



**ORIGINAL RESEARCH PAPER**

**Hospital Administration**

**A CROSS-SECTIONAL STUDY OF PATIENT SATISFACTION LEVEL AMONG INTENSIVE CARE UNIT PATIENTS DURING COVID19 INFECTION CRISIS IN A SELECTED SECONDARY LEVEL HOSPITAL OF BATHINDA PUNJAB**

**KEY WORDS:** Patient's satisfaction, intensive care, quality of care, Covid 19 infection.

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**ABSTRACT**

**Background:** Hospitals have evolved from being an isolated sanatorium to a place with five star hotel like facilities in today's scenario. The patients and their relatives coming to the hospital not only expect world-class treatment, but also other facilities to make their stay comfortable in the hospital even in a place like intensive care unit. This change in their mindset, attitude and expectation which has come due to tremendous growth of media and its exposure, as well as commercialization and improvement in the health care facilities. During this corona crisis the expectation has been increased to prevent COVID 19 infection. As a health care worker it has been experienced by me many times when patient admits in ICU, they expect much from the hospital.

**Aim:** To assess the patient satisfaction with quality of care and to identify relationship between satisfactions of patient with selected variables during COVID 19 crisis.

**Design:** A cross sectional, survey approach was used to study.

**Methods:** The sample was composed of 50 patients discharged from a secondary care hospital. Data were collected using a modified questionnaire on 8 headings covered under more questions regarding patient satisfaction in intensive care during Covid 19 infection crisis in a secondary care level hospital. The options given for rating were: excellent, good, fair and poor. The questionnaire was translated to regional language Punjabi too with some modifications because most of the patients are admitted here from Punjab.

**Result:** Based on the findings of the study the following conclusion was drawn. Study shows that 68% patients rated overall patient satisfaction with intensive care was excellent and 42% were rated good and no one rated fair and poor. This mean mostly patients are very much satisfied with the care in ICU during covid infection.

The five major satisfiers were handling emergencies by nurses and their professionalism, accuracy and efficiency in documentation, Behavior of nurses and their knowledge, quality and behavior of doctors and the courtesy and behavior of staff at admission counter.

**INTRODUCTION**

Patient satisfaction can be interpreted differently by patients and its meaning can also differ for one patient at different times. Patient's satisfaction some time treated as an outcome measure of healthcare providers. A satisfied patient is more willing to recommend the hospital to others to provide his or her care. [15]

Patient satisfaction has become increasingly popular, as a critical component in the measurement of quality of care. Satisfaction is one of the cares out come for healthcare. Satisfaction with health care is measure with a long history in the social science. Nursing service is one of the most important components of hospital service. Understanding how things are looking through the patient's eye should be central part of quality improvement. The level of patient satisfaction with care is an important indicator of quality of care provided in hospitals [9].

Patient places high value on the interpersonal care provided by the nursing staff. Patient's satisfaction is defined as patient's subjective evaluation of their cognitive and emotional reaction as a result of interaction between their expectation regarding ideal nursing care and their perceptions of actual nursing care [13].

The satisfaction of patients coming to hospitals depends on the main structure and function of the medical care system. The functioning of medical care system is based on the various technical, social and physical aspects. The structure of the medical care system is guided by the policies of the government and the type of government set-up prevailing in that particular country, whereas the functioning mainly depends on those who manage the system. In a welfare state like India, where the government takes up the responsibility of providing free medical care to those who are unable to

afford it, free consultation, medicines and treatment facilities have to be provided. Those receiving these kinds of services may be satisfied with whatever services are being provided to them in the hospitals because they are free of cost. But, as soon as they come to realize that it is their right to receive these services and it is the responsibility of government to look after their well-being, when they cannot afford, rise in their level of expectations is uncontrollable specially in armed service hospital and railways etc. [15]

In December 2019, mainland China witnessed a suspicious cluster of diseased patients manifesting as Typical Pneumonia, which was later corroborated as yet another Corona virus outbreak after almost two decades of Severe Acute Respiratory Syndrome Corona virus (SARS-CoV) from 2002 to 2003 . The World Health Organization declared COVID-19 as Public Health Emergency International Concern on January 30, 2020. The current number of confirmed cases and deaths as of Dec 2020 portrays a dismal scenario, not to mention how the COVID-19 pandemic has emaciated the globe physically, emotionally, and financially. Over 200 countries have been stricken thus far and India presently stands at 11,005,850 confirmed cases and 156,418 deaths as of now Feb 2021.

