data for this study was gathered using a questionnaire that was distributed to 400 patients in 12 hospitals. Tangibility, reliability, courtesy and empathy were important criteria for customer satisfaction in this study, the responsiveness, and assurance factors were not identified as direct determinants of service quality.

Clara Mayer (2011) found in the research how strong a defect of the core or supplementary services influences customer satisfaction. This question is essential to be answered for hospitality managers in order to know which parts of the service are most important to the customers with the aim of improving the offering and consequently increasing customer satisfaction. Several services including the aspects of 'flower of service' which offers a detailed explanation of the core and supplementary services.

Nazia S, Ekta Sarda (2014) studies analytically about online appointment scheduling system for hospitals. Many factors affect the performance of appointment systems which include arrival and service time variability, patient and provider preferences etc. Thus, a proper scheduling system has to developed by considering all these factors which will increase patient satisfaction. This paper focuses on detailed study of online appointment scheduling system with architecture and merits. The finding of the study is that, compared to the usual queuing method, the web-based appointment system could significantly increase patient's satisfaction with registration and reduce total waiting time effectively.

Tarabieh & Ahmad (2015) performed pilot survey in their study about the synergistic impact of customer orientation and supplementary services on competitive advantage and organizational performance. It is claimed on the study that banks can enhance their competitive advantage through using additional resources and providing supplementary services together with customer orientation.

Kabatooro et. Al. (2016), investigated on patient satisfaction with medical consultations among adults attending Mulago hospital assessment center. This was a quantitative descriptive cross-sectional study where 384 respondents were interviewed using a structured questionnaire adapted from the Medical Interview Satisfaction Scale (MISS-21) with a four-point Likert scale. Patient satisfaction was measured using four dimensions namely: information provision, clinicians' communication skills, perceived consulting time and patient's confidence in the clinician. Respondents' mean scores were categorized as satisfied or dissatisfied. Multivariate linear regression analysis assessed the effect of independent variables on the regression factor score of the dependent variable. Results Of the sample, 53.9% were satisfied with the medical consultation. Being older, employed, living further away from the health centre and frequently visiting the centre were positively associated with patient satisfaction.

Rosalind Kelly, Erwin Losekoot and Valerie A. Wright-St Clair (2016) conducted a study regarding hospitality in hospitals which expressed the importance about caring about the patient. This New Zealand study explored the lived experience of hospitality among adults during their recent hospital stay. A hermeneutic phenomenological methodology was used to design and conduct the study. Data were gathered using semi-structured, conversational-

style individual interviews. Participant-validated, coherent stories were drawn from the transcripts and analyzed. The findings revealed that, the often small yet heartfelt acts of hospitality that a health care professional will impact so completely the lived experience of a surgical patient, evoking feelings of being cared about.

Amir Ahmadi-Javid, et. al. (2017) investigated on the outpatient appointment systems in healthcare from the review of optimization studies. This research aims to provide a study of the major causes of patient's length of time for medical treatment in an outpatient clinic and also provide recommendation on the best strategy.

Prasad et.al. (2018) analyzed implementation of doctor's appointment application for life care hospital. This article is about using the android application & web for betterment of patient. The main purpose is to provide patient a hassle-free environment and comfort for the patient while visiting the doctor. As the Patient have to wait for a long time for appointments, even if they get the appointment, sometimes the doctor does not visit the hospital and the patient leaves without visiting and the appointment gets canceled. By using technologies like android & web-based application the issue will resolve and the patients get timely updated. Patients can book appointment from anywhere anytime and it will save patients precious time.

Tareq N. Hashemhe (2018) analyzed the flower of service concept and its influence on the customer satisfaction in Jordanian private hospitals sector. For the study, the sample consisted of (431) individuals who were getting services from private hospitals. A self-administered questionnaire was distributed on the sample asking about the service quality within the private hospitals in Jordan based on the dimensions of 'flower of service' and linear regression was used to test hypothesis. The results of the study indicated that the dimensions of the flower of services which included (Information, Order Taking, Consultation, Hospitality, Billing Payment) appeared to be influential on the satisfaction of customers while two dimensions were found (Exception, Safe Keeping) to be not influential.

