

## **Client Satisfaction in Health Service Management in Hospitals of Province One Eastern Nepal.**

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### **ABSTRACT**

In health care organization, the satisfaction of client is the major factor which is directly linked with the effective use and the utilization of health care service. Effective and efficient management is a means to achieve predetermined goals. Organization cannot be successful unless it satisfies the clients. This descriptive cross-sectional study includes 680 patients which were selected from 4 public and 6 private hospitals randomly chosen from province 1. A direct interview method was used to gather and collect the data from clients' and hospital authorities for the quantitative method. The client satisfaction level was tabulated on the basis of 5 points likert scale. The reliability and the validity of the satisfaction scale for quantitative research were checked and examined. Association of categorical variables was assessed by Chi-square test. 92% of clients reported the higher satisfaction in the different aspects of nursing services. Around 31% of patients were completely not satisfied on "information regarding precaution of radio hazard", 26.8% on "waiting time to get the report" and 28.4% on "time consumed for report". About 28% of the participants reported not to be satisfied in the hospitals of Province 1 for the availability of specialist in the emergency. The present study finding shows that 41.8 % of clients had reported any type of grievance towards health care service of hospital in Province 1. The study suggested that government should have first priority to allot sufficient specialized doctor services at least in district hospital and there should be 24 hours emergency duty of doctors. Laboratory and radio-diagnosis service in the hospital should be always be in good condition and reporting of the investigation should always be accurate as well as timely to make patients' satisfied in the hospital services. The gap of satisfaction level between private and public hospital may be fulfilled by the national health insurance system and the government should prioritize and implement the health insurance program with minimum premium.

### **KEYWORDS**

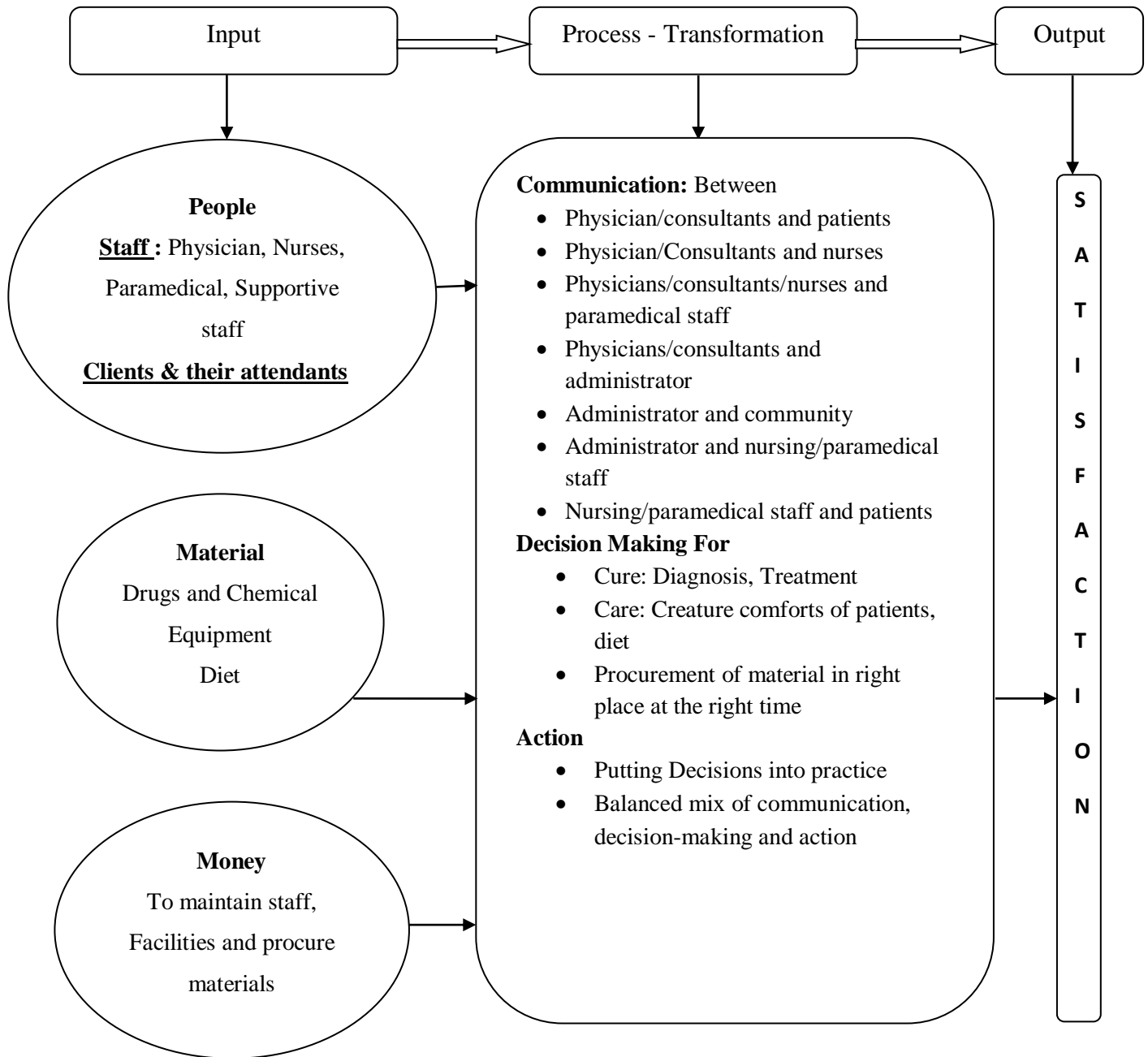
Client satisfaction, Hospital Service Management, Private Hospital, Province No 1, Public Hospital

### **INTRODUCTION**

Satisfaction is the inner joy or sadness that results from the comparison between expectations and the services perceived. If the expectations are less meet, the customer is discomforted but when the accomplishment beats the expectation the customer is enormously delighted maximizing customer value depends on nourishing long-term customer relationships (Kotler Philip, 2009). No patient likes to get the hospital willing as going to the hospital can be painful

and stressful. Patients are always worried about the cost of treatment, their illness and anxious about recovery times. They feel mental pressure until their recovery. Now a day's patients are much conscious about making choice the types of medical care they receive.

