



HEALTH CARE MANAGEMENT OF PATIENTS HOSPITALIZED WITH COVID-19 PNEUMONIA

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Keywords: Covid-19 patients, quality of care, level of satisfaction

Abstract: Patients do not usually have the skills or knowledge to assess the provider's technical competence, but they do know how they feel, how they have been treated, and whether their expectations have been met. Viewed by specialists, patient satisfaction is an element of psychological health that influences the outcome of care. A satisfied and informed patient tends to cooperate with the doctor and more easily accept his recommendations. The purpose of this study is to assess the degree of satisfaction of Covid hospitalized patients regarding the quality of care and treatment. Objectives of the study: identifying the main existing problems and finding solutions to improve the quality of “health care”. Materials and methods: a retrospective, descriptive study, using the patient's medical records and a qualitative study, measuring the degree of Covid-19 patient's satisfaction, according to the quality of nursing care and medical treatment during hospitalization. Conclusions: Covid-19 patients were mostly elderly with associated morbidity, from urban areas, especially men. 95.02% of patients were discharged from the hospital with improved condition, and 4.98% died, most of them being unvaccinated.

INTRODUCTION

SARS-CoV-2 is a new coronavirus, first identified in December 2019 in an outbreak of pneumonia in China (Wuhan City, Hubei Province), which has not been previously identified in humans. It belongs to the Coronaviridae family, belonging to the same family as the viruses that cause Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) and seems to have epidemiological characteristics similar to them.(1,2)

Pneumonia, in general, is the damage to the alveoli of the lungs by the action of pathogens (viral, bacterial etc.). It occurs when the initial infection of the nasopharynx progresses and causes changes in the lungs. Deterioration of the alveoli by inflammation caused by the penetration of pathogens leads to the accumulation of exudate (pus), fluids and dead cells and compromising gas exchange between the lungs and blood vessels (oxygen and carbon dioxide). Interference with oxygen transfer leads to symptoms such as coughing, increased respiratory rate and difficulty breathing (dyspnea) or related to infection and inflammation (fever, chills, sputum, altered general condition).

Recent evidence suggests that COVID-19 disease develops in two phases: the first - the infectious phase, which lasts 5-7 days from the onset of symptoms, the second - the inflammatory phase begins around days 5-10, which manifests itself through pneumonia and a small number of cases (5%) can reach a “cytokine storm” response with rapid worsening of the general condition and lung damage.(3)

Although up to 80% of cases with COVID-19 infections are mild and moderate, about 15% of those infected progress to severe forms of pneumonia that require hospitalization, and 5% end up with critical, sometimes fatal status. Old age, male sex and comorbidities increase the risk of

severe disease.

Among people hospitalized with COVID-19, 15-30% will continue to develop COVID-19-associated acute respiratory distress syndrome (CARDS), a form in which the body manifests an excessive and self-destructive inflammatory reaction. Autopsy studies of patients who have died from a severe SARS-CoV-2 infection reveal not only the presence of diffuse pulmonary alveolar lesions consistent with respiratory distress, but also a higher load of clots (thrombi) in the pulmonary capillaries. This is the unmistakable signature of the coronavirus.(4,5,6)

AIM

The aim of the study is to assess the degree of satisfaction of inpatients, regarding the hospital conditions and the quality of medical services provided. The monthly evaluation of the results of the questionnaires can identify the main dissatisfaction of patients, which seeks the best solutions and the most appropriate measures to increase the quality of medical services, reducing risks and increasing the safety of patients.

Objectives of the study:

- assessing the opinion of patients on the degree of satisfaction during hospitalization;
- identifying the main existing problems;
- finding solutions to improve the identified problems;
- improving the quality management in the medical departments of the hospital by applying a plan of measures.

MATERIALS AND METHODS

The study is a retrospective one based on observation sheets and statistical data of inpatients diagnosed with SARS

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Article received on 26.05.2022 and accepted for publication on 02.09.2022

Cov-2 pneumonia, as well as monthly inpatient satisfaction assessment reports.(7)

The working tool used was the anonymous questionnaire with pre-formulated answers. The data were coded and statistically processed in the Excel Program.

The study was developed within the Sibiu Pneumophthiology Hospital.