Unprecedented circumstances like recent COVID-19 pandemic has put immense pressure on healthcare service providers to reshape the hospital infrastructure and policies to determine the spread of deadly infections and ensure smooth functioning of healthcare delivery. One such healthcare domain that requires thoughtful guidelines revision is ICU care services. There must be a pandemic-preparedness plan that could assist in maintaining a fine balance between ICU care services delivery and minimal risk of nosocomial COVID-19 infection while handling emergencies. While the primary aim of the revised policies to

shield patients as well as healthcare personnel from preventable infections, patients may not fully understand the essence of imposed rules and regulations. [1]

Patient-centered care is a pre-requisite of high-quality healthcare delivery and the opposite is the fact for poor patient satisfaction which may affect healthcare outcomes. One study by Lobo Prabhu et al. (2018) says a significant relationship between the satisfaction of patients and postoperative surgical complications and 30-day after readmission. Patient satisfaction has been reported to influence the communication, compliance, promptness to seek medical consultation, continuity of care, and patients' understanding and retention of the given information, all of which are indispensable for the high quality delivery of clinical care.

In light of the above, systematized research is very much needed to understand the change, if any, in the dynamics of patient care, satisfaction, and post-recovery outcomes in ICU with regards to revised infrastructure and policies in hospitals in the wake of infectious pandemics like COVID-19. [1]

### Need And Significance Of The Study

Patient satisfaction is recognized as an area subjected to competition, where the patient is seen both as a client and consumer of our health care. To improve quality of care, administration of hospital, doctors and nursing officers need to know what factors influence patient satisfaction especially during COVID 19 infection time. Patients are more knowledgeable these days, they are aware about the current situation and are more demanding.

Patients in the intensive care unit needs prolonged hospital stay sometime. Prolonged hospital stay itself can cause health care associated infections, psychological stress and complications like bed sore, hydrostatic pneumonia, deep vein thrombosis and psychosis etc. So staff should focus giving in holistic care to the patient in order to prevent or limit the complication and for easy recovery. So assessing patient satisfaction can bring new changes in approach or modification in patient care.

### AIM

To assess the patient satisfaction with quality of care and to identify relationship between satisfactions of patient with selected variables during COVID 19 crisis.

### OBJECTIVES

The objectives which emerge out from this paper are manifolds. These are set out below:-

- (a) To study the level of Patient satisfaction in ICU at secondary care hospital during COVID 19 infection crisis.
- (b) To study the factors affecting the satisfaction level.
- (c) To assess the effect of COVID 19 infection in ICU care.
- (d) To suggest measures for improvement of hospital services which may lead to better patient satisfaction during COVID 19 infection crisis.

### METHODOLOGY

Survey approach is used for the present study because this is more useful in educational fact finding, in relatively small samples. The cross-sectional study design was used to fulfill the objective of the study. This study was conducted in the ICU of military hospital Bathinda. The rationale for selecting hospital for the study was that the researchers were more familiar with this hospital and researchers were working in the ICU since a year. The target population of the study was both male and female patients admitted in Intensive Care Unit of the hospital. The sample size consists of 50 patients. The criteria for selection have been divided into two categories Inclusion Criteria were Patients who are willing to participate, who can read and understand English, Hindi and Punjabi, Patients who are for discharge or transfer to other wards on

the day of data collection. Patients who have age above 16 years and if kids were admitted with parents, parents also can fill as they are admitted as sick attendant.

Exclusion Criteria were Patients on ventilator, who do not respond/ disoriented and had altered mental status & Patients who are above 90 yrs.

Sampling Technique done by taking patients who were in intensive care unit during data collection period and who fulfilled inclusion criteria. A modified questionnaire was prepared. The questionnaire was translated to regional language Punjabi too with some modifications because most of the patients are admitted here from Punjab. The tool was examined by the guide. The research tool was finalized according to guides opinion.

The questionnaire was four point rating scale during hospital stay. The rating scales were - excellent, good, fair, and poor. The questionnaire was translated to regional language Punjabi with some modification. The structured questionnaire consists of three sections.

- (a) General information or demographic data, it includes Name, age, sex, marital status, length of hospital stay and diagnosis.
- (b) 8 headings covered under more questions regarding patient satisfaction in intensive care during Covid 19 infection crisis. The options given for rating were: excellent, good, fair and poor.
- (c) Any problem area and suggestions.

A set of questionnaire is prepared and patient were asked to rate them. The researcher first introduced herself to the patient and explained the need and purpose of the study. Informed consent was taken from the patient before data collection. It took 20 to 30 minutes for the patients to answering the questions.