The Figure 1 illustrates the management of hospital service with limited input with maximum output in terms of satisfaction of clients towards hospital services.



**Figure 1. Conceptual Framework of client satisfaction on hospital service**

To protect and improve the health of individuals and populations is the main goal of health services. Health care services shouldn't harm patients at any cost during treatment. Time and again research has found medical errors due to the lack of systems that prevent errors from occurring or prevent medical errors from reaching the patient. Patients are likely to visit the same hospital at conditions when they experience effective care to increase the likelihood. Patients seek and receive health care as per the experiences they get in hospitals associated with delays in obtaining an appointment and waiting in emergency rooms and doctor's offices. Patients are found to get distracted when they don't get timely care. Health care services must listen to the patients needs, values and preferences are essential to providing high-quality care. All people must be benefitted by the health care system to accomplish goal (<https://www.ncbi.nlm.nih.gov/books/NBK2660/>).

It is one of the most important areas of concern in hospitals to manage service quality. Now a day's hospitals are spending huge amount in managing service quality because of advancement of lifestyle, education and awareness among consumers (*Swain & Kar, 2017*).

However, satisfaction is a utility and it tends to vary from person to person depending upon the service management ability of hospitals. Thus, with an objective reality, the researcher believes that the level of satisfaction of clients differs in different hospitals and at the same time the meaning of service quality also differs across the hospitals. This means, the attitudes towards the service quality can effect client satisfaction in different ways in different organizations in different circumstances.

Hospital must provide reliable and understandable information to the patient about the level of care they receive to make them feell positively about the decision they make. Client satisfaction survey provides real time feedback for organization. As far as our knowledge, there was no study on client satisfaction toward services of hospital which represents all hospitals of province 1 in the eastern Nepal.

The present study is therefore designed to examine the clients' satisfaction in regards to the health service management of public and private hospital in province 1 of Nepal.

## MATERIALS AND METHODS

This is a descriptive study carried out in province 1 of the eastern Nepal in ???2017 ???.

### Study area and population

Of the seven provinces established by the new constitution of Nepal province one is situated in the eastern part of Nepal which covers an area of 25,905 km<sup>2</sup> and comprises around 4.5 million populations. There were 18 government hospitals and 40 private hospitals currently running in province one. All the clients visited to those hospitals for the treatment were the study population.

### Sample size

Based on proportion of client satisfaction in a private health institution, 37.27%, which is very less than a public health institution (*Sigdel, 2015*), the sample size was determined as 680 clients adding 5% of non-response rate using one proportion at 95% CI with 10% permissible error.

### Sampling methods

A total of 680 clients were interviewed from 10 randomly selected health institutions of province 1. There were 18 government hospitals and 40 private hospitals, 6 government hospitals and 4 private hospitals were chosen randomly using simple random sampling method respectively.

Sixty eight clients were consecutively selected with alternative selection of clients from each randomly selected hospital and interviewed.

### **Data collection tool**

Questionnaire were translated in Nepali language to the make the respondents feel easy to answer the question. The pretested semi structure questionnaire was the tools for data collection of primary data, which includes socio-demographic variables and questions regarding satisfaction of hospital services. There were a total of 93 questions for the client interview, the client satisfaction consisted of 71 questions in which hospital diagnosis satisfaction contained 14 questions, service quality satisfaction contained 18 questions, nursing care satisfaction contained 6 questions, laboratory and radio-diagnosis contained 8 questions, satisfaction on emergency service contained 8 questions, satisfaction of hygiene and sanitation contained 10 questions and satisfaction on cost of treatments contained 7 questions. All the questions were in 5 point likert scale as highly satisfied, satisfied, neutral, dissatisfied, and highly dissatisfied.

### **Reliability and validity of tools**

The pretesting was done in Morang Shahakari hospitals, Biratnagar among 70 clients, 10% of study sample. Initially there were 74 items for the satisfaction assessment scale. During the analysis, Cronbach's alpha found to maximum after deleting three items. Thus, the alpha coefficient (reliability coefficient) for 71 items was 0.96, suggesting that the items have relatively high internal consistency.

Measures taken to enhance validity were use of few modifications on the standard scales, use of pre-tested questionnaire, giving sufficient time to remember and respond confidential one-to-one interview and more than one question in some cases asking for the same information. The content validity of the instrument was established by seeking opinion of the research guide and co- guides and then assessed through reviewing the questionnaire items by the three experts; a psychiatrist, a management expert and an epidemiologist. Constructive feedback from the faculty, seniors and colleagues were also incorporated.

### **Data entry and analysis**

The collected data was entered into Microsoft Excel software. Every 50 entry, the cross check was done to correct false entry if occurred. The data was converted into SPSS software 22.0 version and analysis was done. Frequency, percentages, means, and standard deviations (S.D) were computed.

### **Ethical consent**

Ethical clearance was taken from Nepal Health Research Council, Ramshahpath Kathmandu and also from each selected hospital administration. Verbal consent was taken from each individual after informing him (or her) the purpose of the study. They were also provided assurance of anonymity and confidentiality of data. The participants were compensated for their time by providing refreshment.

### **Operational definition**

Patient/Client was defined as a person receiving or registered to receive medical treatment under health care. Hospital management is one of the latest concepts in the management field related to the management health care system, leadership, hospital networks and administration of hospitals. Client satisfaction was defined as an attitude a person's general orientation towards a

total experience of health care management. Satisfaction comprises both cognitive and emotional facts and relates to previous experiences, expectation and social networks.

