

# A Comparative Study of Patient Satisfaction between ISO Certified and Non Certified Health Care Units

---

*Dr. Nutan Jha\**  
*Dr. Surekha Rana\*\**

## ABSTRACT

The concept of patient satisfaction has encouraged the adoption of marketing culture in service sector including health care services. This paper reports the findings of a survey aimed at understanding the extent of patient satisfaction with health and diagnostics services. To match this expectation of patients many health care units have gone in for ISO 9002 certification. The major findings from analysis of data reveals that the ISO certified hospitals significantly differed on attitude towards availing the services of health care unit, Medical Assistants, Management and Sanitation, cleanliness and facilities as compared to non-certified hospitals. Patient satisfaction from doctors was same irrespective of the certification of the hospitals.

**Keywords:** ISO Certified Hospitals, Non-Certified Hospitals, Patient Satisfaction, and Health Care Unit.

## 1. Introduction

Patient satisfaction is defined as a customer's overall evaluation of his or her experiences with hospital services (Johnson et al. 1995; Andaleeb, 1998). A legitimate avenue to improve patient care is the examination and monitoring of customer satisfaction. The most important definition of overall patient satisfaction is when the patient's own expectations for treatment and care are met or exceeded (Vukmir, 2006). In addition Naidu (2008) defined patient satisfaction as "an important indicator to evaluation of distinct health care dimensions." Vukmir (2006) defined five variables directly related to satisfaction including: i) Waiting before being cared for; ii) Degree of nurse caring; iii) Staff Organization; iv) The degree of physician caring; and v) The amount of information provided by nursing staff.

In addition, the various dimensions of medical care have also supported the validity of patient ratings of satisfaction. For example, satisfaction has been established as a reliable predictor of compliance behavior, health status, continuity of care, patient involvement in care, utilization of health services and effective patient-provider communication (Franklin, 2001; Alsharif, 2008). The patients' satisfaction items: doctor's care; nursing care; hospital infrastructure; quality communication; process of medical care and overall experience of medical care

received were studied (Vukmir, 2006; Naidu, 2008; Duggirala et al, 2008b; Andaleeb, 1998; Hill & Kitchen, 2007; Imam et al. 2007).

### 1.1. ISO Certification and its Importance

ISO stands for International Organization for standardization. It is the worldwide federation of National standard bodies for approximately 130 countries. ISO 9002 is the appropriate standard for the organizations that do not design and develop products. ISO 9002 provides a framework and systematic approach to manage business processes to offer services that conforms to customer expectations. For customers, certification of suppliers to ISO standard means that they can be assured of the services is compliant to reference documents that are globally accepted.

ISO certification lays emphasis on overall quality with reference to equipment, cleanliness, general atmospheric and qualification of the staff. Therefore, it is important that all hospitals should go in for ISO certification process.

## 2. Literature Review

The strategy for patient satisfaction in the health care service requires effective marketing plans, policies and practices to genuinely meet the needs of different strata of population (MacAlexander et al. 1993). The progress of service unit depends on the patient satisfaction and

---

\* Associate Professor, Department of Management Studies, North Eastern Regional Institute of Management, Guwahati.

\*\* Professor, Department of Management Studies, Gurukul Kangri University, Dehradun

service quality in all developing and developed countries (Cronin and Taylor, 1992). Consequently, the measurement of patient satisfaction with service quality has become very important to the providers (Brown and Swartz, 1989; Parasuraman et al. 1988 and Thompson et al. 1985). The major reasons that have necessitated a shift towards marketing approach are intense competition, more patient awareness, increased purchasing power of patients, and availability of specialists (Yadav, 1993). It is very difficult to have a standardized and scientific measurement tool for services, because of the inherent presence of intangible features in service measurement. This has been eloquently identified by a number of authors like Brown and Swartz (1989), Careman (1990), Crosby (1979), and Parasuraman et al. (1991). Thus, the absence of suitable measures for services has cogitated marketing efforts as a drain on resources instead of revenue generating function of an organization (Louden, 1988).

Walston et al. (2010) proposed that the collaboration and cooperation through proper communication determines a high level of patient satisfaction. Climate can influence communication regarding patient safety. It is important to ensure that all communication channels are used in a right way to properly create a safe climate for staff and patients. A positive safe climate is found on mutual trust through good communication. Errors occur when communication problems arise. Duggirala et al. (2008) suggested that, in a critical area such as health care employing training practices are important to ensure the employee is equipped with the right skills. In a hospital setting continuous training of the staff in patient care service is vital. Gremigni et al. (2008) proposed that communication behaviour which is related to patient satisfaction may include: empathy and friendliness, nonverbal affiliate expressiveness, clear and direct way to communicate, listening and other basic skills such as courtesy.

