Study on the perceived impact of COVID -19 pandemic on the delivery of healthcare and management of hospital services in Bhubaneswar and Cuttack

Dissertation Submitted to

The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

By

Anuja Satpathy

Under the Supervision and Guidance of

Prof. Vinod Kumar SV

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled Study on the perceived impact of COVID -19 pandemic on the delivery of healthcare and management of hospital services in Bhubaneswar and Cuttack is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature)

Name of Student – Anuja Satpathy

Date -02-6-2021

CERTIFICATE

This is to certify that Dr. Anuja Satpathy in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her internship at MarketsandMarkets during March 22, 2021 to June 19, 2021.

Place: Preceptor/Head of the Organization

Date: Name of the organization

CERTIFICATE

This is to certify that dissertation titled Study on the perceived impact of COVID -19 pandemic on the delivery of healthcare and management of hospital services in Bhubaneswar and Cuttack is a record of the research work undertaken by Dr. Anuja Satpathy in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide IIHMR University, Jaipur

Date

School Dean IIHMR University, Jaipur

Date

ACKNOWLEDGEMENT

I would like to express my gratitude to everyone who has helped me complete the report. The internship opportunity at Marketsandmarkets has been an enriching experience which helped me develop both professionally and personally.

I would like to express my gratitude to Dr. Rajeev Kalia, Marketsandmarkets for providing me this opportunity.

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Sincerely

Anuja Satpathy

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16th Jun 2021

To Whomsoever Concern

This is to certify that **Ms. Anuja Satpathy (8766)** is working with us full time as a **Research Associate** from **16-Mar-21** till date.

This letter is provided upon his/her own request in lieu of documentation for **education purpose** and has no other significance.

For Markets and Markets Research Pvt. Ltd.

Dhara Shah
Vice President - Human Resources

Note:- This E-Copy is issued during the **Work From Home** period followed by the Organization in adherence to the health and safety advisory issued by competent authority under the Government of India in the month of March and the year 2020

Table of Contents

Table of Figures

Study on the perceived impact of COVID -19 pandemic on the delivery of healthcare and management of hospital services in Bhubaneswar and Cuttack

Abstract

COVID- 19 pandemic has caused widespread disruption of activities spanning almost all sectors through its rapid global spread. Healthcare sector has been in the center of efforts during this crisis whereby health systems in all countries have played a critical role in providing essential medical care to the community. The rapid surge in cases imposed sever strain on health systems of the country owing to the large inflow of cases, deaths, manpower crunch, disruption in supply chain which all led to impaired healthcare delivery. Compounded with large number of complications and death it has created a crises situation across country including India. Several adaptations and adjustments had to be made to rapidly prepare for the challenges posed by the new disease. During this period, some hospitals have discontinued their Outpatient Departments and nonemergency services in order to direct their resources towards combating COVID-19 and providing emergency medical care. This study is planned to get the insights from healthcare workers about their perception and develop an understanding regarding the impact of COVID19 on the healthcare service delivery and try and suggest practical solutions based on these findings.

Introduction

The spread of COVID-19 across the globe and its out go to related morbidity and mortality challenge the country by several means. One such basic perspective is delivering health services in COVID times, is a dreary occupation for medical care workers and over-burden work has made extremely close bottlenecks in the arrangement of the administrations that lead to under perceived and unaddressed space of the feelings of anxiety of the medical care workers create during the pandemic condition. During this flare-up of COVID-19, an interference of these basic help administrations and supplies would conceivably disturb the arrangement of intense medical care by an ill-equipped healthcare facility.

Medical services workers are regularly accepted to have an obligation to work, regardless of whether confronted with individual danger. This is especially so for experts (specialists and attendants). Yet, nonprofessionals such as cleaners, cooks, and watchmen are also enlisted in the healthcare sector. A continuous test of responding to pandemic influenza has put the requirement to work under a microscope right now, where a powerful reaction relies upon most uninfected healthcare workers proceeding to work, notwithstanding close to personal risk.

It may not, in any case, be sensible to accept that medical care laborers will actually want to work. Specialists debated whether it is ethically reasonable not to treat HIV sufferers during the early years of the Epidemic Human Immunodeficiency Virus (HIV), and SARS patients had difficulty being treated by some healthcare providers during the 2003 outbreak of severe acute respiratory syndrome (SARS). There is no irrational reason to reject the possibility that the pandemic influenza reaction might be comparable to HIV and SARS.