## RESULTS AND DISCUSSION

Client satisfactions were assessed in terms of different services provided by the institution. The responses of each question have been demonstrated in 5 point likert scale, i.e. highly dissatisfied, dissatisfied, neutral, satisfied, highly satisfied by the following tables. Table 1 shows, overwhelming majority (more than 90%) of patients were satisfied on number of doctors available and confidence on the diagnosis. Satisfaction of clients seems to be more than satisfactory level in different aspects of diagnosis which ranged from 70.88% to 92.5% of the participants. Almost 30% of clients were not satisfied for waiting longer period to visit doctors and 26.4% of clients were dissatisfied for the approaching of doctors or specialist in time. A study conducted by Harrison et.al in 2016, out of the total complaints received in the hospitals, mostly the complaints were made for delayed diagnosis, misdiagnosis, medication errors, inadequate examinations, etc. (Harrison, Walton, Healy, Smith-Merry & Hobbs, 2016). A published article done in Jimma University specialized hospital stated the highest dissatisfaction, 46.9% reported by respondents with the time spent to see a doctor (Assefa, Mosse & Michael, 2011). This is due to high doctor-patient ratio. Government should pay attention to provide specialist doctors sufficiently at least in the hospitals of the municipalities. However, the specialty services are not available in many of hospitals of Nepal. The prevalence of disease is significantly higher in Nepal than in other South Asian countries ([https://en.wikipedia.org/wiki/Health\\_in\\_Nepal](https://en.wikipedia.org/wiki/Health_in_Nepal)). Number of doctors is not sufficient enough for the treatment of huge mass of ill Nepalese population. There are still vacant of the sanctioned post of doctors in many health centers of Nepal, especially in rural areas. Auxiliary health workers (AHW), village health workers (VHW) and female community health volunteers (FCHV) are treating the patients in many of rural areas of Nepal. This address the issues of high demand of producing medical manpower by opening government as well as private health institutions focusing on quality of education.

**Table 1. Client satisfaction on diagnosis in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>No of doctors available in the treatment</i>	13 (1.9)	49 (7.2)	3 (0.4)	482 (70.9)	133 (19.6)
<i>Taking appointment time for checkups</i>	32 (4.7)	81 (11.9)	2 (0.3)	461 (67.8)	104 (15.3)
<i>Length of time waiting to doctors in OPD/clinic</i>	51 (7.5)	143 (21)	4 (0.6)	410 (60.3)	72 (10.6)
<i>Approach of the doctors/specialist in time</i>	27 (4.0)	152 (22.4)	8 (1.2)	429 (63.1)	64 (9.4)
<i>Examination of patient to identify the problem/disease</i>	12 (1.8)	56 (8.2)	2 (0.3)	520 (76.5)	90 (13.2)
<i>Information about test and investigation</i>	17 (2.5)	92 (13.5)	0 (0.0)	461 (67.8)	110 (16.2)

<i>Answering the quires about disease promptly by doctors</i>	13 (1.9)	77 (11.3)	1 (0.1)	456 (67.1)	133 (19.6)
<i>Counseling skill of doctors</i>	11 (1.6)	80 (11.8)	0 (0.0)	463 (68.1)	126 (18.5)
<i>Spending time for diagnosing and counseling</i>	12 (1.8)	111 (16.3)	2 (0.3)	463 (68.1)	92 (13.5)
<i>Reliability of diagnosis done by doctor/health person</i>	13 (1.9)	75 (11)	4 (0.6)	489 (71.9)	99 (14.6)
<i>Confidence of doctors on diagnosis of patient</i>	5 (0.7)	45 (6.6)	1 (0.1)	508 (74.7)	121 (17.8)
<i>Involvement of other doctors in the same institution when needed</i>	16 (2.4)	89 (13.1)	2 (0.3)	467 (68.7)	106 (15.6)
<i>Teamwork approach of doctors for complications</i>	43 (6.3)	91 (13.4)	1 (0.1)	437 (64.3)	108 (15.9)
<i>Referral practice of the doctors to another institution</i>	11 (1.6)	72 (10.6)	9 (1.3)	444 (65.3)	144 (21.2)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied

In regards to service quality in hospitals, majority of patients were satisfied or highly satisfied for the "performance of supportive staff during the treatment". Also more than 90% of participants were satisfied for performance in treatment, physician and consultant, behaviour of doctors, friendly and helpful in providing information by front desk supportive staff, accessing the pharmacy near by the hospital (Table 2). The present findings are better than a study done in TUTH (*Subedi & Upreti, 2014*), in regards to pharmacy service which states that 73.4% of clients responded to have good pharmacy service. Likewise in response to getting treatment in OPD emergency, 55.4% mentioned that they were satisfied. In regards to the information system of the hospital 51.8% were not satisfied. Only 37.8% were fairly satisfied with admission/discharge information. Visiting hours was good according to 51.4% of the respondents. The payment system was liked by 65.8%. Record system of the hospital was liked by 50.9% of the respondents. In the present study, the overall service quality in the hospitals of Province 1 seems to be very good. However, 38.24% of participants reported *the quality of food supplied by the hospitals* were below than the satisfaction level and 33.4% of them reported to be not satisfied for *Information about side effects of prescribed medicine/drug* (Table 2). This finding is also supported by a cross-sectional study done KMC teaching hospitals and KIST medical college, 75% were fully satisfied with the services. But only 25% of patients completely agreed about hospital workers talking properly and 56.1% of them did not agree regarding the timing and relevant information in case of both the hospitals (*Chand, Katuwal, Pandit, & Pandey, 2018*).

In fact, obtaining the information in regards to the side effects of the treatment is the patients' right. But, in context of developing country like Nepal, people do not have knowledge of their rights due to ignorance. The hospitals in Nepal where patient-doctor ratio is very high, doctors may not have sufficient time to explain all details about information of treatment including side effect of drugs, hospitals administration should be aware to provide information to the patients through information desk or nursing staff. The process of measuring the valid indicator of the service quality in the health sector goes on the hand of patient's satisfaction. To

comprehend the satisfaction or atmosphere of enriched quality service, the collection of patient's opinions plays a significant role in the hospital zone. This process actually drives the hospitals towards the destination of standard improvement and betterment of hospital service quality can be highly possible through the fruitful and remarkable judgment of every patient's with their sustainable corrective feedback.