A long-term plan to meet or exceed the expectations of customers' satisfaction was seen as an important determinant in a study conducted by Oluwatoyin and Oluseun (2008). The main objectives of TQM in health services were customers' satisfaction and focus on meeting the client needs. Vukmir (2006) proposed that the proactive patient communication was basic for a positive interaction between medical service providers and patient and can be accomplished by all health care staff without much extra effort.

Boshoff and Gray (2004) suggested that the most significant factor that affects patient satisfaction is satisfaction of patients with nursing staff and nursing care. If patients experience the nursing staff as cheerful, kind, caring, courteous as well as highly skilled and prompt, they are significantly more likely to return to the same hospital.

The communication skills between medical staff and patient have received special attention as a major component of medical encounters and a key to patient compliance and satisfaction (Ishikawa et al. 2002). The higher standards of communication skills have become requisites for healthcare providers from within the framework of patient focus. "The major problems related to patient satisfaction have been reported to be issues related to communication, lack of interest, impatient information, lack of consideration and impoliteness by medical staff" (Polluste et al. 2000).

Sharma and Chahal (1999) reported the findings of a survey which was aimed at understanding the extent of patient satisfaction with diagnostic services. They have constructed a special instrument for measuring patient satisfaction. The instrument captures the behaviour of doctors and medical assistants, quality of administration, and atmospherics. They found that patients gave first preference to the efficiency of doctors followed by prior family experience and recommendations by friends, relatives, etc. in selecting the private clinics for their outdoor services. Twenty nine per cent of the respondents preferred to avail services from private units because of time factor. Knowledge and efficiency was the most important attribute and cooperation is the second best attribute. Confidentiality and individual consideration are contributing least to patient satisfaction score. Politeness, impartial attitude, examination comfort, and experience were ranked third, fourth, fifth, and sixth respectively. Almost same ranking with regard to attributes knowledge, cooperation, politeness, and impartial attitude. Maintenance of records, answering of queries and experience has secured fifth, sixth, and seventh positions respectively in the variables related with performance of medical assistants. Seven percent of patients came just because the private health care units were meticulously clean in comparison to government health care units. The patients have assigned great importance to the infrastructure of the unit.

### 3. Research Methodology

**3.1 Sample:** The study is based on both Primary and Secondary data. Personal interviews have been conducted with the hospital administrators and doctors of various ISO certified and non-certified hospitals to elicit the relevant information. Initially, ISO 9002 Certified hospitals were identified in Northern states of India. In this empirical study, sample comprised of 196 patients (98 patients of certified hospitals, 70 patients of non certified private hospitals, and 28 patients of government hospitals) from five certified hospitals and five non-certified hospitals were taken. Data for study were acquired using a structured questionnaire, Customer satisfaction Instrument. The instrument

captures the behaviour of doctors and medical assistants, quality of administration, and atmospherics. Data were analyzed with the help of z-test. The base of research work was to compare the patient satisfaction in certified hospitals and non-certified hospitals. Sample was divided into five sub-groups, studying satisfaction of patients in certified hospitals, non-certified hospitals, non-certified private hospitals, government hospitals and private hospitals.

**3.2 Measuring Tools:** A standardized instrument on Consumer Satisfaction developed by Sharma and Chahal (1995) was used for data collection. It comprises of ninety items covering five broad measures, Attitude towards availing the services of health care unit (7 items), Attitude towards doctors (25 items), Attitude towards medical assistants (28 items), Attitude towards management (15 items) and Attitude towards sanitation, cleanliness and facilities (15 items). It had five-point Likert type scale. When response was strongly agree score assigned was 5, when response was neutral, score given was 3 and when response was strongly disagree, score 1 was allotted.

In this study, hypothesis is formulated and 'Z' test used to compare the patient satisfaction level between the ISO certified and non certified hospitals.

**3.3 Hypothesis:** Following hypothesis has been framed for the purpose of study:

**Ho:** There is no significant difference between the patient satisfaction of ISO certified hospitals and non-certified hospitals.

**H1:** There is a significant difference between the patient satisfaction of ISO certified hospitals and non-certified hospitals.

