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Measuring Patient Satisfaction Level of Out-Patient Department (OPD): A Study on Square Hospital Limited

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Abstract

One of the fastest growing industries in the service sector is the health-care industry. In Bangladesh Square Hospital Ltd. is one of the best and reliable names in the health care industry. Gap between services provided by different functional units and services received by different customers of out-patient department (OPD) has created opportunity for this study. Objective of this study was to measure customer satisfaction level of out-patient department (OPD) of private healthcare industry of Bangladesh by analyzing scenario of Square Hospital Limited. Overall scenario of out-patient department (OPD) shows tha, satisfaction is at more than average level but less than satisfactory level. That means, condition is not at satisfactory level but position can be improved. Out of six functional units three (registration desk, waiting room and doctors' service) are found at satisfactory or little bit better than satisfactory level. But other three units (appointment desk, customer service and nurse station) are found at between average satisfaction and dissatisfaction level.

Key Words: Patient/customer satisfaction, Out-Patient Department (OPD)

1.0 Introduction

Service is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything (Kotler and Armstron, 2010). Health-care industry is one of the fastest growing industries under service sector. The rapid growth of this sector has been accompanied by dramatic changes in the environment, challenging health care managers and administrators to find alternative ways of remaining viable. Many providers, with help from the research community, are beginning to realize that providing customer satisfaction is a key element of strategy and a crucial determinant of long-term viability and success. Information about patient satisfaction should be as indispensable to assessments of quality as to the design and management of health care systems. Square Hospital is one of the best hospitals in Bangladesh. It has started its operation in 2006 to provide the best quality medical service equipped with state of the art medical equipments and best physicians (Source: Findings from discussions with employees of Square Hospital).

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The out-patient department (OPD) section of a hospital is the gateway of the organization. It introduces the hospital's different kinds of services to the patients. Therefore, patient's satisfaction at this section is very crucial for the hospital to grow. Service quality can be used as a strategic differentiation weapon to build a distinctive advantage which competitors would find difficult to copy. To achieve service excellence, hospitals must strive for "zero defections", retaining every customer that the company can profitably serve. "Zero defections" require continuous efforts to improve the quality of the service delivery system. Furthermore, quality does not improve unless it is measured and quality always is dependent on some drivers. There are some drivers of customer satisfaction of this department also. There are complains that the customers are not satisfied with the overall service quality of the out-patient department of the hospital, irrespective of the fact that the out-patient department of this hospital is one of the modernized department in the health care industry. In an attempt to find out the reasons of above gap this research has been conducted.

In the healthcare industry, hospitals provide the same types of services, but they do not provide the same quality of services. Furthermore, consumers today are more aware of alternatives on offer and rising standards of service have increased their expectations. They are also becoming increasingly critical of the quality of service they experience. In all advanced nations the service sector has become the largest element of the economy and the significance of services in modern society is indisputable. Services account for a very large part of economic activity and the service sector constantly increases its share of gross domestic product (GDP), employment, and international trade. Services account for roughly two-thirds of GDP in developed countries and almost one-half of GDP in developing countries (Lowendahl, 2000; and Lovelock and Wright, 2002; Guidelines..., 1999).

The hospital is an important place for medical service. For this reason the country needs more medical colleges to create doctors. The doctor patient's ratio is still far from adequate in this country of 140 million people. Along with the Government initiative private entrepreneurs are coming forward in the health sector establishing Medical Colleges. The private sector has already made commendable progress in this field. However, the health care system still lacks a unified process for assessing and measuring the various elements of quality (Moss and Garside, 1995; Berwyk, 1989; Blumenthal, 1995; Blumenthal et. al., 1998; Turner, 1996). A variety of models have been used to describe how patients' satisfaction with medical treatment impacts their health-related decision-making (Gelber et al.,1989; Gopalakrishna and Mummalaneni,1992; Greiner and Addy, 1996; Llewellyn-Thomas, 1997 and Schommer and Kucukarslan,1997). However, the health care system still lacks a unified process for assessing and measuring the various elements of quality (Moss and Garside, 1995; Berwyk, 1989; Blumenthal, 1995; Blumenthal et. al., 1998; Turner, 1996).