Health care workers are impacted by factors that imply a sense of expert commitment when it comes to their preparedness to work, an assessed hazard to oneself and ones' family and incorporation in the preparedness planning of healthcare workers (doctors, last year clinical understudies, medical caretakers, and overseers) may relinquish work for securing themselves and family.

It is likely that staff truancy will also be at a high level. Equipment and supplies shortages may adversely affect healthcare delivery and may prevent patients from getting the care they need. Panic might actually endanger set-up working schedules. In such a situation, for a decidedly ready hospital, adapting to the wellbeing results of a COVID-19 outbreak would be a challenge. Coronavirus is a continuous circumstance and associations interaction ought to be changed day by day to adjust to different necessities in the emergency. Alongside this, associations need to explore through the implementation of various procedures to reduce impact.

The hospital plays a critical role within the health system in giving fundamental clinical consideration to the local area, especially in emergency. Prolonged and consolidated outbreaks can prompt the progressive spread of the infection with quickly expanding administration requests that can possibly overpower the capacity of hospital and health system at large.

Reviews of literature

1. Review article titled "How will country-based mitigation measures impact the COVID-19 epidemic?" published in The Lancet stated that deaths due to Approximately 10-18 percent of the total economic impact of viral transmission is caused by Coronavirus disease 2019 (COVID-19). Putting an end to the inevitable economic downturn must be a priority for governments. Isolating infected populations, implementing quarantine, and segregating infected populations helped eradicate the disease in China. A person's interception of infection and his or her subsequent infection affect the course of infection, as well as speed of initial epidemic spread is determined by the average duration of infectiousness, and its likely duration. Public health epidemiologists ought to assist policymakers in making decisions about how to reduce morbidity and associated mortality, prevent epidemic peaks that would overwhelm the health care system and keep the economy from suffering devastating effects, and as vaccines are developed and manufactured on a large scale, and antiviral drugs are developed, the epidemic curve will flatten. Contact tracing is of high importance in the early stages to contain spread. Public communication strategies that inform the public how to avoid infection, along with additional assistance to manage the economic downturn, are essential. Governments must make difficult decisions, but, if not more, what individuals do in response to government actions is crucial.

2. A study on “COVID-19 and pandemic planning: How companies should respond” by Global EY., the corporate output of several multinational companies has been reduced or operations have been suspended because travel restrictions and social distancing have been enforced. In coordination with federal, state, and local authorities, annexures can serve as powerful mechanisms. A firm's resilience planning includes business continuity, disaster recovery, and crisis management, but

cyber risk is relatively new in this area. Businesses may experience disruptions caused by natural disasters, technological failures, or operational problems, as well as pandemics. Continuity for the most critical products and services can only be achieved when pandemic planning is incorporated into existing resilience management efforts. Organizations must extend their planning beyond traditional resilience strategies due to the potential occurrence of large-scale, severe and long-lasting pandemic events.

3. In a review article on "COVID-19, an Emerging Coronavirus Infection: Current Scenario and Recent Developments-An Overview", by Alfonso J. Rodriguez-Morales, D. Katterine Bonilla-Aldana, Ruchi Tiwari, Ranjit Sah, Ali A. Rabaan and Kuldeep Dhama, it was concluded that worldwide scientists, researchers, and various health agencies are in a race to fight COVID-19 by designing appropriate vaccines and therapeutics to keep away any pandemic situation which may arise otherwise if this virus could not be halted and are putting high efforts to stop the further transmission and spread of SARS-CoV-2 by following strict vigilance, intervention strategies, heightened prevention and control policies.

4. A study on "The Global Macroeconomic Impacts of COVID-19. Seven Scenario Warwick McKibbin and Roshen Fernando introduced a scope of strategy reactions which will be required both in the present moment just as in the coming a very long time for COVID-19 outbreak under seven distinct situations. Isolating influenced individuals and decreasing the enormous scope of social connection is a compelling reaction. Alongside this, wide dispersal of good hygiene practices can be a minimal expense and profoundly viable reaction that can decrease the degree of disease and consequently lessen the social and financial expense. The long-term reactions are much more significant. Worldwide participation, particularly in the circle of public health and economic developments, is fundamental. All significant nations need to take an interest effectively. It would be past the point where it is possible to act once the sickness has grabbed hold in numerous different nations and attempt to close lines once a pandemic has begun.