#### 4. Data Analysis and Interpretation

**4.1 Comparison between Patients of Certified Hospitals and Non- Certified Hospitals:** The following Table 1 presents the Mean and Standard Deviation of various Parameters calculated on the basis of perception of respondents. It also presents the 'Z' value calculated for comparing Means between Patients of Certified Hospitals and Patients of Non- Certified Hospitals.

**Table 1: Mean, Standard Deviation and Z-value, of Patient Satisfaction of Certified and Non Certified Hospitals.**

Parameters	Respondents				Calculated 'Z' value	Tabulated Z <sub>0.05</sub>
	Patients of Certified Hospitals (n <sub>1</sub> =98)		Patients of Non - Certified Hospitals (n <sub>2</sub> =98)			
	Mean	SD	Mean	SD		
Attitude towards availing the services of health care unit	22.41	3.62	20.29	4.20	3.78*	1.96
Attitude towards doctors	88.95	11.19	87.26	14.43	0.92	
Attitude towards medical assistants	101.74	8.09	95.41	7.20	5.81*	
Attitude towards management	54.31	4.25	56.81	4.26	4.09*	
Attitude towards sanitation, cleanliness and facilities	60.51	5.38	54.57	4.78	8.14*	

\*Significant at 5% level of significance; and df= 194 (98+98-2)

Table 1 reveals that patient satisfaction differ significantly on the measure of attitude towards availing the services of health care unit, attitude towards medical assistants, attitude towards management and attitude towards sanitation, cleanliness and facilities because the Calculated 'Z' value is more in comparison to the Tabulated value at 5 % level of significance. The measure of attitude towards doctors has calculated z value (.092) less than tabulated value (1.96). The inference drawn here was that patients of certified hospitals and non-certified hospitals did not differ significantly on the measure attitude towards doctors. The overall patient satisfaction was

invariably influenced by doctor's personal integration with patients. The attitude of patient was also influenced by the quality of medical staff.

**4.2 Comparison between Patients of Certified Hospitals and Non-Certified Private Hospitals:** The following Table 2 presents the Mean and Standard Deviation of various Parameters calculated on the basis of perception of respondents. It also presents the 'Z' value calculated for comparing Means between Patients of Certified Hospitals and Patients of Non- Certified Private Hospitals.

**Table 2: Mean, Standard Deviation and Z-test, of Patient Satisfaction of Certified Hospitals and Non-Certified Private Hospitals.**

Measures	Respondents				'Z' value	Z <sub>0.05</sub>
	Patients of Certified Hospitals (n=98)		Patients of Non - Certified Private Hospitals (n=70)			
	Mean	SD	Mean	SD		
Attitude towards availing the services of health care unit	22.41	3.62	20.80	4.76	2.37*	1.96
Attitude towards doctors	88.95	11.19	87.73	15.34	.56	
Attitude towards medical assistants	101.74	8.09	95.83	5.24	5.73*	
Attitude towards management	54.31	4.25	57.36	4.63	4.36*	
Attitude towards sanitation, cleanliness and facilities	60.51	5.38	56.06	4.68	5.70*	

\*Significant at 5% level of significance; and df= 166 (98+70-2)

Table 2 clearly indicates that the patients of certified hospitals and non certified private hospitals differ significantly on the measures attitude towards availing the services of health care unit, attitude towards medical assistants, attitude towards management, and attitude towards sanitations, cleanliness and facilities because the Calculated 'Z' value is more in comparison to the Tabulated value at 5 % level of significance. The measure of attitude towards doctors having calculated 'Z' value (0.56) as less than tabulated value (1.96). The low value

indicated that certified hospitals and non-certified private hospitals do not differ significantly on the measure attitude towards doctors.

**4.3 Comparison between Patients of Certified Hospitals and Government Hospitals:** The following Table 3 presents the Mean and Standard Deviation of various Parameters calculated on the basis of perception of respondents. It also presents the 'Z' value calculated for comparing Means between Patients of Certified Hospitals and Patients of Government Hospitals.