The study group consisted of 215 respondents to the questionnaire. Inclusion criteria: patients with a health status which allowed them to fill out the questionnaire and / or those who agreed to fill out the questionnaire. Exclusion criteria: patients in severe condition, poorly cooperating or uncooperative, patients with mental illness, including Alzheimer's disease or senile dementia.

The analysed period was between May 2020 - Apr 2021.

RESULTS

Between 01.05.2020- 30.04.2021, at the hospital level, there were 1023 patients hospitalized with the diagnosis of SARS-CoV-2 infection. The Sibiu Pneumophthiology Hospital has a total number of 170 beds, of which 60 were allocated to COVID-19 patients, which means a share of 35%.

Out of a total of 1023, 972 patients (95.02%) were discharged with "improved" condition, and 51 patients died (4.98%) (figure no. 1). The average duration of hospitalization was 12.47 days, all patients with SARS-CoV-2 pneumonia being on stationary or aggravated health condition, most of them with other associated diseases (cardiovascular, diabetes, COPD, cancer) (93%) (figure no. 2).

Of the patients admitted to the Covid Department, 215 patients answered the questionnaire (21, 01%).

Figure no. 1. Distribution of Covid-19 outpatients

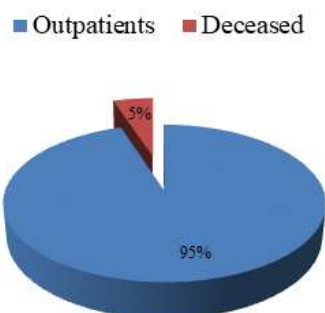
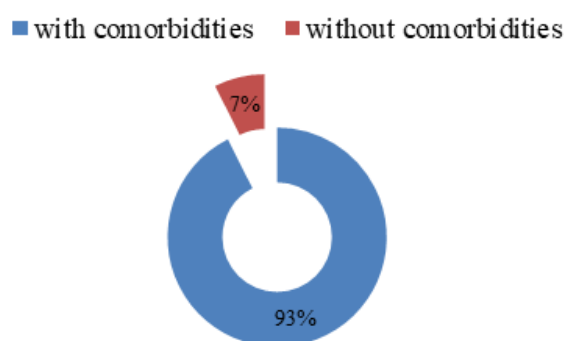


Figure no. 2. Patient's distribution by comorbidities



Patients were predominantly males (56%) (figure no. 3) and came mainly from urban areas. Most of them were elderly in the age group 60-69 years and over (figure no. 4), and as a level of schooling they had mainly high school and secondary education.

Figure no. 3. Patients' distribution by gender

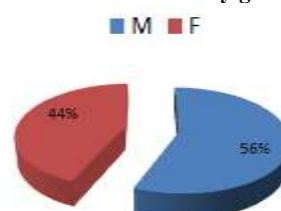
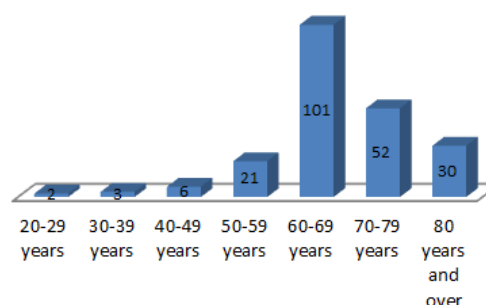
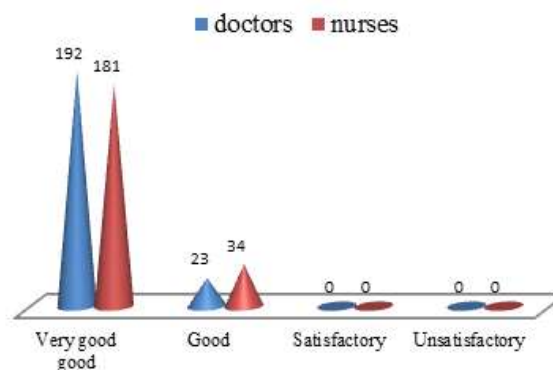


Figure no. 4. Patients' distribution by age



Patients were asked to rate the quality of care during hospitalization. They accorded "very good" and "good" qualifications, both for doctors and nurses (figures no. 5).