**Table 2. Client satisfaction on service quality in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>Performance in treatment, physician and Consultant</i>	12 (1.8)	50 (7.4)	3 (0.4)	481 (70.7)	134 (19.7)
<i>Specialized service of the hospital</i>	31 (4.6)	131(19.3)	0 (0.0)	434 (63.8)	84 (12.4)
<i>Behaviour of doctors</i>	13 (1.9)	40 (5.9)	1 (0.1)	472 (69.4)	154 (22.6)
<i>Proper monitoring and supervision by doctors to patients</i>	10 (1.5)	57 (8.4)	2 (0.3)	483 (71)	128 (18.8)
<i>Friendly and helpful in providing information by front desk supportive staff</i>	13 (1.9)	53 (7.8)	2 (0.3)	462 (67.9)	150 (22.1)
<i>Performance of supportive staff during the treatment</i>	10 (1.5)	40 (5.9)	0 (0.0)	486 (71.5)	144 (21.2)
<i>Operation success rate of doctor+</i>	24 (4.0)	45 (7.5)	1 (0.2)	416 (69.7)	111 (18.6)
<i>Precaution of Infection prevention in this hospital/Institution</i>	42 (6.2)	92 (13.5)	4 (0.6)	463 (68.1)	79 (11.6)
<i>The expenses of the Institution are according to the services</i>	15 (2.2)	79 (11.6)	3 (0.4)	510 (75)	73 (10.7)
<i>The building structure of the hospital</i>	15 (2.2)	70 (10.3)	3 (0.4)	487 (71.6)	105 (15.4)
<i>Comfortable of waiting room in hospital</i>	42 (6.2)	132 (19.4)	1 (0.1)	421 (61.9)	84 (12.4)
<i>Sitting facility for visitors in ward</i>	51 (7.5)	142 (20.9)	1 (0.1)	424 (62.4)	62 (9.1)
<i>Accessing the pharmacy near by the hospital</i>	21 (3.1)	45 (6.6)	2 (0.3)	411 (60.4)	201 (29.6)
<i>Record keeping system of the hospital</i>	45 (6.6)	64 (9.4)	1 (0.1)	484 (71.2)	86 (12.6)
<i>Copy of care plan of disease (Drug Schedule, Dietary chart etc.)</i>	51 (7.5)	114 (16.8)	1 (0.1)	440 (64.7)	74 (10.9)
<i>Information about side effects of prescribed medicine/drug</i>	80 (11.8)	145 (21.3)	2 (0.3)	387 (56.9)	66 (9.7)
<i>Quality of food supplied by</i>	85 (12.5)	169 (24.9)	6 (0.9)	340 (50)	80 (11.8)

<i>hospital</i>					
<i>Information regarding free health services</i>	66 (9.7)	108 (15.9)	5 (0.7)	405 (59.6)	96 (14.1)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied +missing-83

A very high response on the satisfaction level was noticed for the nursing care in the hospitals of Province 1 (Table 3). This finding is supported by a descriptive study (BS, S, & BK, 2014) which reports overall perception of respondents about nursing care (nurses behavior, safety and security and admission procedure) is positive as 182 (91%) perceive positively. There is no significant difference of perception in relation to total nursing care by sex, education and occupation status of the respondents as highest percentage of respondents had positive perception.

Nursing care remains a vital concept, and integral part of quality care since it determines the pace of the well being or the recovery time span of a patient. It is also considered to be an important aspect of the qualitative nursing care. These caring and support provided by the nursing department act as the pillars for the further goodwill of the hospital based on their satisfaction level (Chalise, Bharati, Niraula, & Adhikari, 2018). The nursing care is a tough job as a nurse should always need to be calm and smiling despite the tedious and night duty job. A nurse is a human being. It is very difficult to maintain all. But one should always remember that patients are the sufferers and need care. A study perform on 2010 NHS survey of inpatient obtain from 50% of all patients discharged between June and August show that there is lack of confidence in Nurses or Doctor's (Aiken, Sloane, Ball, Bruyneel, Rafferty, & Griffiths, 2018). Many hospitals use solution box to find out how patients feel about their nursing care. Research on patient perception routinely conducted in the developed country to monitor and improve the quality of care. But it lags in the developing country especially in Nepal.

**Table 3. Client satisfaction on nursing care in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>Availability of the Nurses</i>	13 (1.9)	19 (2.8)	1 (0.1)	357 (52.5)	290 (42.6)
<i>Approach of the Nurses</i>	9 (1.3)	13 (1.9)	5 (0.7)	395 (58.1)	258 (37.9)
<i>Caring of Nurses</i>	9 (1.3)	31 (4.6)	2 (0.3)	360 (52.9)	278 (40.9)
<i>Described the case by the Nurses</i>	12 (1.8)	38 (5.6)	1 (0.1)	402 (59.1)	227 (33.4)
<i>Medication given by the Nurses</i>	12 (1.8)	14 (2.1)	0	348 (51.2)	306 (45)
<i>Communication/behaviour of Nurses</i>	8 (1.2)	19 (2.8)	1 (0.1)	379 (55.7)	273 (40.1)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied

Curing and caring are the fundamental components of health care services, the doctor's focus on the curing issues where as the nurses take responsibility of caring the patients. Nurse from the largest group of the health workforce are the primary care givers in all health promoting environments, including hospitals, clinics and community settings. Nursing practice is patient driver and patient centered. Patient satisfaction has been strongly advocated by nursing professionals to be an important indicator of nursing care delivery (Chalise, Bharati, Niraula, & Adhikari, 2018).