**Table 3: Mean, Standard Deviation and Z-test, of Patient Satisfaction of Certified Hospitals and Government Hospitals.**

Measures	Respondents				Calculated 'Z' value	Tabulated Z <sub>0.05</sub>
	Patients of Certified Hospitals (n=98)		Patients of Government Hospitals (n=28)			
	Mean	SD	Mean	SD		
Attitude towards availing the services of health care unit	22.41	3.62	19.04	1.81	6.74*	1.96
Attitude towards doctors	88.95	11.19	85.25	11.87	1.47	
Attitude towards medical Assistants	101.74	8.09	94.36	6.48	5.02*	
Attitude towards management	54.31	4.25	55.43	2.79	1.12	
Attitude towards sanitation, cleanliness and facilities	60.51	5.38	54.58	4.75	5.65*	

\*Significant at 5% level of significance; and df= 124 (98+28-2)

Table 3 indicates that there is a significant difference on the measures of attitude towards availing the services of health care unit, attitude towards medical assistants, attitude towards management, and attitude towards sanitations, cleanliness and facilities because the Calculated 'Z' value is more in comparison to the Tabulated value at 5 % level of significance. It also indicates that certified hospitals and government

hospitals did not differ significantly on the measures of attitude towards doctors (Calculated Z= 1.47) and attitude towards management (Calculated Z=1.12). Similarly, the significant values indicated that attitude towards availing the services of health care unit and attitude towards medical assistants was perceived differently by patients of government and certified hospitals. The level of satisfaction with certified hospitals

was more. The average degree of satisfaction secured by patients in private health care sector was far greater than the degree of satisfaction secured by patients of government health care system (Sharma and Chahal, 1995). Present findings substantiate the attitude of the patients towards medical assistance and atmospherics as an important indicator of satisfaction.

**4.4 Comparison between Patients of Non- Certified Private Hospitals and Government Hospitals:** The following Table 4 presents the Mean and Standard Deviation of various Parameters calculated on the basis of perception of respondents. It also presents the 'Z' value calculated for comparing Means between Patients of Non- Certified Private Hospitals and Patients of Government Hospitals.

**Table 4: Mean, Standard Deviation and Z-test, of Patient Satisfaction of Non- Certified Private and Government Hospitals.**

Measures	Respondents				Calculated 'Z' value	Tabulated $Z_{0.05}$
	Patients of Non-Certified Private Hospitals (n=70)		Patients of Government Hospitals (n=28)			
	Mean	SD	Mean	SD		
Attitude towards availing the services of health care unit	20.80	4.76	19.04	1.81	2.67*	1.96
Attitude towards doctors	87.73	15.34	85.25	11.87	.85	
Attitude towards medical Assistants	95.83	5.24	94.36	6.48	1.07	
Attitude towards management	57.36	4.63	55.43	2.79	2.53*	
Attitude towards sanitations, cleanliness and facilities	56.06	4.68	54.58	4.75	1.49	

\*Significant at 5% level of significance; and  $df= 96 (70+28-2)$

Table 4 indicates that there is significant difference on the measures of attitude towards availing the services of health care unit, and attitude towards management because the Calculated 'Z' value is more in comparison to the Tabulated value at 5 % level of significance. The measures of attitude towards medical assistants, and attitude towards sanitations, cleanliness and facilities and attitude towards doctors having the Calculated 'Z' value (0.85) less than Tabulated value ( $Z=. 1.96$ ). Hence, it can be calculated that there was no significant difference on the perception of the patients of non-certified private hospitals and government hospitals on the measures of hospital environment, medical assistants and doctors. Whereas, the high values that patient rated private hospitals better

on services and management dimensions as compared to government hospitals. The present findings were similar to the findings of Sharma and Chahal, (1995) that the quality of administration was better in private health care units in comparison to public health care units with regards to factors like convenient office hours, simple checking procedure, prompt service, and no overcrowding.

**4.5 Comparison between Patients of Private Certified Hospitals and Government Hospitals:** The following Table 5 presents the Mean and Standard Deviation of various Parameters calculated on the basis of perception of respondents. It also presents the 'Z' value calculated for comparing Means between Patients of Private Certified Hospitals and Patients of Government Hospitals.

**Table 5: Mean Standard Deviation and Z-test, of patient satisfaction of Private Certified Hospitals and Government Hospitals.**

Measures	Respondents				Calculated 'Z' value	Tabulated $Z_{0.05}$
	Patients of Private Hospitals (n=168)		Patients of Government Hospitals (n=28)			
	Mean	SD	Mean	SD		
Attitude towards availing the services of health care unit	21.28	4.35	19.04	1.81	4.67*	1.96
Attitude towards doctors	87.89	12.42	85.25	11.87	1.08	
Attitude towards medical Assistants	99.28	7.61	94.36	6.48	3.62*	
Attitude towards management	55.58	4.65	55.43	2.79	.23	
Attitude towards sanitation, cleanliness and facilities	58.65	5.54	54.58	4.75	4.11*	