Research Question-

What does the healthcare staff think about the impact of COVID19 on the delivery of services and management of hospital services in hospitals of Bhubaneswar and Cuttack?

Objectives

a) To understand the perception of healthcare providers on impact of COVID19 on hospital services.
b) To understand the perspectives of hospital management staff on the impact of COVID19 on the functioning of their facilities
c) To map the change in functioning of hospitals due to COVID19
d) To suggest possible solutions for better preparedness in future.

Methodology

- Study design and approach – This is planned to be a Descriptive study, using a mixed method approach. Primary data collection was planned thorough a self-administered questionnaire which was shared on google forms to all the healthcare workers working in the hospitals at Bhubaneswar and Cuttack. Due consent was taken, and confidentiality and data security were ensured. Secondary Data Review was also done. Relevant reports, past studies and peer reviewed research articles on related areas is included for the review.

Data Collection and Analysis- Google forms derived data from healthcare workers is analyzed using MS Excel and this is triangulated with the findings from the desk review of relevant reports and research publications.

Results

From the data derived from the healthcare workers, it was found that more than 87% of the hospitals in Bhubaneshwar and Cuttack were COVID treating centers.

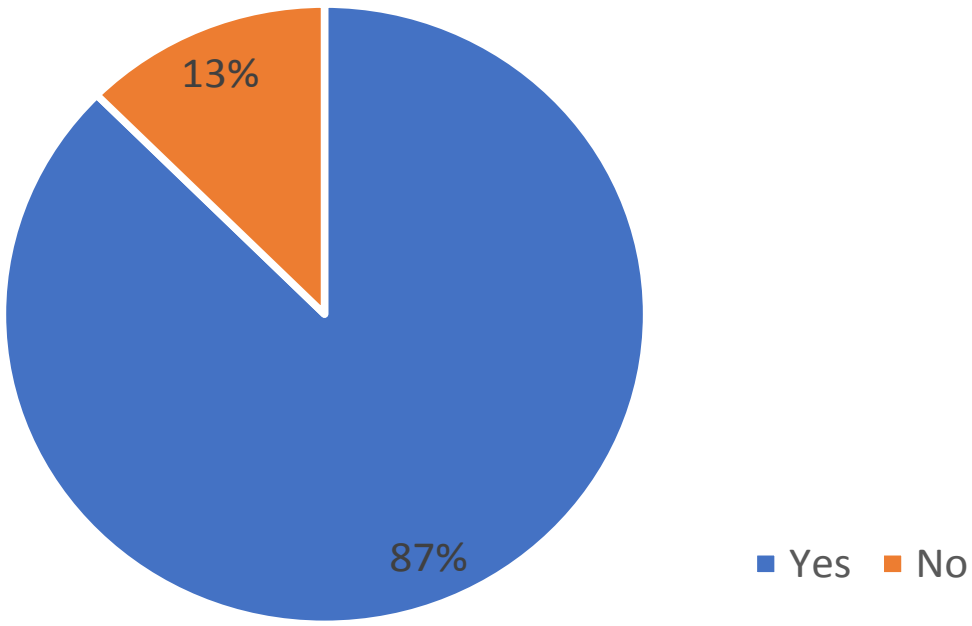

Fig. 1: Percentage of hospital being COVID treating center.

When the no. of bed strength compared with the beds utilized for COVID treatment, it was found that in most of the hospital all the beds were occupied by the COVID patient.