Wageeh Nafei and Wessam Hemdan Ahmed EL-Horany (2021) focused on understanding the necessity of Supplementary Services (SS) and its role in enhancing Customer-Based Brand Equity (CBBE) in Five-stars Hotels. Here, field study dealt with 384 customers who benefit from the services provided in the five-star hotels, hence the survey responses were 78%. The statistical analysis was carried out by several analytical analysis like means of a number of statistical methods and tests, such as the confirmatory factor analysis method, multiple regression and correlation analysis and one-way ANOVA method. The research reached to the results that there is a positive statistically significant relationship between the dimensions of SS (information, order taking, billing, payment, consultation, hospitality, safe keeping and exception) and CBBE.

Materials and Methods

Materials and Methods

A study was conducted in secondary level hospital in Laksham Upazilla. A questionnaire was designed based on the literature review, standardized by a small-scale pilot study on 31 patients. The questionnaire contained questions on 42 items that measure eight dimensions on patient satisfaction. The well-recognized dimensions are information, appointment, hospitality, consultation, safekeeping, exceptions, billing and payment. The questionnaire consisted of five-point Likert scale items. Responses to the variables in the questionnaires were assigned a score of 1 for 'strongly disagree', 2 for 'disagree', 3 for 'neutral', 4 for 'agree' and 5 for 'strongly agree'.

Sample

Among the 298 sample size the total inpatient was 118 and outpatient was 180. Permission from the administrative office and the manager was obtained before the survey was carried out in the hospital. Informed verbal consent was taken from all the participants before the start of the interview. Doctors and the supporting staffs were largely kept unaware of the survey, except in unavoidable circumstances, to avoid the bias in their behavior with the patients.

Analysis

The surveyed questionnaires were collected and coded in the MS Excel database and analyzed using SPSS version 20. Descriptive statistics were performed on demographic variables. The satisfaction score was expressed as the mean and standard deviation for overall satisfaction with the health services.

Results

Here, in the figure 1, among 298 patients 90 are from Laksham General Hospital, 21 are from Unity trauma & General Hospital, 58 are from Momotamoyee Hospital Ltd, 46 are from Amena Medical Hospital, 23 are from Laksham Medical Center, 43 are from Fair Health Complex & Hospital, 17 are from Ma O Shishu Hospital. Mean, Standard Deviation, F and Significance Value are shown in the table. The figure is constructed by the table 1 (a). The following 42 items are tested for measuring satisfaction of patients in hospitals:

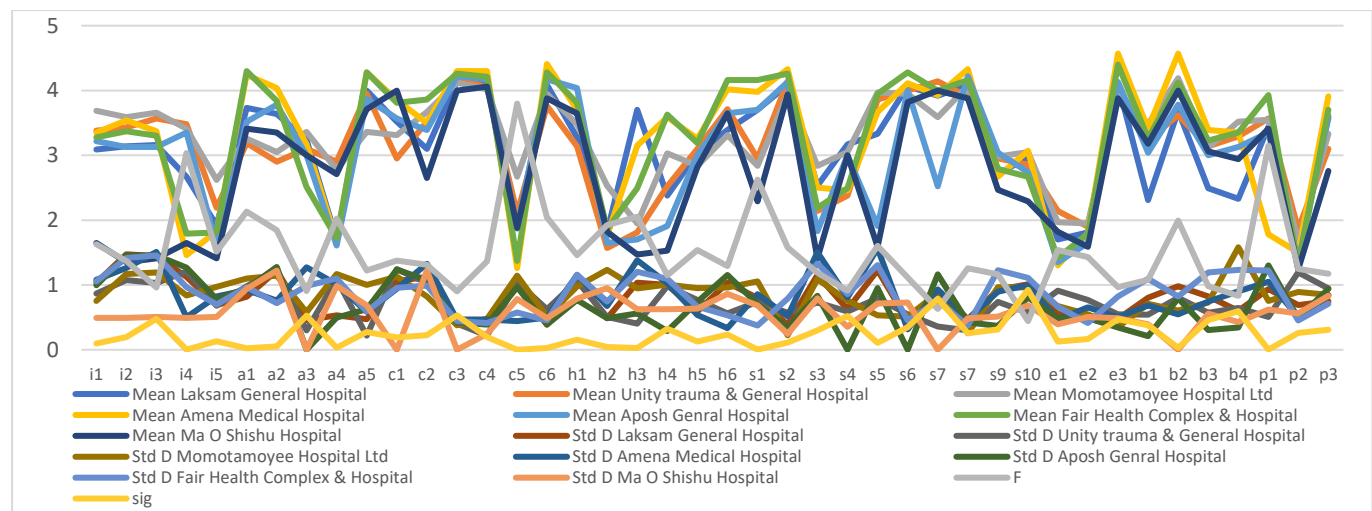


Figure 1: The statements affecting to patients' satisfaction from the perspective of hospitals.