\*Significant at 5% level of significance; and  $df= 194 (168+28-2)$

Table 5 indicates that there is a significant difference on the measures of attitude towards availing the services of health care unit, attitude towards medical assistants, and attitude towards sanitations, cleanliness and facilities because the Calculated 'Z' value is more in comparison to the Tabulated value at 5 % level of significance. There is no significant difference in the satisfaction level of patients on attitude towards management, and attitude towards doctors. Patients availing the health care facilities of private hospitals were more satisfied on Sanitation, Cleanliness, Facilities and medical assistants' services as compared to the patients of government hospitals ( similar studies by Woodside et. al.1993; and Anderson, 1982) atmospheric distinguishers like comfort, appearance, cleanliness, facility, etc. had major affect on patient satisfaction.

## 5. Findings and Conclusions

The findings of this study have certain implications for health care policy makers, the hospital administrators, doctors and hospital staff. Main findings and conclusions of the study are:

- (i) Except for attitude towards doctors, on all other measures certified and non-certified hospitals differed significantly. Patient satisfaction in certified hospitals was comparatively more than that of the non-certified hospitals. It has been observed that ISO certified hospitals differed significantly from non certified hospitals on the parameters of attitude towards availing the health care services, medical assistants, sanitation, cleanliness and other facilities. ISO certification was seen only in certain private hospitals
- (ii) Patient satisfaction and Infrastructural facilities have been found better in certified hospitals.
- (iii) Patient satisfaction was seen more in case of private hospitals (certified and non -certified) as compared to government hospitals on attitude towards healthcare services, medical assistants, sanitation, cleanliness and other facilities. Within the private hospitals, certified and non-certified hospitals had similar satisfaction pattern. The hospitals need to improve sanitation, cleanliness and infrastructural high tech facilities.
- (iv) The health care customers are not concerned with ownership or management of hospitals. The image of the hospital in the eyes of the patients is invariably an outcome of image of the hospital medical assistance, clean décor, hygienic conditions, technological upgradation and above all attitude of the doctors

- (v) The overall patient satisfaction was invariably influenced by doctors' personal integration with patients. The attitude of patient was also influenced by the quality of medical staff.
- (vi) First impression of the reception counter makes the impression of the hospital services. Support staff and medical assistants are peripherals of the medical care. A bit of emphasis on improvement of their human factors would evolve feeling of satisfaction and improve the image of the hospital in the eyes of the patients.
- (vii) Total Quality Management and Patient satisfaction are significantly related. Facilities available in the hospitals remarkably enhance the Patient satisfaction.

## 6. Limitations and Suggestions

The present study has the following limitations:

- (i) The investigator has taken up only limited variables in present study. It will be more appropriate to study some more variables like level of family size, and income of patients.
- (ii) In the present investigation, only few hospitals have been chosen for the study. The finding would be clearer and better if more hospitals would be included for the research work.
- (iii) Due to the comprehensive questionnaire the patients at times showed the irritation, therefore a concise questionnaire should be used for conducting the research.
- (iv) In the present study, only urban hospitals have been chosen. It will more appropriate to study rural hospitals also.
- (v) A large sample could have been taken which was not possible due to limitation of time. Large sample comprising of hospitals of different sizes in different areas of the country would give better results.

## References

- Al-Eisa I. S., Al-Mutar M. S., Radwan M. M., AL-Terkit A. M. 2005. Patient satisfaction with primary health care services at capital health region, Kuwait. *Middle East Journal of family medicine* 3: 10-16.
- Alsharif B. F. T. 2008. Patient's satisfaction with hospital services at Nablus district, west bank, Palestine. *Unpublished master thesis*, Al- Najah national university. Palestine