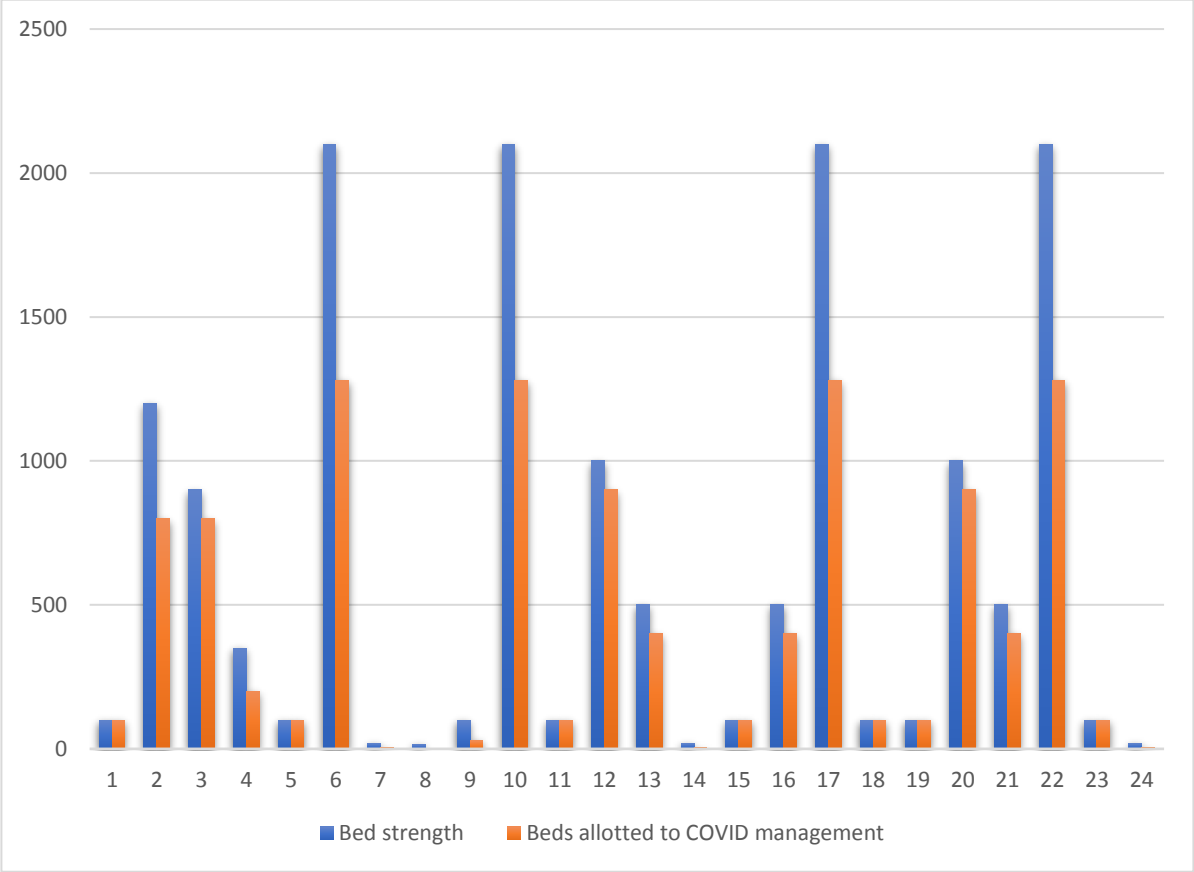

Fig. 2: Bed strength - COVID patient occupancy

As per the data it shows that most of the hospital have less than 30 oxygen, ICU and general beds, hospitals with more than 100 are those which have the normal bed strength of 1000 and more.