Anderson and Zwelling (1996) advocate that health care institutions actively evaluate the effectiveness of their technical initiatives to determine the point of maximum return. Beyond this, if an intervention yields no further benefit, the resources dedicated to it could be freed up to focus on functional quality improvements. They advocate the integration of measurable and quantifiable dimensions—such as clinical outcomes—with functional dimensions such as patient satisfaction (Peyrot et al., 1993). O'Brien and Hughes (1991) calls for an expansion of the physician's central role in delivering, assessing and improving the quality of medical care to include a role as patient advocate (Taylor, 1994; Woodside et al., 1989, Jun, 1998; Starfeld, 1998; Issel and Kahn, 1998).

Within the health care industry, competitive advantage is best attained through service quality and customer satisfaction in the minds of customers (Taylor, 1994). Woodside, et al. (1989) provided support for service quality influencing service provider choice. Clearly, there are many reasons why quality measurement is important. The terms quality and satisfaction are sometimes used interchangeably. While they are closely related, there are differences worth noting. (Taylor, 1994). Woodside et al. (1989). Jun (1998) recommends that family members should be updated frequently on the status of patient/relative while treatment is on-going.

There are many reasons why health care quality is important. Providers consider increasing quality in health care to be "the right thing to do". The revival of customer service occurred, in part, because service quality, as opposed to cost, distinguishes among health care institutions (Hudson, 1998). Secondly, involvement and satisfaction of the customer affect behavior. Legnick-Hall (1996) developed a conceptual model of the consumer contribution to quality, which includes a description of the relationship of perceived quality to satisfaction, and the motivation to change behavior. This is of considerable importance if you consider the relationship between patient satisfaction and compliance with medical treatment plans (Oswald et al., 1998; Lytle and Mokwa, 1992; Steffen et al., 1996; Arnetz and Arnetz, 1996; Harris, et. al., 1995; Salimbene, 1999; Moore and Schlegelmilch, 1994; Berry et. al., 1988; Mittal and Baldasare, 1996; Zifko-Baliga and Kampf, 1997; Dube and Menon; 1998; Shetty, 1987;). The literature on satisfaction, particularly patient satisfaction, shows that satisfaction ratings are derived from satisfaction with various components of their care, and that consumers are able to make summary judgments regarding their care (Oliver, 1981, 1993; Berry et al., 1988; Rodwin, 1994; Wensing et al., 1994; Woodside et al., 1989).

2.0 Related Constructs of This Study

2.1 Customer satisfaction

Customer satisfaction is the extent to which a product's perceived performance matches a buyer's expectations. If the product's performance falls short of expectations, the buyer is dissatisfied. If performance matches or exceeds expectations, the buyer is satisfied or delighted (Kotler and Keller, 2005).

2.2 OPD of Square Hospital Limited

Square Hospital is one of the best hospitals in Bangladesh. The out-patient department (OPD) section of a hospital is the gateway of the organization. It introduces the hospital's different kinds of services to the patients. The out-patient department of the hospital can serve 1200 patients per day through 60 examination rooms. To ensure optimum healthcare-hospitality, the patients are closely monitored in their waiting times in out-patient clinics, emergency and admissions. Different facilities, i.e., 60 fullyequipped medical consultation & exam rooms, 100+ foreign-trained medical & nursing specialists, and open daily - convenient early morning / afternoon / late evening hours are available at this unit. Different types of medical specialties, i.e., internal medicine, cardiology, pulmonary medicine, gastroenterology, pediatrics & neonatology, neurology, hematology, nephrology, dermatology, rheumatology, physical & rehabilitation, medicine, infectious diseases, geriatric medicine, diagnostic & interventional radiology, clinical pathology, medical oncology, general surgery, cardiovascular & thoracic neonatal pediatric obstetrics surgery, surgery, & gynecology, otolaryngology(ear/nose/throat), general & cardiac anesthesiology, minimal invasive surgery (MIS), neurosurgery, orthopedic & joint surgery, hepato biliary surgery, colorectal surgery, urology, surgical oncology, dental & maxillofacial surgery, ophthalmology, plastic surgery, and emergency medicine & trauma surgery are also available.

3.0 Objectives of the Study

The broad objective of the study was to measure customer satisfaction level of outpatient department (OPD) of private healthcare industry of Bangladesh by analyzing scenario of Square Hospital Limited.