- Andaleeb S. S. 1998. Determinants of customer satisfaction with hospital: an managerial model. *International Journal of health care quality assurance* 11(6): 181-187.
- Anderson, Douglas (1982). "The Satisfied Patient: Service Return Behaviour in the Hospital Obstetrics Market," *Journal of Health Care Marketing*, Vol 2(4), 25-33.
- Baker R. 1991. Audit and standards in new general practice. *BMJ* 303:32-34.
- Boshoff L. and Gray B. 2004. The relationships between service quality, customer satisfaction and buying intentions in the privet hospitals industry. *South African journal of business management*, 35(4): 27-37.
- Brown, Stephen and Swartz, Teresa (1989), "A Gap Analysis of Professional service Quality", *Journal of Marketing*, No 2, 92-98.
- Caraman, James M.(1990), "Patient Perception of Service Quality: An Assessment of the Servqual Dimensions," *Journal of Retailing*, Vol 66( 1), 33-35.
- Cronin, Joseph J and Taylor, Steven A (1992), "Measuring Service Quality:A Re-examination and Extension," *Journal of Marketing*, Vol 56, July, 55-68.
- Crosby, Philip B (1979), *Quality is Free: The Art of Making Quality Certain*, New York: New American Library.
- Duggirala M., Rajendran C. and Anantharaman R. N. 2008b. Provider-perceived dimensions of total quality management in health care. *Benchmarking An International Journal*, 15 (6): 693-722.
- Frankline J. S. P. 2001. Patient satisfaction in Alberta: An empirical analysis. *Published master thesis*. University of Alberta, Canada.
- Gremigni P., Sommaruga M., Peltenburg M. 2008. Validation of health care communication questionnaire (HCCQ) to measure outpatients' experience of communication with hospital staff. *Patient education and counseling*, 71 : 57-64.
- Hills R. and Kitchen S. 2007. Toward a theory of patient satisfaction with physiotherapy: Exploring the concept of satisfaction. *Physiotherapy theory and practice*, 23(5): 243-254.
- Ishikaw H., Takayama T., Yamazaki Y., Seki Y., Katsumata N. 2002. Physician patient communication and patient satisfaction on Japanese cancer consultation. *Social science and medicines*, 55:301-311.
- Johnson M. A. 1995. The development of measures of the cost of quality for an engineering unit. *International Journal of quality and reliability management* 12(2): 86-100.
- Jr J. E. W., Davies-Avery A. and Stewart A. L. 1977. The measurement and meaning of patient satisfaction: A review of the literature. *Health and medical care services review*.
- Louden, Teri L (1988). "Measuring Marketing Effectiveness is Crucial as it Becomes Cutback Target," *Modern Health Care*, November 25, Vol 9, No 32.
- Luft, Harod S (1981). *Health Maintenance Organisation: Dimensions of Performanc*, New York : Wiley Interscience publications.
- MacAlexander, James H: Becker, Boris W and Kaldenberg, Dennis O (1993). "Positioning Health Care Services: Yellow Pages Advertising and Dental Practice Performance," *Journal of Health Care Marketing*, Vol 13, Summer, 26-33.
- Mowen, J C; Licata, John and Mcphail, Jeannie (1993). "Waiting in the Emergency Room: How to Improve Patient Satisfaction," *Journal Of Health Care Marketing*, Vol 13, summer, 26-33.
- Naidu A. 2008. Factors affecting patient satisfaction and health care quality. *International Journal of health care quality assurance* 22(4): 366-381.
- Oluwatoyin A. and Oluseun A. 2008. Total quality management. *Master dissertation*. Bleking institute of technology. Nigeria.
- Parasuraman, A.,V.A.Zeithaml and L.L.Berry (1988), SERVQUAL: A Multiple Item Scale for Measuring Customer Perceptions of Service Quality', *Journal of Retailing*, Vol.64 (1), 55-68.
- Parasuraman, A;Zeithaml, Valerie and Berry, Leonard(1991)" Refinement and Reassessment of the SERVQUAL Scale," *Journal of retailing*, Vol 67, winter, 420-426.
- Peyrot, Mark; Cooper,Philip Dand Schnapf, Donal (1993). "Patient satisfaction and Perceived Quality of Out Patient Health Service," *Journal of Health Care Management*, Vol 13,Winter, 24-23.
- Polluste K., Kalda R., and Lember M. 2000. Primary health care system in transition: the patient's experience. *International journal for quality in health care*, 12(6):503-509.
- Sharma, R D and Chahal, Hardeep (1995). "Patient

- Satisfaction in Public Health System- A Case Study," *The Indian Journal of Social Work*, Vol 61(4), 445-456.
- Sharma, R D and Chahal, Hardeep (1999)." A Study of Patient Satisfaction in Outdoor Services of Private Health Care Facilities," *The Journal for Decision Makers*, Vol 24(4), 69-75.
  - Vukmir R. B. 2006. Customer satisfaction. *International Journal of health care quality assurance* 19(1): 8-31.
  - Walston S. L., AL-Omar B. A., AL-Muteri F. A. 2010. Factors affecting the climate of hospital patient safety. *International journal of health care quality assurance*, 23(1): 35-50.
  - Woodside, Arch G; Frey, Lisa L and Daly,Robert T (1989)."Linking service Quality ,Patient Satisfaction and Behavioural Intention," *Journal of Health Care Marketing*, Vol 7, March, 61-68.
  - Yadav, kamal (1993)." Health Services: The Indian Scene Marketing of Services- Concept and Application," in Khurana, Rakesh; Kaushik,Madulika and yadav,kamal (eds). *Indira Gandhi National Open University*, 141-149.