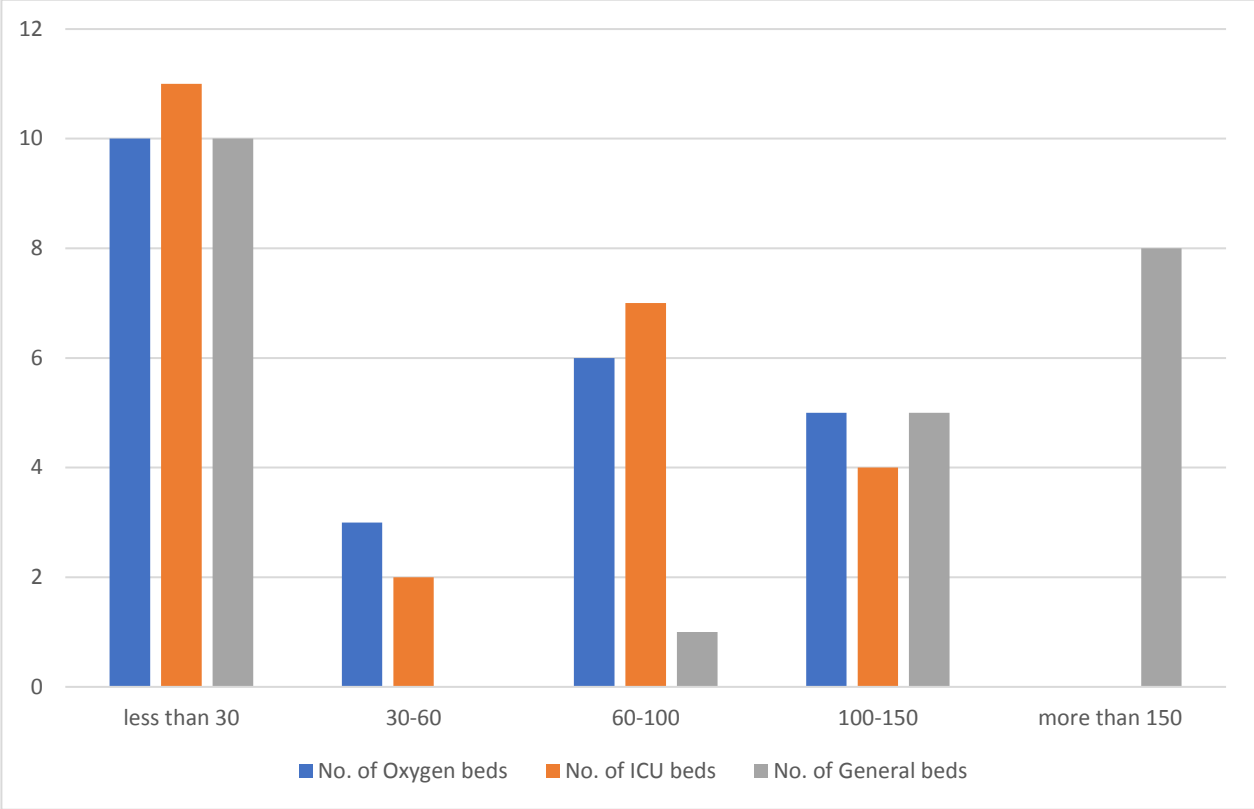

Fig. 3: Number of Oxygen, ICU and General bed strength.

On being asked about the change is working hours; 75% people agreed that there was a change and fluctuation in the working hours but there were only 13% who face long working hours during this pandemic.

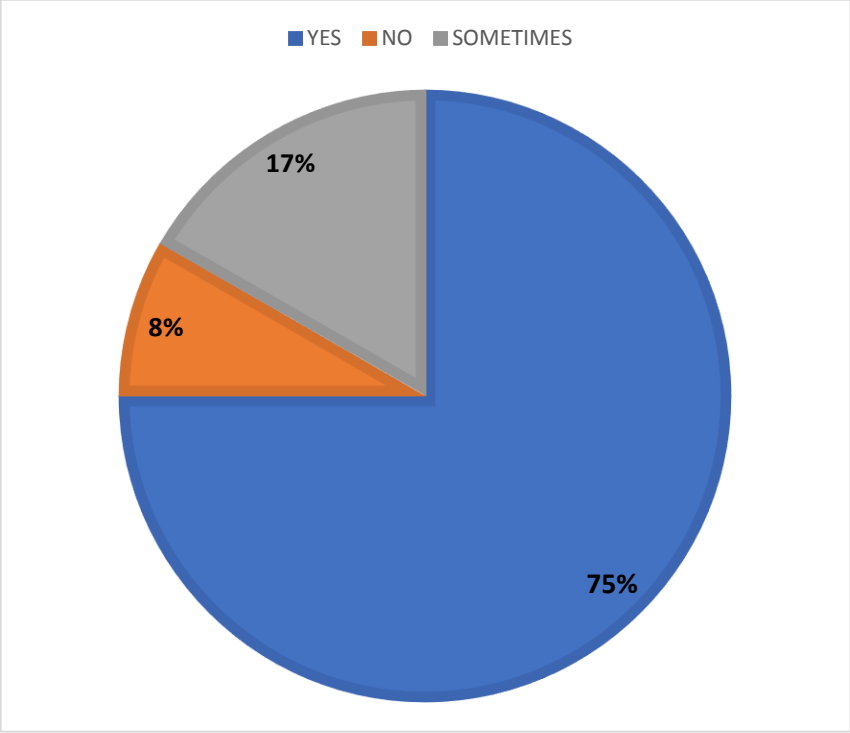

Fig. 4: Change in working hours.