More specifically the study has following objectives:

- To find out different drivers of customer satisfaction of out-patient department (OPD) of Square Hospital Limited.
- To set parameters to measure customer satisfaction at each stage.
- To measure customer satisfaction level of each driver by the set parameters.

3.0 Research Methods

3.1 Manipulation of Independent Variables

It is a case based study and **Square Hospital Limited** was selected based on its importance in the private healthcare industry of Bangladesh. The study was done only on out-patient department (OPD) of the hospital. The out-patient department is divided into

six small functional units. These functional units are considered as customer satisfaction drivers of OPD of the hospital as well as healthcare industry, and are as follows:

- Appointment Desk
- Customer Services
- Registration Desk
- Nurse Station
- Waiting Room
- Doctors' Service

Under each driver some items were developed. A thirty-two items under six (6) drivers were generated. 100 patients were drawn randomly from out-patient department (OPD) to generalize the perception of the patients. Among 100 samples all were 25 and above years old and experienced to take services from those functional units. Pre-tested questionnaire was designed in keeping with the view of the objective of the research. A 5-point Likert Scale was used for the scoring system with one (1) representing least satisfaction and five (5) representing most satisfaction.

3.2 Data Collection Methods

This study was conducted on the basis of primary as well as secondary data. Primary data were collected from patients of out-patient department (OPD) and employees of Square Hospital Limited. The methods for collecting primary data were survey, personal interview, conversation and observation. Secondary data were collected through different reports, papers and prospectus, relevant journals, dailies, periodicals, related research works, relevant books and websites.

3.3 Data Presentation and Analysis

Data analysis and presentation were performed in descriptive statistics by using SPSS 12 Software.

4.0 Discussion of the Findings

As out-patient department is considered as the gate way of the hospital so it should provide quality service to impress its customers and help them to understand the money they are spending is worthy. In out-patient department a patient comes then get into the hospital for consulting with the concerned doctor. Following flow chart shows general process of out-patient department: In almost every hospital above flow chart is followed. But in the Square Hospital tasks of the out-patient department are performed through six different stages. Patients' perceptions toward the performance of these six stages are discussed here.

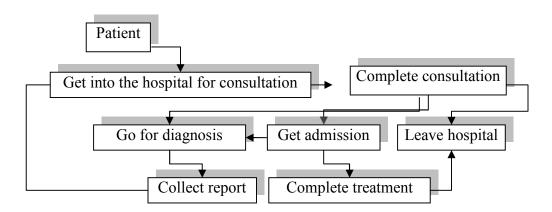


Figure 1: General process flow of OPD

4.1 Appointment Desk Unit

The OPD process flow starts when a patient calls at the appointment desk or walk in to the hospital for appointment of certain specialist. The appointment desk then checks the availability of the doctor and informs the patient about the time available. The appointment desk sometimes suggests the time for appointment and sometimes the patient chooses himself/herself to suit his/her convenience. After confirmation from the patient the appointment desk records the appointment time and reconfirms the timing with the patient. Prior to appointment time the appointment desk reminds the patient about the appointment by calling to them.

Table 1: Customer Satisfaction Level on Appointment Desk

Variables	Number of Sample	Minimum	Maximum	Mean	Std. Deviation	Average mean value
Promptness of services	100	1	5	2.53	1.527	
Accuracy of information	100	1	5	3.10	1.528	
Services availability	100	0	5	2.95	1.635	2.72
Attitude to customers	100	0	5	2.09	1.615	
Complexity to get appointment	100	0	5	2.91	1.436	

Above table shows the scenario of customer satisfaction level of appointment desk. Five variables were considered as parameters to measure the satisfaction level at this stage. Out of five variables one variable shows satisfaction at average level (3.1 out of 5) and rest of the variables show satisfaction at below average level (2.09 to 2.95). And average satisfaction to different items of this driver is also at below average level but close to that level (as mean value is 2.72). That means, customers are dissatisfied at this functional unit. The study finds some reasons, i.e., weaknesses in English communication skill, lacking in providing correct information, appointment schedules are not strictly maintained and decoration is not attractive enough to visualize the quality of the hospital, for the above dissatisfaction.