**Annexure: Questionnaire**  
**DEPARTMENT OF MANAGEMENT STUDIES**  
**II nd CAMPUS, GURUKUL KANGRI UNIVERSITY**  
**DEHRADUN**

Dear Sir,

The present attempt is being undertaken with the purpose of studying the hospital services and patient satisfaction. In this ardent task we solicit your kind co-operation. Kindly give your objective and frank response. This will enable us to bring out recommendations based on true facts the information supplied by you will be used for research purpose only.

Thanking you

**Research Supervisor**  
Dr Surekha Rana

**Research Scholar**  
Nutan Jha

**CONSUMER SATISFACTION WITH HEALTH SYSTEM**

Completing this questionnaire is voluntary; try to estimate the answer to certain question as best as you can; individual response sand your identity will be kept strictly confidential

**RATING SCALE**

SA	STRONGLY AGREE
A	AGREE
N	NEUTRAL
D	DISAGREE
SD	STRONGLY DISAGREE

**GENERAL INFORMATION**

Please check the following

1. a) out patient department                      b) indoor patient
2. Sex    i) female                      ii) male
3. Age
4. M status    i) Married                      ii) unmarried
5. Education qualification                      i) Under graduate                      ii) Graduate                      iii) Postgraduate &Others
6. Occupation    i) Business                      ii) Service                      iii) Dependents
7. Monthly income                                      i) Below Rs 2000                      ii) Between Rs 2000-4000                      iii) Above Rs 4000
8. Family size    i) four                      ii) between 4-6                      iii) above 6
9. Earning members in the family                      i) 1                      ii) between 1-2                      iii) above2
10. No. of times visited the hospital of your area
11. Visited any other health centre                      if yes, name
12. Name of the disease for which                      you are taking treatment
13. No of times visited the doctor for same treatment.

## ATTITUDE TOWARDS AVAILING THE SERVICES OF HEALTH CARE UNIT

1. Efficiency	SA	A	N	D	SD
2. prior family experience & recommendation by friend relative etc	SA	A	N	D	SD
3. overall reputation	SA	A	N	D	SD
4. own physician	SA	A	N	D	SD
5. time factor	SA	A	N	D	SD
6. location	SA	A	N	D	SD
7. sanitation	SA	A	N	D	SD

## ATTITUDE TOWARDS DOCTORS

1. They are adequately competent	SA	A	N	D	SD
2. they are dedicated and devoted to their jobs	SA	A	N	D	SD
3. they are sincere and honest	SA	A	N	D	SD
4. they are always polite to you	SA	A	N	D	SD
5. they never irritate with you	SA	A	N	D	SD
6. they are friendly with you	SA	A	N	D	SD
7. they do not argue unnecessarily	SA	A	N	D	SD
8. they are helpful and considerate	SA	A	N	D	SD
9. they are impartial in their in their behavior	SA	A	N	D	SD
10. they are well disciplined	SA	A	N	D	SD
11. they maintain strict discipline in the department	SA	A	N	D	SD
12. they give due respect to you	SA	A	N	D	SD
13. they have sufficient knowledge about their field	SA	A	N	D	SD
14. they are well trained	SA	A	N	D	SD
15. they work up to your expectation	SA	A	N	D	SD
16. they are very much conscious about their responsibilities	SA	A	N	D	SD
17. they do not induce you to get checked in their private clinics	SA	A	N	D	SD
18. they do not write the prescriptions just after looking at you	SA	A	N	D	SD
19. they thoroughly check you before writing the prescription	SA	A	N	D	SD
20. they prefer to prescribe only those medicines which are available in the medical store	SA	A	N	D	SD
21. they always diagnose the disease correctly	SA	A	N	D	SD
22. they never delayed too long for sending the patient to the primary health centre/hospital	SA	A	N	D	SD
23. they attend you even after, in case of working hours emergencies	SA	A	N	D	SD
24. there exist harmonious relations between doctors and medical assistants	SA	A	N	D	SD
25. there exist no communication gap between assistant and patients	SA	A	N	D	SD