The figure 1 shows the statements affecting to patients' satisfaction from the perspective of hospitals. Codes are used to measure the value of mean and standard deviation in this line graph. Further analysis is procced by the table 1 to show the overall satisfaction regarding various hospitals.

The above figure exposes different color to indicate the mean, standard deviation, t and P value based on different hospitals. Here, most satisfied patients are from Laksham general Hospital. The mean, t and significance value of different hospitals are same.

Patients satisfaction of different dimensions according to selected hospitals

	Hospitals	N	Mean	Std. Deviation	F	Sig.
Information	Laksam General Hospital	90	2.80	.919	13.759	.000
	Unity trauma & General Hospital	21	3.21	.722		
	Momotamoyee Hospital Ltd	58	3.39	.794		
	Amena Medical Hospital	46	2.71	.668		
	Aposh Genral Hospital	23	2.89	.979		
	Fair Health Complex & Hospital	43	2.71	.750		
	Ma O Shishu Hospital	17	1.49	.246		

	Total	298	2.85	.900		
Appointment	Laksam General Hospital	90	3.26	.423	1.895	.081
	Unity trauma & General Hospital	21	3.21	.523		
	Momotamoyee Hospital Ltd	58	3.16	.824		
	Amena Medical Hospital	46	3.48	.419		
	Aposh Genral Hospital	23	3.16	.508		
	Fair Health Complex & Hospital	43	3.33	.423		
	Ma O Shishu Hospital	17	3.24	.460		
	Total	298	3.27	.544		
Consultation	Laksam General Hospital	90	3.48	.314	3.047	.007
	Unity trauma & General Hospital	21	3.43	.386		
	Momotamoyee Hospital Ltd	58	3.62	.335		
	Amena Medical Hospital	46	3.61	.254		
	Aposh Genral Hospital	23	3.56	.358		
	Fair Health Complex & Hospital	43	3.63	.305		
	Ma O Shishu Hospital	17	3.41	.230		
	Total	298	3.55	.320		
Hospitality	Laksam General Hospital	90	2.93	.404	14.257	.001
	Unity trauma & General Hospital	21	2.64	.370		
	Momotamoyee Hospital Ltd	58	2.86	.507		
	Amena Medical Hospital	46	3.25	.359		
	Aposh Genral Hospital	23	2.66	.360		
	Fair Health Complex & Hospital	43	3.19	.389		
	Ma O Shishu Hospital	17	2.49	.384		
	Total	298	2.94	.464		
Safekeeping	Laksam General Hospital	90	3.46	.284	14.018	.000
	Unity trauma & General Hospital	21	3.33	.183		
	Momotamoyee Hospital Ltd	58	3.43	.449		
	Amena Medical Hospital	46	3.50	.272		
	Aposh Genral Hospital	23	3.11	.202		
	Fair Health Complex & Hospital	43	3.50	.305		
	Ma O Shishu Hospital	17	2.87	.149		
	Total	298	3.40	.348		
Exceptions	Laksam General Hospital	90	2.54	.255	2.905	.009