4.2 Customer Service Unit

100

toward

request

If the patient is new, he/she arrives at customer care service for direction. The customer service then directs the patient to the registration desk for registration. In addition to it, if the customer has any query about services the customer care service provides it to the customer. Moreover, if any seriously ill patient arrives, the customer service provides the initial support.

Variables	Number of Sample	Minimum	Maximum	Mean	Std. Deviation	Average mean value
Initial support for the patients	100	1	5	2.20	1.576	
Guide toward registration desk	100	2	5	4.02	.995	
Informative brochures	100	0	5	2.33	1.356	2.65
Friendly and courteous behavior	100	1	5	2.44	1.678	
Promptness						

Table 2: Customer Satisfaction Level on Customer Service

Above table shows the scenario of customer satisfaction level of customer service unit. Five variables were considered as parameters to measure the satisfaction level at this stage. Out of five variables one variable shows satisfaction at satisfactory level (4.02 out of 5) and rest of the variables show satisfaction at below average level (2.2 to 2.44). And

5

2.26

1.606

1

average satisfaction to different items of this driver is also at below average level (2.65). That means, customers are dissatisfied with this functional unit. Reasons behind the dissatisfaction include: a) customers not guided accurately, b) improper respect shown at the time of customer dealing, c) tendency of avoiding responsibilities of the employees, d) floor attendants not equipped with up-to-date information to guide patients, and e) attacking approach of attendants of some floors.

4.3 Registration Desk Unit

After arriving at the registration desk, the patients are asked to fill up a form with basic information for registration. The personnel at the desk help the patients to fill up the form. After filling up the form, the patients are guided to the accounts section of the registration desk for payment of initial registration fee. After that, the patients are guided to the concerned nurse unit. Following table shows the scenario of customer satisfaction level of the registration desk. Five variables were considered as parameters to measure the satisfaction level at this stage. Out of five variables two variables show satisfaction at close to satisfactory level (3.75 & 3.84) and rest of the variables show satisfaction at more than satisfactory level (4.38 to 4.6). And average satisfaction to different items of this driver is also at more than satisfactory level (4.2). That means, customers are satisfied at this functional unit because overall service quality is good but cost of registration is very high, and employees are often found gossiping whereas patients found waiting in the queues.

Average Std. Number of Variables Minimum Maximum Mean mean **Deviation** Sample value Served as "first 100 1 5 4.45 1.067 come first serve" Consistency of 100 0 5 3.75 1.839 registration fees Guide properly 4.20 100 0 5 4.38 1.042 toward nurse unit Attitude to 100 3 5 4.60 .725 customers 5 100 1.070 Fee was too high 1 3.84

Table 3: Customer Satisfaction Level on Registration Desk

4.4 Nurse Station Unit

After arriving at the concerned nurse station, nurses collect basic information of the patients' health. The nurses measure weight, height, blood pressure, temperature of patients and prepare the files of the patients for the doctors. The patients then wait for the call from the doctors. After consulting with doctors, the patients get back to nurse

station. The nurses scan the prescription and other documents into the database and help the patients if they have any questions regarding prescription. If the doctors ask the patient to do certain tests, the patients might go to laboratory for testing or may do it from outside. If they wish to do it in the hospital, the customer service leads them to the lab.

Variables	Number of Sample	Minimum	Maximum	Mean	Std. Deviation	Average mean value
Service was prompt	100	1	5	2.36	1.605	
Diagnose patients with proper care	100	2	5	3.86	.853	
Diagnosis equipments are	100	2	5	4.07	1.047	2.93

5

5

2.07

2.30

1.430

1.580

1

1

Table 4: Customer Satisfaction Level on Nurse Station

Above table shows the scenario of customer satisfaction level on nurse station. Five variables were considered as parameters to measure the satisfaction level at this stage. Out of five variables one variable shows satisfaction at satisfactory level (4.07) and another variable shows satisfaction at close to satisfactory level (3.86). Rest of the variables show satisfaction at below average level (2.07 to 2.36). And average satisfaction to different items of this driver is also at below average level (2.93). Variables behind dissatisfaction are: a) nurse stations are not well indicated (like nurse station 1, nurse station 2 etc.), and b) some nurses are inexperienced.