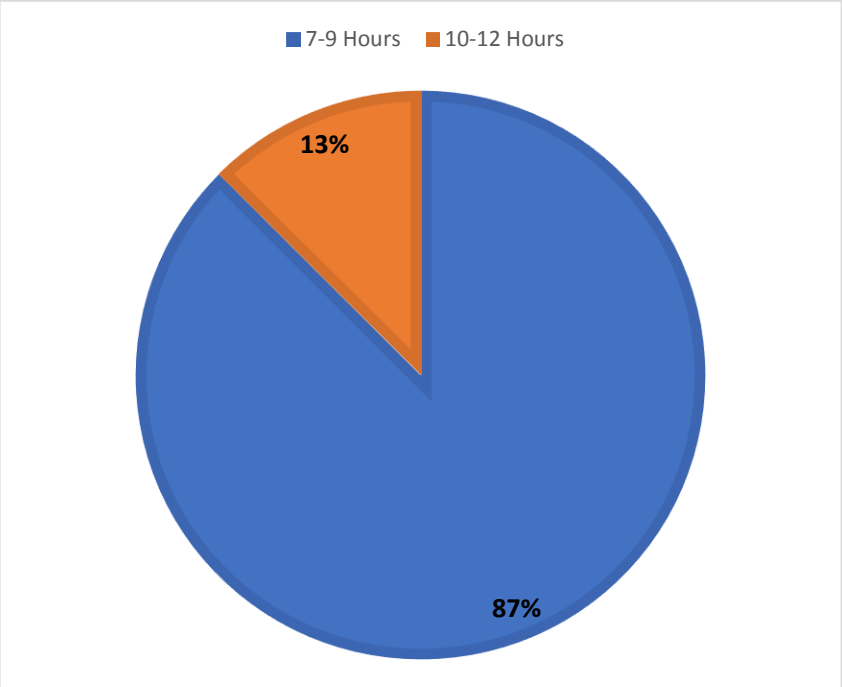

Fig. 4: Duration of working hours.

The psychological status of the healthcare workers at peak of COVID was found to be stressed most of the time, somewhat emotional and sometime satisfied and sometime dissatisfied across the parameter.

