

Study of Covid-19 management in a tertiary care hospital in Assam

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Abstract

The wide range of symptoms and severity associated with co-morbidities had been the key challenges in disease management of Covid-19. Drug usage pattern and using right drugs according to symptom presentation has been most useful in relieving symptoms, and hence providing a good discharge outcome of Covid-19 patients. Polypharmacy and symptomatic treatment has proven to be keys in disease progression, while effectively managing existing co-morbidities decreased the mortality rate.

Keywords: Covid-19, management, discharged, polypharmacy

Aims & Objectives

1. To study drug usage pattern in management of Covid 19 patients
2. To study outcome of patients at the time of discharge.

Introduction

World Health Organization declared Covid-19, a Public Health Emergency of International Concern & Pandemic in January & March 2020 respectively. At par with the

country, Tezpur Medical College and Hospital geared up to tackle the pandemic on war footing. By the month of November, 2021 the number of isolation beds for confirmed cases are 265, dedicated ICU beds with ventilator are 36 and plasmapheresis machine was installed last year itself though it is no longer used now for Covid-19 treatment. As on 08.10.2021 580657 confirmed cases of Covid-19 are detected in Assam, out of which 5502 died and 566101 got discharged.

A “cluster containment strategy” to control the disease was followed according to national guidelines. Thus, breaking the chain of transmission and preventing its spread. RT-PCR(Reverse Transcriptase Polymerase Chain Reaction) and RAT (Rapid Antigen Test) for the virus has played pivotal role in detection of the illness. . Vaccine is being administered widely and efforts are made to provide full vaccine coverage in the state.

Methodology

200 bed tickets of Covid-19 ward patients admitted during the period of October to December, 2020 were included in the study. Retrospective study was done by analyzing each patient’s ticket based on demography,

co-morbidity and management received during their stay in the hospital. After a thorough study of data of these patients, analysis using ANOVA was done.

Results

- Patients shifted to ICU: 11%
- Patients discharged: 87%
- Patients died: 1.5%
- Leave Against Medical Advice: 0.5%

Statistical analysis of most common drugs administered

- Paracetamol:100%
- Remdesivir: 19.5%
- Oxygen Therapy: 21%
- Zinc: 82%
- Azithromycin :73%
- Piperacillin & Tazobactam : 34%
- LMWH: 31%
- Multivitamin: 83%.
- Vit C: 98%
- Dexamethasone: 63%
- Plasma:3%

Conclusion

In the management of Covid-19 patients, the SOP followed was according to national guidelines. Polypharmacy and symptomatic treatment has shown results in improving symptoms and subsequently in decreasing the severity and mortality rate. The management protocol proved to be efficacious in the study conducted.

Discussion

On 26 November 2021, WHO designated the variant B.1.1.529 a variant of concern, named Omicron which was taken notice of in South Africa due to rising cases. It is still not clear if Omicron is more transmissible in comparison to other variants, including Delta; however,

it has shown to have milder symptoms. There is no evidence yet on the effectiveness of current covid-19 vaccines against this new variant. Studies are underway in finding whether the existing treatment protocols are efficacious against Omicron. Hand hygiene, wearing masks and social distancing are still the most useful preventive measures in disease spreading.

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