	Unity trauma & General Hospital	21	2.68	.554		
	Momotamoyee Hospital Ltd	58	2.63	.317		
	Amena Medical Hospital	46	2.56	.346		
	Aposh Genral Hospital	23	2.38	.233		
	Fair Health Complex & Hospital	43	2.53	.311		
	Ma O Shishu Hospital	17	2.43	.199		
	Total	298	2.55	.321		
Billing	Laksam General Hospital	90	2.71	.541	24.250	.000
	Unity trauma & General Hospital	21	3.32	.337		
	Momotamoyee Hospital Ltd	58	3.58	.598		
	Amena Medical Hospital	46	3.68	.502		
	Aposh Genral Hospital	23	3.24	.287		
	Fair Health Complex & Hospital	43	3.49	.777		
	Ma O Shishu Hospital	17	3.29	.202		
	Total	298	3.26	.666		
Payment	Laksam General Hospital	90	2.83	.424	9.291	.000
	Unity trauma & General Hospital	21	2.84	.442		
	Momotamoyee Hospital Ltd	58	2.84	.402		
	Amena Medical Hospital	46	2.40	.377		
	Aposh Genral Hospital	23	2.77	.517		
	Fair Health Complex & Hospital	43	2.97	.492		
	Ma O Shishu Hospital	17	2.47	.355		
	Total	298	2.76	.464		

Table 1 (a): Patient's satisfaction on different hospitals are influenced by various dimensions.

From the perspective of different statements, patient's satisfaction of several hospitals is influenced by the dimensions of flower of services. Here, in the first dimension is Information, the value is $F=13.759$, $\text{Sig}=.00$ in Momotamoyee Hospital Ltd and it has the highest significance (Mean=3.39, S.D.=.714). On the second dimension, Appointment has the value is $F=1.895$, $\text{Sig}=.08$ in Amena Medical Hospital (Mean=3.48, S.D.=.419). The third-dimension consultation has the value is $F=.047$, $\text{Sig}=.00$ in Fair Health Complex & Hospital and it has the highest significance (Mean=3.63, S.D.=.305). The fourth dimension is Hospitality which has the value is $F=14.257$, $\text{Sig}=.00$ in Amena Medical Hospital and it has the highest significance (Mean=3.25, S.D.=.359). The fifth-dimension safekeeping has the value is $F=14.018$, $\text{Sig}=.00$ in Amena Medical Hospital and Fair Health Complex & Hospital and it has the highest significance (Mean=3.50, S.D.=.272) and (Mean=3.50, S.D.=.305) respectively. The sixth-dimension exceptions bear the value $F=2.905$, $\text{Sig}=.00$ in Unity trauma & General Hospital and it has the highest significance (Mean=2.68, S.D.=.554). The seventh-dimension billing has the value is $F=24.250$, $\text{Sig}=.00$ in Amena Medical Hospital and it has the highest significance (Mean=3.68, S.D.=.502). The eight-dimension payment has the value is $F=9.291$, $\text{Sig}=.00$ in Fair Health Complex & Hospital and it has the highest significance (Mean= 3.19, S.D.=.346). The table represents the satisfaction of patients across hospitals by the significant responses from almost all of the dimensions except 'Appointment'.

	Hospitals	N	Mean	Std. Deviation	F	Sig.
OVERALL SATISFACTION	Laksham General Hospital	90	3.00	.176	15.610	.00
	Unity trauma & General Hospital	21	3.08	.139		
	Momotamoyee Hospital Ltd	58	3.19	.346		
	Amena Medical Hospital	46	3.15	.162		
	Laksham Medical Center	23	2.97	.201		
	Fair Health Complex	43	3.17	.184		
	Ma & Hospital O Shishu Hospital	17	2.71	.127		

Table (b): Patients satisfaction of several hospitals are influenced by the various dimensions

Here, above table is expressing the overall satisfaction based on selected hospitals which are named as Laksham General Hospital (Mean=3, S.D. = .176), Unity trauma & General Hospital (Mean=3.08, S.D.=.139), Momotamoyee Hospital Ltd (Mean =3.19, S.D.=.346), Amena Medical Hospital (Mean=3.15, S.D.=.162), Laksham Medical Center (Mean=2.97, S.D.=.201), Fair Health Complex (Mean=3.17, S.D.=.184), Ma & Hospital O Shishu Hospital (Mean=2.71, S.D.=.127), with the value, F= 15.610 and sig. = .00. Here, it can be inferred that, Momotamoyee hospital has highest significant impact on overall Patient's satisfaction.

Findings and Conclusion:

The dimensions i.e. have influence on satisfaction of patient in various selected hospitals. To develop the satisfaction of patients; hospitals should develop notification of information system about services, improve appointment and room reservation system, proper parking facilities and prayer room, hygiene environment, impoverished digitalization system, and good consultation from doctors, nurses and other technicians.

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