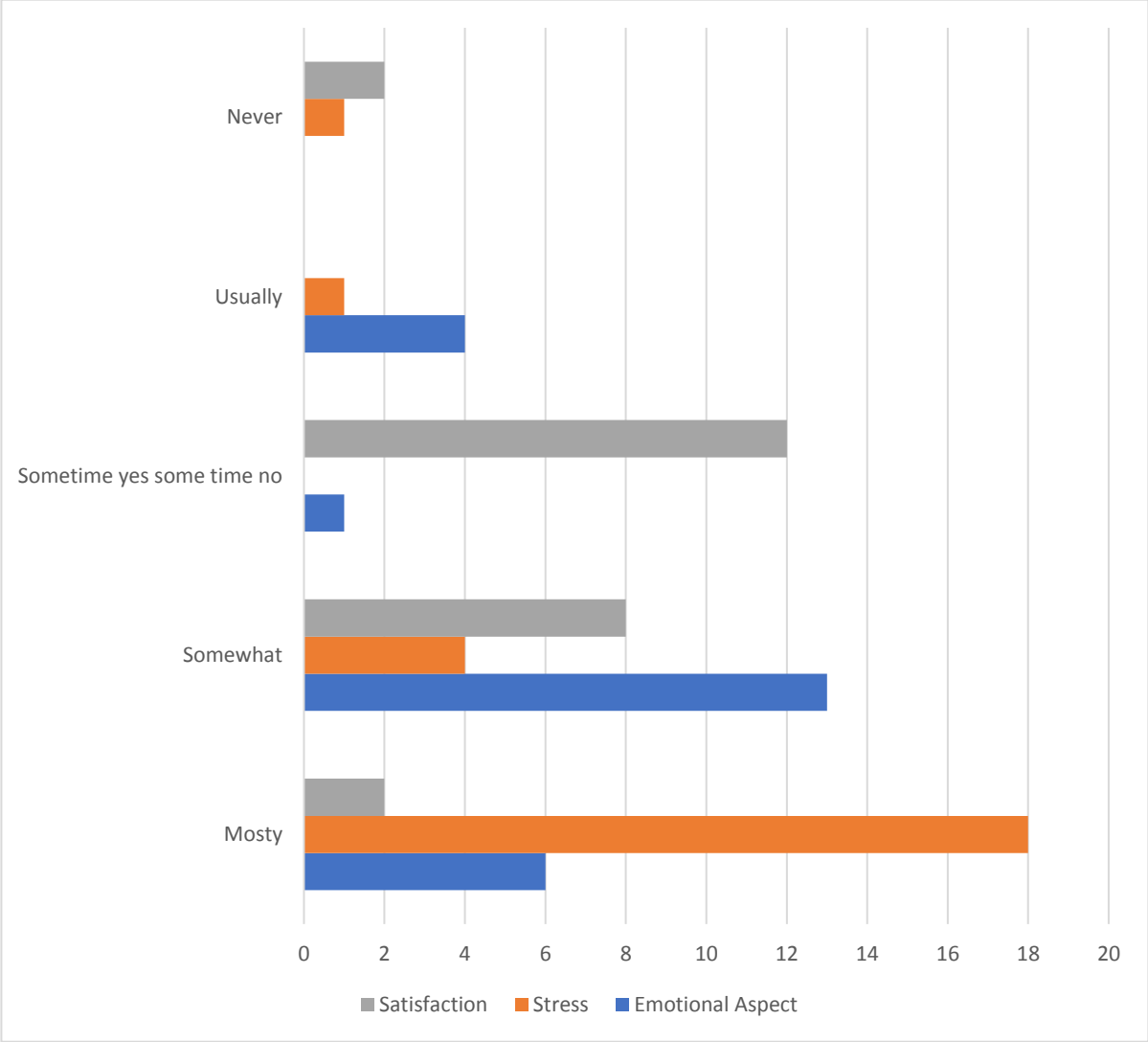

Fig. 6: Status of mental health of the healthcare workers during this pandemic.