4.5 Waiting Room Unit

modern, hygienic Help patients to

understand reports
Friendly and

courteous behavior

100

100

After completing all the necessary checkups patients wait for the call of the concerned doctor. The waiting room is well equipped with all kinds of recreation facilities. Here patients can pass their time by watching television, reading news papers/magazines. There are special arrangements for sick people, who are unable to walk or seat. Following table shows the scenario of customer satisfaction level of waiting room. Six variables were considered as parameters to measure the satisfaction level at this stage. Out of six variables two variables show satisfaction at close to satisfactory level (3.39 & 3.75) and rest of the variables show satisfaction at more than satisfactory level (4.41 to 4.82). And average satisfaction to different items of this driver is also at little bit more than satisfactory level (4.29). That means, customers are satisfied with this functional unit.

Table 5: Customer Satisfaction Level on Waiting Room

Variables	Number of Sample	Minimum	Maximum	Mean	Std. Deviation	Average mean value
Rooms are spacious	100	3	5	4.82	.458	
Well ventilated	100	3	5	4.74	.562	
Have recreation facilities	100	2	5	4.41	.854	
Arrangements for very sick person	100	1	5	3.39	1.853	4.29
Very clean and hygienic	100	1	5	4.62	.814	
Have to wait for a long time	100	1	5	3.75	1.321	

Factors behind the lack of full satisfaction of patients are: a) magazines and newspapers are not available in the waiting rooms, b) waiting room of surgery department is very congested, and c) lighting is not OK at cardiac OPD area.

4.6 Doctors' Service Unit

Waiting ends when the concerned doctor calls the patient into his/her cabin for consultation and treatment. At this stage the doctor gives necessary suggestions to the patient regarding problem.

Table 6: Customer Satisfaction Level on Doctors' Service

Variables	Number of Sample	Minimum	Maximum	Mean	Std. Deviation	Average mean value
Give patients adequate time	100	1	5	4.45	.892	
Listen to patients with attention	100	1	5	4.23	.952	
Doctors explain health condition	100	2	5	4.24	.806	
Treated with dignity and respect	100	2	5	4.29	.935	4.31
Doctors have wide knowledge	100	2	5	4.31	.748	
Doctors behave friendly	100	1	5	4.34	.831	

Above table shows the scenario of customer satisfaction level on doctors' service. Six variables were considered as parameters to measure the satisfaction level at this stage. Out of six variables all the variables show satisfaction at more than satisfactory level (4.23 to 4.45) Average satisfaction to different items of this driver is also at more than satisfactory level (4.31) and it shows highest level of satisfaction among drivers. That means, customers are satisfied with this functional unit. Factors behind the lack of full satisfaction of patients are: a) sometimes not served as first come first serve basis, b) sometimes doctors do not give full attention to patients (specially medicine department), and c) proper schedule is not maintained at pediatric clinic.

4.7 Overall Scenario of Customer Satisfaction of Out-patient Department

Following table shows the overall scenario of customer satisfaction of OPD. Average mean value (3.52) of all the variables (32) under six drivers says that customers' satisfaction is not at satisfactory level. It is more than average but below satisfactory level. That means, at present condition is not that much bad but there is much opportunity to improve the performance of the department.

Table 7: Overall Customer Satisfaction Level on OPD

Number of drivers	Variables	Number of Sample	Average mean value of all the drivers & items	
6	32	100	3.52	

5. Conclusion

As people are being more conscious about health, importance of health-care industry is also increasing. Many providers, with help from the research community, are beginning to realize that providing customer satisfaction is a key element of strategy and a crucial determinant of long-term viability and success. Service marketing is different from product marketing. As it is intangible, it is hard to realize about service quality before consumption. So, to set strategy for service marketing as well as healthcare industry is very tough. Square Hospital is one of the best hospitals in Bangladesh. The out-patient department (OPD) of a hospital is the gateway of the organization. It introduces the hospital's different kinds of services to the patients. Therefore, patients' satisfaction at this section is very crucial for the hospital to grow. For setting proper strategy for customer satisfaction of OPD of any hospital, at first we will have to know about drivers of that satisfaction and reliability of those drivers. Square's also has some considerable drivers for OPD, i.e., appointment desk, customer service, registration desk, nurse station, waiting room, and doctors' service. There were complains that the customers of the hospital are not satisfied with the overall service quality of the out-patient department of the hospital, irrespective of the fact that the out-patient department of this hospital is one of the modernized departments in the health care industry. To find out satisfaction level of the drivers or the items of the drivers, above research was done. Three drivers of customer satisfaction magnitude from the benchmark but not significantly. So, nothing to be worried about these three drivers but concerned authority will have to take care to improve the position. Other three drivers significantly magnitude from the benchmark and concerned authority will have to give immediate attention to improve the position of these stages as it wants to maintain its position as one of the leading companies under healthcare industry of Bangladesh, otherwise they will fall in danger in future. Most of the organizations under this industry are suffering from this OPD problems. As customers have huge opportunity to switch from one company to another because of emergence of many local and international players, companies should increase customer satisfaction level as early as possible. If the satisfaction level can be improved and maintained that would be very helpful for the hospital as well as for the industry.