A plan for data analysis was developed by the investigator after the data collection. The data obtained from satisfaction questionnaire are analyzed by descriptive statistics. Percentages would be used for describing the sample. In this study there are 8 headings. These headings are divided into other parts. Patients were asked to rate according to their experience. A suggestion form is also given to the patients to in case they want to suggest for improvement of services in the ICU.

### RESULTS AND DISCUSSION

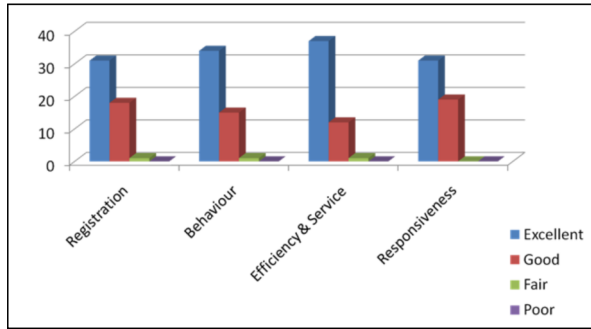
This study was undertaken to assess patient satisfaction with quality of hospital care in ICU during Covid 19 infection. The study was conducted in Intensive care unit in Secondary care hospital by circulation of structured questionnaires among 50 patients.

The review of related literature helped to get a clear concept about research topic. For this study a modified Patient satisfaction with quality care questionnaire was used. This is translated to Punjabi language too. Data collection was done from the month of January 2021 to Feb 2021, analyzed and interpreted using descriptive and inferential statistics.

The questions asked were about the process of patient getting admitted, their reception in the ward, room preparation, behavior of doctors, nurses, orderlies, food services, cleanliness of toilet, etc.

The questions were given same scale from excellent to poor for uniformity of comparison. There were two open ended questions for their opinion about the problems and suggestions for improvement of services.

**ADMISSION AND RECEPTION**



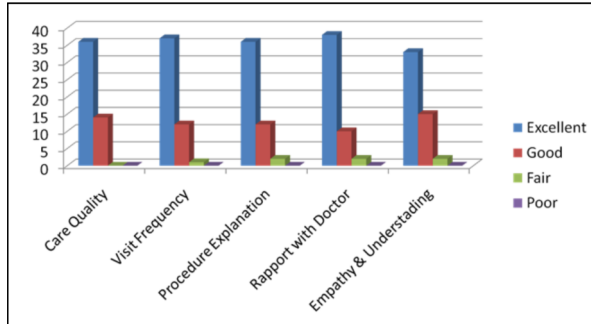
**Ease In Registration.** About admission 62% patients felt it was excellent, 36% patients felt it was good, 2% said it was fair. None of them said it to be poor. Overall people were satisfied with the services of registration at admission counter.

**Behavior Of Front Desk.** About 68% patients felt it was excellent, 30% patients felt good, 2% felt fair, none of them said it to be fair and poor. As a whole, most of the people were satisfied with the behavior of desk at the time of admission.

**Efficiency And Services.** About 74% patients felt it was excellent, 24% patients felt good, 2% felt it was fair. None of them said it to be poor. So on a whole, Most of the people were satisfied with the services.

**Responsiveness To Need.** Nearly 62% of the patients felt it was excellent, 38% patients felt good. None of them said it to be poor. On a whole, mostly people were satisfied.

**MEDICAL SURGICAL CARE**



**Quality of Care.** Nearly 72% patients felt it was excellent, 28% felt good, none of them said it to be fair or poor. Mostly people were satisfied with the explanation about disease and treatment by doctors.

**Frequency of visit.** About 74% patients felt it was excellent, 24% patients felt good, 2% felt it was fair. None of them said it to be poor. Mostly patients in the ICU were satisfied with the doctor rounds.

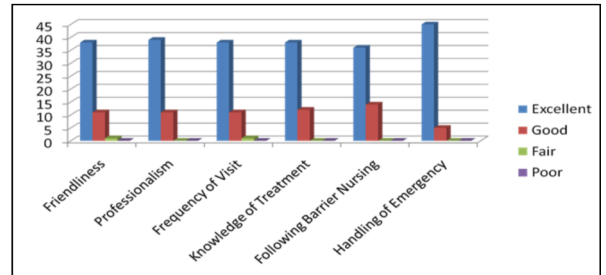
**Explanation of Procedures.** About 72% patients felt it was excellent, 24% patients felt good, 4% felt it was fair. None of them said it to be poor. So on a whole; mostly people were satisfied with the explanation of procedures. It was observed that the briefing about the explanation of procedures still few patients were not happy still they were ready for procedure.