Table 4 shows that more than one-fourth of the clients were not satisfied for "availability of latest technology" (27.7%) "Information regarding precaution of radio hazard" (31.3%), "waiting time to get the report" (26.8%) and "time consumed for report" (28.4%). This present finding contradicts that there was good satisfaction in the laboratory diagnosis in the rural hospitals (Manna, Pandit & Biswas, 2013). A study findings support the importance of resources management in hospital settings. Quality service includes best quality services of emergencies services, laboratory and radiography services (Chalise, Bharati, Niraula, & Adhikari, 2018)

A comparison study conducted in Morang district of Nepal, identify one of the main reasons for patients satisfaction was laboratory services and registration facilities (Sigdel, 2015). Until and unless the laboratory diagnosis is not accurate, the treatment would not be effective for the cure of disease. No matter how expert is the doctors, the treatment will not be successful without laboratory and radio-diagnosis. The radiological diagnosis is very important to correlate with clinical diagnosis. So the laboratory and radio diagnosis services should be perfect, not only the manpower, but the equipment and machine should also be updated. Hence, the clients of province 1 emphasizes on availability of latest technology for the diagnosis in the present study. Every hospital administration should always prioritize for the update and latest services of laboratory/radio-diagnosis for the patients' satisfaction.

**Table 4. Client satisfaction on Laboratory/Radio-diagnosis in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>Availability of necessary lab services</i>	22 (3.2)	51 (7.5)	1 (0.1)	465 (68.4)	141 (20.7)
<i>Availability of latest technology</i>	44 (6.5)	140 (20.6)	4 (0.6)	385 (56.6)	107 (15.7)
<i>Waiting time to get the report</i>	26 (3.8)	152 (22.4)	11 (1.6)	401 (59)	90 (13.2)
<i>Time Consumed for report</i>	28 (4.1)	158 (23.4)	6 (0.9)	396 (58.2)	91 (13.4)
<i>Response by Staff in-charge</i>	17 (2.5)	76 (11.2)	3 (0.4)	486 (71.5)	98 (14.4)
<i>Availability of lab technician</i>	35 (5.8)	88 (12.9)	10 (1.5)	445 (65.4)	102 (15)
<i>Information regarding precaution of radio hazard</i>	72 (10.6)	128 (18.8)	13 (1.9)	318 (55.9)	87 (12.8)
<i>Quality of Report</i>	26 (3.8)	52 (7.6)	5 (0.7)	465 (68.4)	132 (19.4)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied

In regards to the emergency service, any hospital should not be compromised the service as it is directly associated with patients live and death. The one of the major determinants of customers' satisfaction has been reported by a study is "24 hours management of emergency cases". In the hospitals of Province 1, about 28% of the participants reported not to be satisfied in regards to the availability of specialist in the emergency. Two hundred four clients did not respond for availability of ICU/CCU when needed. It was because the district hospitals; Dhankuta, Inaruwa and Rangeli did not have ICU or CCU (Table 5).

A study conducted in the surgical ward at Kiraj Abdulaziz University Hospital in Jeddah, Saudi Arabia reported that the overall patients' satisfaction rate was 89.6%. The level of satisfaction was high regarding the explanation of the on call doctor about the operation in the emergency department (75.5%), doctor's reception in the clinic (81.25%), surgical team

reception in the ward (79.75%), response of the team about the patient's question (71.75%), and safety level in the hospital (74.75%). In contrast to those findings, the lowest level of satisfaction was for the waiting time in the emergency (40%) (*Aldaqa, Alghamdi, AlTurki, El-deek, & Kensarah, 2012*).

If 100 the emergency cases was successfully handled and one case was failure, the image of organization will be worse. The emergency is the most sensitive place as the patients need to be cared fast without any mistaken. The waiting time at the emergency could not be compromised. No of doctors should be sufficiently enough to tackle the traffic of serious patients. Management should focus to provide 24 hours specialist and make easy and fast for the formalities for the registration. Almost 19% of clients were not satisfied about the longer formalities for the registration. Not only doctors but nurses are also responsible for the management of emergency cases. Hence sufficient and trained doctors and nursed should be appointed by the administration of any hospital for the satisfaction of clients.

**Table 5. Client satisfaction on Emergency service in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>Response of the doctor at emergency</i>	25 (3.7)	42 (6.2)	2 (0.3)	405 (59.6)	206 (30.3)
<i>Explanation about health problem of Patients</i>	26 (3.8)	74 (10.9)	1 (0.1)	430 (63.2)	149 (21.9)
<i>Speed of Work (in time service)</i>	8 (1.2)	68 (10)	1 (0.1)	446 (65.6)	157 (23.1)
<i>Management of Mass casualty</i>	33 (4.9)	85 (12.5)	4 (0.6)	411 (60.4)	147 (21.6)
<i>Formalities for Registration</i>	36 (5.3)	94 (13.8)	2 (0.3)	433 (63.7)	115 (16.9)
<i>Availability of specialist</i>	52 (7.6)	139 (20.4)	2 (0.3)	378 (55.6)	109 (16)
<i>Availability of equipment and medicine</i>	54 (7.9)	96 (14.1)	4 (0.6)	411 (60.4)	115 (16.9)
<i>Availability of ICU/CCU when needed+</i>	21 (4.1)	59 (12.4)	0 (0.0)	282 (58.2)	114 (23.9)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied, +Missing-204

Good hygiene or cleanliness is a basic requirement for good health. The importance becomes much more in a hospital setting, where sick people come to restore their health. In the present study, countable clients reported to be not satisfied in case hygiene and sanitation in hospitals, particularly in *Cleanliness of floors, Sanitation of the hospital, Hygienic condition of the rooms, Cleanliness of Waiting room, Ventilation of the rooms, Safe drinking water facility, Toilet, Canteen*. Relatively high, more than one-third of clients reported to be not satisfied in safe drinking water facility (36.1%) and toilet facility (34.4%) (Table 6). A cross-sectional study conducted in the government health institutions and teaching hospital of Kathmandu valley reports very low level of satisfaction in the cleanness of the admitted room and encouragement in proper personal hygiene in the hospitals, (*D, SK, & SC, 2012*). A necessary and effective step should be taken for the improvement in the hospitals. Another study reaches to the conclusion after getting low level of satisfaction of patients and suggests that it is certainly necessary to improve the room services especially overall cleanliness and food supply (*Subedi & Upreti, 2014*). The blog again mentions that hospitals provide cure for all types of sickness of the people.