Figure no. 5. Qualifications for doctors and nurses



DISCUSSIONS

All patients with Covid-19 came to our hospital by ambulance from the Emergency Department, Sibiu. They were predominantly males and came mainly from urban areas. Most of them were married, belonging especially to the age group 60-69 years old, and as a level of schooling they had mainly high school and secondary education.(7)

The medical staff managed to boost the morale of all patients admitted to the Covid Department from the beginning, by encouraging them and adopting a positive attitude throughout the hospitalization, despite their concern and anxiety, due to negative information from the media about hospitalized patients.

The patients appreciated the whole medical team, they felt the kindness and empathy of the medical staff from the very beginning of the period of hospitalization.

Also, the hotel conditions were very good in their opinion, with oxygen station at bedside, with an audible warning button, but also with its own bathroom. Patients immobilized or in poor health were cared for with great attention, being sanitized and fed in bed.

The attending physicians gave the patients all the explanations regarding their health problems, giving them the opportunity to ask additional questions if they had any questions.

Also, the doctors on duty in the Covid Department communicated permanently with the patients' relatives, through a telephone specially designed for this purpose. In critical situations, at the request of patients, the hospital facilitated the visit of patients by a family member, following a request approved by the doctor on duty. The family member was fully equipped by the hospital and accompanied for 10 minutes to the patient's bed, previously signing a declaration on his own responsibility, that he assumes the risk of infection.

For the treatment of patients, drugs were administered exclusively from the hospital, and in the case of injectable treatments, all ampoules were opened in front of the patient.

At the paraclinical examinations all patients were accompanied by our staff.

The interviewed patients did not notice any form of conditioning of the medical act and did not feel the need to reward the medical staff during the hospitalization, "they did not even think about such a thing", they said in the interview.

Asked to assess on a scale from 1 to 5 the quality of medical services, most of the patients appreciated the hospital's staff with "very good" regarding admission, hospitalization, accommodation conditions (facilities, equipment), the degree of cleanliness in the hospital, nutrition quality and bathrooms conditions, taking into account the each hospital ward was equipped with its own bathroom.

Asked about their general degree of satisfaction with their own experience during hospitalization, all patients said they were very satisfied with the aspects described above.

Asked if they would return to our hospital for admission, or if they would recommend this medical unit to other people, the patients answered affirmatively.

At the end of the questionnaire, we asked the patients to offer us suggestions and / or recommendations regarding the hospitalization period, in order to improve the quality of medical services at the hospital level.

Thus, the patients were impressed primarily by the medical staff, who were in their opinion, extremely professional, prompt and dedicated and constantly encouraged them with a kind word, which did more than the treatment.

Recommendations to improve medical care after the assessment of the satisfaction degree of internal patients

1. Continuing the effort of the management team to ensure adequate conditions for hospitalized patients, with the continuous improvement of the hospital's quality standards.
2. Maintaining an appropriate level of hygiene and disinfection at the hospital level, in accordance with the legislation.
3. Continuity of providing the necessary medication to inpatients.
4. Replacing worn bed lines by purchasing new linens.
5. Diversification of patient menus, depending on the season.
6. Adequate communication between healthcare professionals and patients, observing medical ethics and ensuring a climate of trust and safety for patients.

The SARS-CoV-2 pandemic is a global concern, as a very large number of people have been infected since the beginning of this pandemic until now.

A solution to remedy this problem can be educating the population by wearing a face mask, social distancing, avoiding or reducing crowding and limiting social contacts.

Cardiovascular disease, diabetes mellitus, old age, lung disease and cancer are known to be risk factors, and if a person has one of the above examples, they may have a severe form of SARS-CoV-2 virus infection, which can eventually lead to death.(8,9)

It is necessary that when the symptoms appear, the doctor should be notified and samples to be taken for a PCR test

that detects the infection with this virus in order to immediately start the treatment so that the disease does not reach an advanced form.

The disease progresses variably depending on the patient; there may be people infected with SARS-CoV-2 who have no symptoms, others have a mild form of the disease, but there are also patients with severe forms, which have even led to death.(10)

CONCLUSIONS

The patients admitted to the Pneumophthiziology Hospital were very satisfied with the quality of the care received during the hospitalization, they trusted the medical team, they felt safe and they particularly appreciated the empathy shown by the entire medical team. Therefore, if they needed our specialized services in the future, they stated that they would choose our hospital again and would recommend it to those close to them, relatives and friends.

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