**Rapport with Doctor.** 76% patients/attendants felt it was excellent, 20% patients felt good, 4% felt it was fair. None of them felt it to be poor.

**Empathy and Understanding.** Nearly 66 % patients felt it was excellent, 30% patients felt good, 10% felt it was good. Only 4% said it to be poor. Some people felt that the doctors have become less sensitive and empathetic to their problems. The new generations of doctors should be trained in soft skills

and value of empathic care must be reemphasized. However, mostly people were satisfied with the behavior of doctors.

**NURSING CARE**



**Friendliness And Professionalism.** Nearly 76% patients felt it was excellent, 22% felt good, 2% said it fair. None of them said it to be poor. Mostly people were satisfied with the friendliness and behavior of the nurses. They found that nursing officers are very professional in dealing patients.

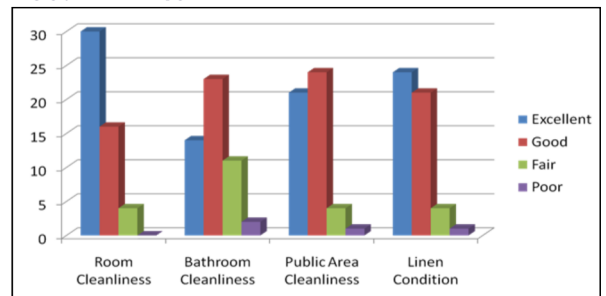
**Frequency of Visit.** About 76% patients felt it was excellent, 22% patients felt good, 2% felt it was fair. None of them said it to be poor; Mostly patients in the ICU were satisfied with the nursing officers' rounds in each shift.

**Knowledge of your Treatment.** About 76% patients felt it was excellent, 24% patients felt good. None of them said it to be fair or poor. So on a whole; mostly people were satisfied with the knowledge of nursing officers.

**Following Barrier Nursing.** 72% patients/attendants felt it was excellent, 28% patients felt good, none of them felt it to be fair and poor. All were satisfied with the nursing officers following barrier nursing.

**Handling Emergency.** 90% patients/attendants felt them excellent, 10% patients felt that they are good in handling emergencies. Nobody has any doubt on nursing officers while handling emergencies in the ICU.

**HOUSEKEEPING**



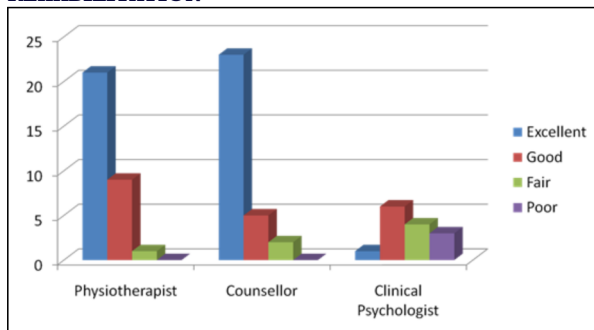
**Cleanliness of Room.** About 60% patients/attendants felt it was excellent, 32% patients felt good, 4% and 8% felt it was fair, None of them said it to be poor. It was felt that there is less sensitivity about protocols to avoid cross infection amongst staff.

**Cleanliness of Washroom.** Some people complaint about the bad behavior of hospital and housekeeping attendants, although they did not give in writing. The shortage of hospital attendants for taking the patient for investigations in or outside also reported. On a whole, 28% people were satisfied with the cleanliness of bathroom and behavior of ward Sahayika/housekeepers. 46% said it was good, 22% said fair and 4 % said it poor. This was a major dissatisfier.

**Cleanliness of Public Areas.** About 42% patients felt it was excellent, 48% patients felt good 42% , 8% felt it was fair, 2% said it to be poor. Most of them were satisfied with cleanliness of public areas like waiting room, canteen, dispensary and garden.

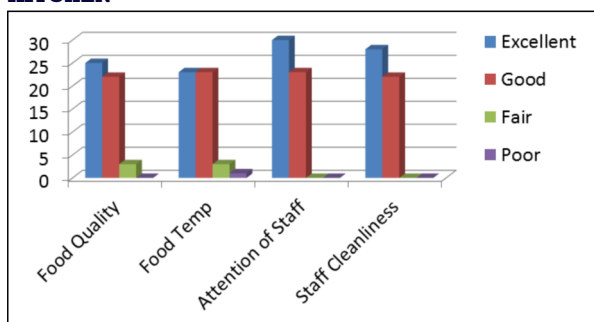
**Condition of Linen.** About 48% patients felt it was excellent, 42% patients felt good and 8% felt it was fair, 2% said it to be poor. Overall mostly patient were satisfied. It was found that patients want to change their bed sheets daily but due to over admission in ICU made it not possible for the staff to change it daily for all the patients.