But, they also become a potential source of spread of infection if people concerned are not vigilant enough. A person may be hospitalized for some other problem say cardiac failure and may become sicker after acquiring some infection in the hospital. Infections occurring in a hospital setting or nosocomial infections as they are called usually occur by 3 modes.

The infection can spread from one patient to another, from patient to doctor or nurse. A doctor or health care personnel can also infect a patient. The microbes responsible for hospital acquired infections usually cause more severe illness and are resistant to the more conventional antibiotics being used. Germs like pseudomonas, kliebsella, etc. which produce grave illness are mostly implicated in nosocomial infections. Hence it is important for all concerned to be aware of these infections and take utmost precautions to prevent them. For prevention of infection from one patient to another, the beds are separated by a suitable distance. Those suffering from contagious illness like cholera; T.B., etc. are put in isolation. Regarding part of the hospital it is very important to maintain very good hygiene. Every room should have good amount of sunlight as most of the disease producing germs present in the environment are killed by strong sunlight. It should be remembered that a hospital room is always full of infectious agents of various kinds. Adequate aeration and cross ventilation helps to minimize the concentration of germs inside the rooms. Daily washing and mopping of the hospital rooms with some antiseptic solution helps to kill the microbes prevalent in the rooms. One should be vigilant enough to see that cobwebs and dust do not settle over the doors and windows and even on the furniture, because these harbor germs. Hygiene needs to be observed even for the hospital linen and clothes, as these also tend to gather germs. These should be always clean and changed regularly. This linen includes the bed sheets and other bedding used by the patient as well as the uniforms and coats used by doctors and other health personnel. They need to be washed and dried in strong sunlight or ironed by a hot iron. Proper disposal of the fluids of the patient like urine, blood, etc. and laboratory samples should be such that it does not become a source of infection for others. For this purpose, antiseptic solution is poured over the liquids before they are disposed off.

Every hospital should design its own infection control program which includes measures for cleanliness, hygiene and waste disposal. Ministry of health and department of health service must effectively have to take measures to implement this in all hospitals. As people should be more aware of the need for good hygiene in the hospitals, these measures will become more effective. This will definitely reduce incidence of hospital acquired infections and ensure that sick individuals visiting the hospital will be highly satisfied with the health service provided by the hospitals.

**Table 6. Client satisfaction on hygiene and sanitation in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>Cleanliness of floors</i>	15 (2.2)	119 (17.5)	1 (0.1)	397 (58.4)	148 (21.8)
<i>Sanitation of the hospital</i>	22 (3.2)	143 (21.0)	4 (0.6)	385 (56.6)	126 (18.5)
<i>Hygienic condition of the rooms</i>	24 (3.5)	140 (20.6)	0 (0.0)	393 (57.8)	123 (18.1)
<i>Cleanliness of Waiting room</i>	28 (4.1)	124 (18.2)	3 (0.4)	400 (58.8)	125 (18.4)
<i>Ventilation of the rooms</i>	49 (7.2)	107 (15.7)	3 (0.4)	391 (57.5)	130 (19.1)
<i>Safe drinking water facility</i>	67 (9.9)	172 (25.3)	6 (0.9)	325 (47.8)	110 (16.2)
<i>Toilet</i>	56 (8.2)	176 (25.9)	2 (0.3)	340 (50.0)	106 (15.6)

<i>Canteen</i>	57 (8.4)	121 (17.8)	8 (1.2)	367 (54.0)	127 (18.7)
<i>Waste Management in hospital</i>	24 (3.5)	72 (10.6)	1 (0.1)	460 (67.6)	123 (18.1)
<i>Surrounding environment</i>	9 (1.3)	62 (9.1)	6 (0.9)	443 (65.1)	160 (23.5)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied

In regards to the cost of treatment, table 7 depicts that almost half of the clients were unsatisfied in the cost of ICU/CCU with or without ventilator. Doctor's check up fee was satisfactory or more among 90.2% of clients. In many of the hospitals there were no ICU and CCU or they do not perform operation and hence not responded. The costs of ICU/CCU with ventilator (44.4%) and without ventilator (44.0%) were reported to be high and not satisfied with the costs. Lab test fee (34.3%), operations fee (28.8%), cost of medicine (34.0%), were also the factors for not being satisfied as reported by the clients in Province 1.

The cost of medicine and the issue of availability of free medicine work as decisive factor for satisfaction of some patients have been explored by a study on client satisfaction. Majority of the poor patients perceive that the cost of medicine is very high and expect that treatment and cost of medicine should be borne by the hospital authority. But in reality their expectation are very rarely met and eventually most of them remain dissatisfied. The study also found that only cheaper medicines are provided by the hospital and most of medicine are needed to buy from outside in the private sector. One respondent echoes the issue. (*Chalise, Bharati, Niraula, & Adhikari, 2018*).

While assessing the level of customer satisfaction in important, it is equally important for the hospital management to work with the factors that explain customer satisfaction. The results shows that all five variables were significant in the model which includes communication with the patients, competence of the staff, behavior of staffs, qualities facilities, and cost of treatment. (*Devija, Bhandari, & Agal, 2012*). A study conducted among major Malaysian private hospitals including Khala Lumpun Pantai hospital, prince court medical centre, and KPJ Ampang Puteri Specialist Hospital, the three important aspects of health care services, quality as received by the interviewees patients i.e. cost and location of service delivery, quality of patient care and availability of adequate facility (*Sarwar, 2014*).