6. Limitations and Further Research

There are some limitations of this study for which the findings should be used with caution. In this research, only descriptive statistics was used, more statistical tools could be used for more concrete results. The research was done only on one hospital; further research can be done taking more hospitals. Sample size was 100, more sample could be used. Therefore, further attempts can be taken by removing above limitations.

References

- Berwyk, D.M. (1989), "Continuous Improvement as an Ideal in Health Care," *New England Journal of Medicine*, 320:53-6.
- Berry, L.L. Parasuraman, A. and Zeithaml, V.A. (1988), "The Service Quality Puzzle," *Business Horizons* 31, no. 5 (1988), pp. 35-43
- Blumenthal, D. and Scheck, A. (1995), "Applying Industrial Quality Management Science to Physician's Clinical Decisions In Improving Clinical Practice: Total Quality Management and the Physician," San Francisco: Jossey-Bass, pp.
- Blumenthal, David, Charles M. Kilo. (1998), "A Report Care on Continuous Quality Improvement," Millbank Quarterly, Winter, 1998 v 76 i4, p. 625
- Chowdhury, Md. Humayam Kabir (2001), "Generalizability of Perceived Quality Measures: An Evaluation," *Yokohama Journal of Social Sciences*, Vol. 6(1), pp. 27-38
- Chowdhury, Md. Humayam Kabir and Sultan, Md. Parves (2005), "Determinants of Perceived Service Quality: An Empirical Study," *Journal of Business Administration*, Institute of Business Administration, University of Dhaka, Vol. 31, No. 1, pp. 179-188.
- Dube, Laurette and Kalyani Menon (1998), "Managing Emotions: accenting the positive might not produce the highest satisfaction payoff," *Marketing Health Services*, Fall 1998 v 18, n3, p. 34.