## ATTITUDE TOWARDS MEDICAL ASSISTANTS

1. They are adequately competent	SA	A	N	D	SD
2. they are dedicated and devoted to their jobs	SA	A	N	D	SD
3. they are sincere and honest	SA	A	N	D	SD
4. they are always polite to you	SA	A	N	D	SD
5. they never irritate you	SA	A	N	D	SD
6. they are friendly with you	SA	A	N	D	SD
7. they are helpful and considerate	SA	A	N	D	SD
8. they always cooperate with you	SA	A	N	D	SD
9. they carry out your instructions satisfactory	SA	A	N	D	SD
10. they are impartial in their behaviour	SA	A	N	D	SD
11. they are well disciplined	SA	A	N	D	SD
12. they maintain strict discipline	SA	A	N	D	SD
13. they give due respect to you	SA	A	N	D	SD

14. they have sufficient knowledge about their field	SA	A	N	D	SD
15. they are well trained in their profession	SA	A	N	D	SD
16. they work up to your expectation	SA	A	N	D	SD
17. they are always present in their jobs during working hours	SA	A	N	D	SD
18. they are quite efficient in administering injections	SA	A	N	D	SD
19. they always keep complete record of the patients	SA	A	N	D	SD
20. they reply your queries satisfactorily	SA	A	N	D	SD
21. they properly convince you in case of any misunderstanding	SA	A	N	D	SD
22. they take extra pain in satisfying you	SA	A	N	D	SD
23. they always obey you	SA	A	N	D	SD
24. there exist no communication gap between the doctors and medical assistants	SA	A	N	D	SD
25. Harmonious relationship exist between the doctors and medical assistants.	SA	A	N	D	SD
26. They do not indulge in loose talks during working hours.	SA	A	N	D	SD
27. They are very much conscious about their responsibility.	SA	A	N	D	SD
28. There are adequate no of medical assistants in the hospital.	SA	A	N	D	SD

### ATTITUDE TOWARDS MANAGEMENT

1. The procedure of checking in the hospital is not cumbersome.	SA	A	N	D	SD
2. Hospitals function keeping in view the day requirement of the patients.	SA	A	N	D	SD
3. You feel satisfied with the functioning of the hospital.	SA	A	N	D	SD
4. Hospital takes complete care of you.	SA	A	N	D	SD
5. Hospitals try to provide maximum satisfaction to you.	SA	A	N	D	SD
6. Hospital is fully conscious of your problems.	SA	A	N	D	SD
7. Hospitals welcome your suggestions.	SA	A	N	D	SD
8. It implements the good suggestions	SA	A	N	D	SD
9. OPD are never over crowded	SA	A	N	D	SD
10. Strict discipline is observed in the hospital.	SA	A	N	D	SD
11. Smoking is not allowed.	SA	A	N	D	SD
12. Hospital is well equipped with all types of necessary equipments.	SA	A	N	D	SD
13. there exist harmonious relationship between staff and patients	SA	A	N	D	SD
14. Harmonious relation exists between staff and patients.	SA	A	N	D	SD
15. Hospital is having proper grievance handling system.	SA	A	N	D	SD

### ATTITUDE TOWARDS SANITATIONS, CLEANILINESS AND FACILITIES

1. Outdoor departments are always kept neat and clean..	SA	A	N	D	SD
2. Windows, doors and other furniture used in the health.units are always kept dust free.	SA	A	N	D	SD
3. Fresh air is found in the department.	SA	A	N	D	SD
4. Natural air is found in the department	SA	A	N	D	SD
5. Flies mosquitoes are not seen in the department.	SA	A	N	D	SD
6. patients do not spit on the floor	SA	A	N	D	SD
7. Spittoons are placed at appropriate place.	SA	A	N	D	SD
8. dustbins are adequately provided in the department	SA	A	N	D	SD
9. Hospitals provide each and every type of medicines.	SA	A	N	D	SD
10. X ray facility is easily available.	SA	A	N	D	SD
11. Glucose is provided to the needy patients.	SA	A	N	D	SD
12. Oxygen services are available with no problem.	SA	A	N	D	SD
13. Blood test facility is available in the medical institution	SA	A	N	D	SD
14. Urine tests are conducted efficiently.	SA	A	N	D	SD
15. Stool tests are conducted efficiently.	SA	A	N	D	SD