Similarly another study conducted among patients of public and private hospitals of Dhaka city, Bangladesh concluded that the further utilization of the hospital facility was directly influenced by the quality of services and cost of services and hence, it was necessary to improve facilities in health services and reduce the cost of services of government hospitals would not further utilize the services (*Begum & Alam, 2016*). A case study of West Bengal, India, the customer is king and god, customer satisfaction directly depends of the behavior of employee such as; cooperative, knowledgeable, well-mannered as well as quality of services, timely provided facilities, and affordable cost (*Gangopadhyay & Ghosh, 2011*). The interim constitution of Nepal has applied the inspiration of federalism and announced the provision of basic health care receives free of cost as fundamental right which requires strengthening foreseen federalism (*Dulal, Magar, Karki, Khatiwada, & Hamal, 2014*).

**Table 7. Client satisfaction on cost of treatment in hospitals of Province 1 (n=680)**

Questions in regards to	HD	D	N	S	HS
<i>Doctor's check-up fee</i>	8 (1.2)	57 (8.4)	2 (0.3)	418 (61.5)	195 (28.7)
<i>Lab test fee</i>	17 (2.5)	155 (22.8)	6 (0.9)	402 (59.1)	100 (14.7)
<i>Bed charge of admitted patient</i>	13 (1.9)	101 (14.9)	1 (0.1)	382 (56.2)	183 (26.9)
<i>Operations fee+</i>	38 (6.2)	134 (21.9)	4 (0.7)	329 (53.8)	106 (17.3)
<i>Cost of medicine</i>	58 (8.5)	169 (24.9)	4 (0.6)	384 (56.5)	65 (9.6)
<i>Cost of ICU/CCU (without ventilator)++</i>	46 (9.7)	165 (34.7)	0 (0.0)	209 (43.9)	56 (11.8)
<i>Cost of ICU/CCU (With Ventilator)!</i>	45 (9.5)	164 (34.5)	0 (0.0)	210 (44.0)	57 (12.0)

\*HD-highly dissatisfied, D-dissatisfied, N-neutral, S-satisfied, HS-highly satisfied, + =63, ++= 204, !=204

Health for all is the health policy of the nation. Free cost of treatment is not possible as there should be at least the running cost of hospitals. Any hospital could not be sustained without the fund. Only the source of income of any hospitals is the patients cost. The cost of treatment should be optimum, neither less nor more. However, the overburden cost of patient could be minimized by insurance policy. Thus, concern authority should be responsible for the health insurance of citizen like in other developed countries.

The result of the present study depicts in Table 8 that the average score of overall satisfaction including diagnosis, service quality, nursing care, laboratory/radio-diagnosis, emergency, hygiene and sanitation and cost of treatment was estimated to be 75.52% with standard deviation of 9.57. The average percentage satisfaction score was ranged from 30.14% to 100%. Table 8 illustrates average percentage scores of satisfaction on different services of hospitals of Province 1, eastern Nepal. Maximum percentage of satisfaction was reported in nursing care (85.71%) and the rest of the services like diagnosis, service quality, laboratory and radio diagnosis, emergency, hygiene and sanitation, cost of treatment were almost equal satisfaction level, ranged from 71.78% to 76.24% on an average. However, Lower range of satisfaction varies from 20% to 30%.

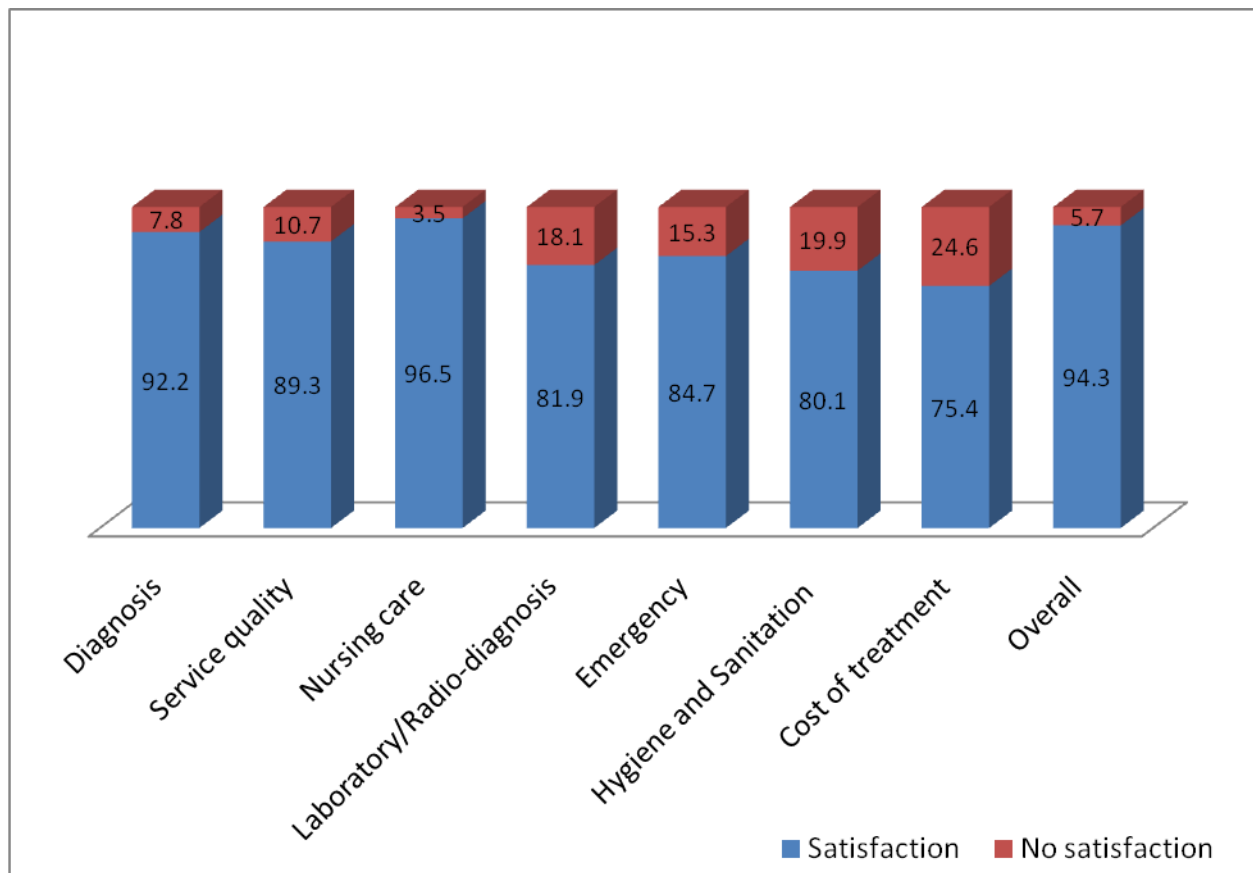
**Table 8. Client satisfaction in regards to different services in hospitals of Province 1 (n=680)**