**REHABILITATION**



This section was not applicable for 20 % patients. Others 80 % were highly satisfied with the performance of physiotherapist and counseling by counselor and they were not satisfied with clinical psychologist side because they were not seen by them on time.

**DIET SERVICES KITCHEN**

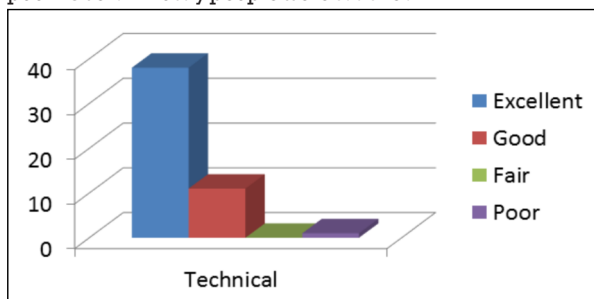


**Quality of food.** About quality of food 50% patients felt it was excellent, 44% patients felt good, 6% felt fair. None of them said it to be poor. Overall mostly people were satisfied with the quality of food served in the hospital but only thing that they dint like chapattis and always complaint of poor quality of chapattis providing in the ICU.

**Temperature of Food.** About 44% patients felt it was excellent, 46% patients felt good, 6% felt fair. 2% said it to be poor. Overall mostly people were not satisfied with temperature of food.

**Personalized Attention of staff/requirement.** About 60% patients felt it was excellent, 40% patients felt good. None of them said it to be poor. Overall mostly people were satisfied with behavior of the staff.

**Cleanliness of the Staff.** About 56% patients felt it was excellent, 44% patients felt good. None of them said it to be poor. Overall mostly people were satisfied.

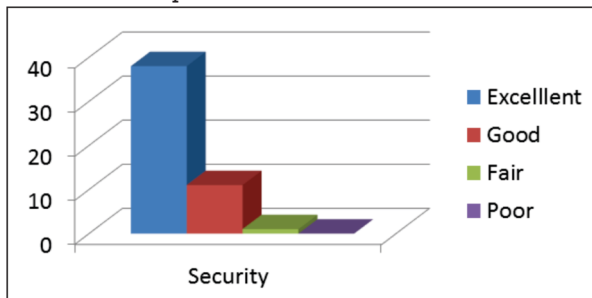


**TECHNICAL DEPARTMENT**

About 76% patients felt it was excellent service of AC /blower for temperature in the ICU, 22% patients felt good, 2% felt poor. None of them said it to be poor. Overall mostly people were satisfied with temperature of the ICU.

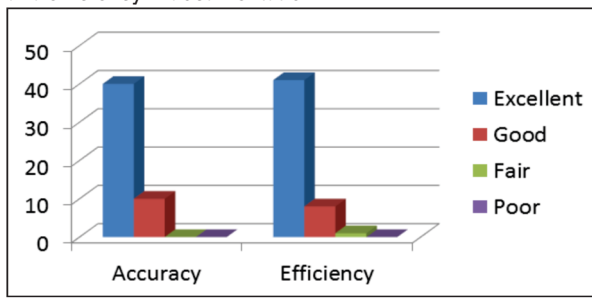
**SECURITY**

About 76% patients felt it was excellent, 22% patients felt good and 2% felt it to be fair. None of them said it to be poor. Overall mostly people were satisfied because of high security of the service hospital.



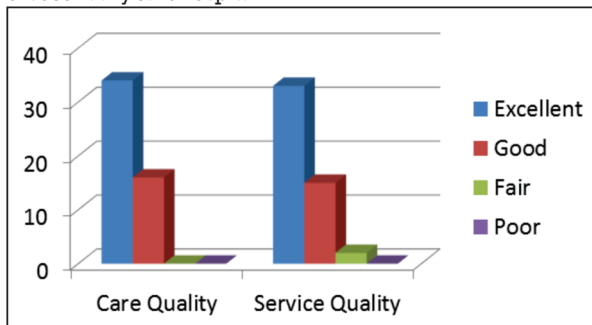
**DOCUMENTATION**

Accuracy and efficiency are two base kept for the study of documentation. About 80% patients felt it was excellent in documentation, 20% patients felt good. None of them said it to be poor. Overall mostly people were satisfied with accuracy and efficiency in documentation.