- Gelber, RD, Gelman, RS and Goldhirsch, A (1989), "A quality-of-life-oriented endpoint for comparing therapies," *Biometrics* 1989, 45:781-795.
- Gopalakrishna, P and Mummalaneni, V (1992), "Examination of the role of social class as a predictor of choice of health care provider and satisfaction received a model and empirical test," *Journal of Ambulatory Care Marketing* 1992, 5:35-48.
- Greiner, DL and Addy, SN (1996), "Sumatriptan use in a large group-model health maintenance organization," *American Journal of Health-System Pharmacy*, 53:633-638.
- GUIDELINES ON HEALTH CARE IN FINLAND (1999), "Publications of the Ministry of Social Affairs and Health," 21.5., Retrieved from World Wide Web:ttp://www.vn.fi/stm/english/publicat/publications_fset.htm
- Harris, LE, Luft, FC, Rudy, DW and Teirney, WM (1995), "Correlates of Health Care satisfaction in innercity patients with hypertension and chronic renal insufficiency," *Social Science in Medicine*, Dec; 41(12):1639-45.
- Hudson, T. (1998), "Service Means Business," Hospital Health Networks, Mar 5, 72(5):30-32
- Issel, L. Michele and Kahn, David (1998), "The Economic Value of Caring," *Health Care Management Review*, Fall, 1998. V 23 m4, p. 43.
- Kotler, Philip and Armstrong, Gary (1997), "Principles of Marketing," 13th edition, Prentice Hall, Upper Saddle River, New Jersey 07458, p. 224
- Kotler, Philip and Keller, Kevin Lane (2005), "Marketing Management," 12th edition, Prentice Hall of India Private Limited, New Delhi-110 001, p. 144
- Lengnick-Hall, Cynthia (1996), "Customer Contributions to Quality: a different view of the customeroriented firm," *Academy of Management Review*, July, 1996 v 21, n3, p.791.
- Llewellyn-Thomas, HA (1997), "Investigating patients' preferences for different treatment options," Canadian Journal of Nursing Research 1997, 29:45-64.
- Lowendahl, Bente (2000), "Strategic Management of Professional Service Firms," *Copenhagen Business School Press*," Copenhagen,pp.
- Lovelock, Christopher and Wright, Lauren (2002), "Principles of Service Marketing and Management," Prentice Hall, Englewood Cliffs, pp.
- Lytle, RS and Mokwa, MP (1992), "Evaluating health care quality: the moderating role of outcomes," Journal of Health Care Management, 12,4-14.
- Malhotra, Naresh K. (2006), "Marketing Research-An Applied Orientation", 5th edition, Prentice Hall of India Private Limited, New Delhi-110 001, pp. 608, 609
- Mittal, Vikas, and Baldasare, Patrick M. (1996), "Eliminate the negative: managers should optimize, rather than maximize performance to enhance patient satisfaction," *Journal of Health Care Marketing*, Fall, 1996 v 16 n 3, pp.
- Moore, S.A and Schlegelmilch, B.B. (1994), "Improving Service Quality in an Industrial Setting," *Industrial Marketing Management* 23, no.1, pp. 83-92.
- Moss, Fiona, and Pam, Garside (1995), "The Improtance of Quality: sharing responsibility for improving patient care," *British Medical Journal*, April 15, v 310 no 6985, p.996.
- O"Brien, James L. and Edward F.X Hughes (1991), "The Physician's role in Quality Assessment and Improvement," *Topics in Health Care Financing*, 8(2) 33-45, Aspen Publishers, pp.

- Oliver, R.L. (1981), "Measurement and Evaluation of Satisfaction Process in Retail Settings," *Journal of Marketing*, Fall (41-50).
- Oliver, R.L. (1993), "Cognitive, Affective, and Attribute Bases of the Satisfaction"
- Peyrot, M., Cooper, P.D. and Schnapf, D. (1993), "Consumer Satisfaction and Perceived Quality of Outpatient Health Services," *Journal of Health Care Marketing* 12, no.1, pp. 24-33.
- Rodwin, M.A. (1994), "Patient Accountability and Quality of Care: Lessons From Medical Consumerism and the Patients' Rights, Women's Health and Disability Rights Movements," *American Journal of Law and Medicine*, XX(1&2), pp.117-167.
- Salimbene, S. (1999), "Cultural Competence: A Priority for Performance Improvement Action," Journal of Nursing Care Quality, Feb; 13(3), 23-35.
- Schommer, JC and Kucukarslan, SN (1997), "Measuring patient satisfaction with pharmaceutical services," American Journal of Health-System Pharmacy, 54:2721-2732.
- Shetty, Y.K. 1(987), "Product Quality and Competitive Strategy," Business Horizons, 30, no.5 1987, pp.46-52
- Starfeld, Barbara (1998), "Quality of Care Research", JAMA Sept 16, v280, n11, p 1006.
- Taylor, S.A. (1994), "Distinguishing Service Quality from Patient Satisfaction in Developing Health Care Marketing Strategies," Hospital and Health Service Administration, 39, p. 221-36
- Turner, Paul D. (1996), "A CQI System for Health Care: How the Williamsport Hospital Brings Quality to Life," *Journal of Health Care Marketing, Spring*, v16 n1, p. 51.
- Wensing, M., Grol, R., and Smits, A. (1994), "Quality Judgements by Patients on General Practice Care: A Literature Analysis," *Social Science and Medicine*, 38(1), pp.45-53.
- Woodside, A.G., Frey, L.L., and Daly, R.T. (1989), "Linking Service Quality, Consumer Satisfaction, and Behavioral Intention," *Journal of Health Care Marketing*, 9(4), pp.5-17
- Zifko-Baliga and Robert Kampf (1997), "Managing Perceptions of Hospital Quality: Negative Emotional Evaluations can undermine even the best clinical quality<," *Marketing Health Services, Spring* v 17 n1, p.28.