Satisfaction (%)	Mean	SD	Median	Minimum	Maximum
Diagnosis	76.24	11.30	78.57	21.43	100.00
Service quality	74.79	10.68	76.67	24.44	100.00
Nursing care	85.71	11.92	86.67	20.00	100.00
Laboratory/Radio-diagnosis	73.72	15.16	80.00	20.00	100.00
Emergency	76.08	15.27	80.00	20.00	100.00
Hygiene and Sanitation	73.29	14.82	76.00	20.00	100.00

Cost of treatment	71.78	15.41	74.29	20.00	100.00
<b>Overall</b>	<b>75.52</b>	<b>9.57</b>	<b>76.55</b>	<b>30.14</b>	<b>100.00</b>

The average scores in different categories were classified into satisfied and not satisfied on the basis of cut off value 60%. The figure 2 shows that the average cost of treatment in the hospital was not satisfactory among almost 25% of the clients who visited the hospitals. The hygiene and sanitation in the hospitals was reported to be poor by around 20% of participants, followed by laboratory and radio diagnosis services (18.1%). A very less dissatisfaction (3.5%) was reported for nursing care. The overwhelming majority of clients (94.3%) reported the overall satisfaction in the hospitals of Province 1. The analysis of client satisfaction in terms of numeric expression as well as categorical expression shows the relatively higher dissatisfaction in regards to the cost of treatment, hygiene and sanitation, laboratory and radio diagnosis services, emergency, and service quality of the hospitals in province 1. The findings are supported by the many studies conducted in different places.

A cross sectional analytical study design conducted on 425 postnatal mother's satisfaction in maternity care services of government Hospital, Chitwan, Nepal reported mother satisfaction level was connected with waiting time to obtain the service and with the quality of services which was major cause of prefer the hospital (*Sapkota, Sapkota, & Shrestha, 2018*) .



**Figure 2. Satisfaction level (%) of clients in different services of hospitals of Province 1**

The service sector is encountering a sharp competition to meet the requirements of the profitable ways of business. This can be seen in organization's survival in terms of return on

investment, retention of customers, service qualities etc. it indicates that the driving force towards success in service business is the delivery of high quality service. In this sense, enhancement of service quality and its proper measurement is one of the significant issues for the growth of business, in both manufacturing and service. Quality is the key determinant of consumer satisfaction. In this regard, healthcare is one of Indians largest sectors, in terms of revenue and employment. We can see it expanding rapidly. Because of fast growing purchasing power, Indian patients are willing to pay more to obtain healthcare services of International Standards. In this highly competitive era, it has been observed that delivery of quality service of is the key for Indian healthcare providers, to satisfy their customers. Hence, it is important to know how patients evaluate the quality of health care services. It is important because it facilitates the hospital administration to enhance quality of service and satisfy patients to a great extent. The policy of the hospitals need to address for the organizations' sustainability and its' development which is possible by attracting the clients with the quality of services in the optimum cost of treatment and the quality of laboratory and radio diagnosis services. The emergency is the most trafficking area of patients and visitors. The management of emergency is also a major factor for the satisfaction of the patients. The proper hygiene and sanitation should be maintained regularly in the hospitals of province 1 as it directly related to the patients health and their satisfaction towards hospitals service management.

## **CONCLUSION AND RECOMMENDATION**

Clients' dissatisfaction was due to longer waiting period to visit doctors and there were high demand of specialist doctors from the most of place which refers the very low doctor-patients ratio. The government should give still high priority for production of the quality of human resource. The hospitals in Nepal where doctor-patient ratio is very low, doctors may not have sufficient time to explain all details about information of treatment including side effect of drugs, hospitals administration should be aware to provide information to the patients through information desk or nursing staff.

Very excellent responses were reported for the nursing care satisfaction by the clients. So administration should also concern for the attractive incentive and reward for the nurses along with other staff as well. Reporting system of hospitals, delay in reporting, and lacking of latest technology services to diagnose disease accurately were the another hindrances to get clients satisfied in the hospitals of province 1. Laboratory and radio-diagnosis services are equally important for the quality of health services provided by the hospitals as it the standard reference to correlate with clinically suspected cases which give confirmation for the disease to start treatments. Optimum doctors and nurses should be appointed at emergency to tackle the traffic of serious patients with 24 hours service by the administration. There must be ICU or CCU services in the district hospitals which is lacking in province 1.

There is an urgent need of own infection control section in each hospital which should take responsibility for the proper hygiene and sanitation of the hospitals including safe drinking water facility. Another reasons for patients not to be satisfied were the high cost of treatment in ICU/CCU charge, laboratory test, operation fee, medicine cost etc. Because of this burden, out of pocket expenditure of clients in Nepal is also higher. This problem could be reduced by implementing health insurance policy. Government should be taken priority for the insurance to all the patients in all the district of Nepal with minimum premium.

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