**OVERALL RATING**

About 68% patients felt it was excellent, 32% patients felt good, none of them said it to be poor. Overall mostly people were satisfied with the quality of care and services in the ICU of secondary care hospital.



**RECOMMENDATIONS**

On interaction with patients and their attendants, following suggestions came out for improvement

**Admission.** There is no procedure of issuing Covid attendant's pass. However, if a patient is very sick and the attendant are civilian, if he has to go out of cantonment to get any investigations which are not available in hospitals, for them to go out a bit difficult. Then he has problem for coming back because of they don't have Covid passes. The policy of issuing Covid passes for going out of Cantonment may have to be reconsidered.

**Room Preparation.** There were many complaints of flies in the ward. The pest control department (field health

organization) should do regular sprays and take effective measures for controlling them. Room preparation should be improved by more cleaning, flying catcher measures and daily dusting.

**Behavior of Doctors.** Although 90% of responses showed that the doctors were above good level, yet 10% people felt that the doctors have become less sensitive and empathetic to their problems. The new generations of doctors should be trained and value of empathic care and soft skill must be re-emphasized

**Nurses' Behavior.** Due to high demand in other departments like new Covid wards and staff deficiency, there is always shortage of nursing officers, nursing assistants and housekeepers. Now the working number of other staff has decreased and this has started showing in their efficiency and behavior. More number of staff should be posted for patient care. Management should think about it and put more demand from headquarters and retain good efficient nursing officers and nursing assistant for the hospital especially in the ICU.

**Toilets.** The cleanliness of toilets should be improved, there are only two toilets for 18 bedded patients, it may be done thrice a day. Frequent and surprise checks by floor in charge and administrators will instill a sense of responsibility and alertness in housekeepers.

**Rules and Regulations.** It was observed that the briefing about the rules and regulations of hospital had got poor response. It was one of the biggest dissatisfiers. Visitors are not adhering to the timings. If they checked they are reluctant to understand so most of the time ADM JCO called up to take care of this part. The patients and their relatives should be clearly informed in writing about the rules and regulations. This should be available in Hindi and Punjabi also.

**Explanation about disease and treatment by doctors.** All tests to be carried out and treatment options were not told at the time of admission, which caused frequent delay in treatment and procedures. Patients require more information about their disease and treatment. Patient should be explained in detail about the tests and procedures to be carried out and these should be pre planned and if possible may be done from the OPD itself. There were inadequate guidance for attendants about care of patients discharged from ICU.

**Food Services.** Food services have got 6% fair and 2% poor response. It was the second major dissatisfier. The quality and quantity of food, especially quality of chapattis and its presentation should be improved. Even temperature of food is the main complaint of the patients. There were also some complaints of normal diet being given to diabetic patients and high spice in food. This needs careful monitoring.

**Behavior of Ward Sahayikas/ Housekeepers.** Most of the patients were disturbed by frequency of visits by different staff at different time. The timing for activities like nursing, cleaning, ward rounds should be fixed, so that the patient is mentally prepared for the same and can take rest at other time. Some people complaint about the bad behavior of hospital lady ward sahayikas and housekeepers .There is less sensitivity about avoiding cross infection in staff like washing of hands and washing of bedpans before use. They should be trained about the importance of hand washing and other universal precautions, before and after touching any patient. They should be regularly trained and sensitized about how to improve their image and behavior. After so much complaints administration must take actions against them to improve their behavior towards patients care.

**CONCLUSION**

A cross sectional study was done to assess patient satisfaction

level among intensive care unit patients during covid-19 infection crisis in a selected secondary level hospital. The study was conducted in sample of 50 patients. Based on the findings of the study the following conclusion was drawn. Study shows that 68% patients rated overall patient satisfaction with intensive care was excellent and 42% were rated good and no one rated fair and poor. This mean mostly patients are very much satisfied with the care in ICU during covid infection.

The five major satisfiers were handling emergencies by nurses and their professionalism, accuracy and efficiency in documentation, Behavior of nurses and their knowledge, quality and behavior of doctors and the courtesy and behavior of staff at admission counter.

The five major dissatisfiers were cleanliness of the toilet, cleanliness of the room, condition of linen, quality of the food and dietary service and clinical psychologist visit.

**Conflicts Of Interest**

The authors have none to declare.

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