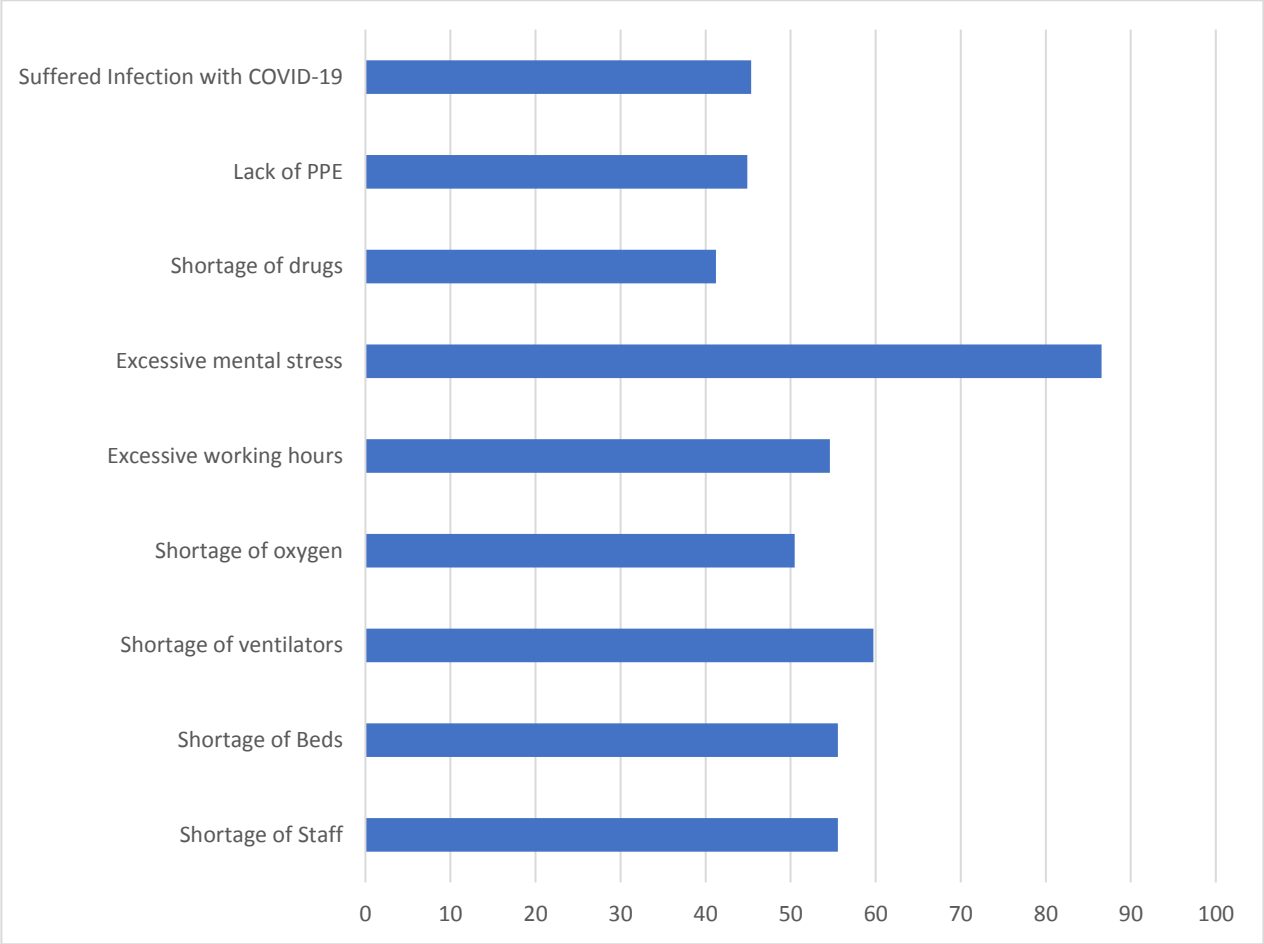

Fig. 7: Challenges faced by healthcare worker during this period.

Excessive mental stress was the most prominent challenge perceived by the respondents followed by shortage of ventilators, shortage of beds and shortage of staff in that order which caused a lot of chaos. Other challenge faced by the healthcare workers are insufficient medical equipment's, fluctuation in working hours and use of PPE cause tremendous frustration and unwillingness to work during this pandemic.

After the above analysis it was found that Shortage of staff, bed, manpower where the most common issues faced by the healthcare workers. There were additional issues which caused a lot of chaos like:

1. "Returning the patient due to shortage of ICU beds."
2. "Oxygen shortage"
3. "Difficulty in managing the public, leading to many conflicts and assault to the medical staffs.
4. "Patient care was compromised."
5. Many health staffs became covid positive, resulting in shortage of manpower and stress on the staff on duty."
6. "Controlling the crowd was a big problem, as soon as the CHC being a vaccination and covid testing center."
7. "Discomfort due to PPE kit and layers worn for protection."

Suggestions from the healthcare worker that they think while working in this pandemic scenario that needed to be changed or implemented or innovated are:

- Continue Social distancing
- More support from the government

- Better public awareness and cooperation
- Increase in manpower who are quite powerful and proper management.
- Lockdown
- Requiring more staff to manage effectively.
- Giving more importance to health Dept and directing more funds for the development of medical institutions and overall health providing centers throughout the country, and maintaining the lockdown protocols of limited movement of people
- Periodic duty and quarantine to heath workers along with supply of huge number of testing kits to small hospitals
- Awareness and strict punishment on violation of rules by public, especially for those who are wearing mask below the mouth, even at this point.

Recommendation

COVID 19 was announced as an overall pandemic by the World Health Organization on 11th March 2020.India, with almost 1.3 billion individuals, have two different healthcare services framework with a deficient public health infrastructure and a widely developing private area. While the entire world is striving to adjust to the sharp increase in the infection, the current clinical consideration limit even in developed nations has to miss the mark concerning the certifiable need. There was a restriction in retrieving the inpatient and critical patient record in India, making it doubtful whether a mass accommodation of people hospitalized due to COVID 19 is possible or not. As a large number pf healthcare facility is available in the private sector, public-private partnership was the best alternative to challenge this pandemic. At district level it is necessary to strengthen the public- private partnership for overcoming the lack of bed capacity. Elderly patients are the most effected segment od the population due to weak immune system and co-morbidities leading to serious consequences. Such patients may warrant admission to ICUs and may require steady ventilation.

As of May 2021, the COVID-19 case include in India is approaching 1.5 lakh and is consistently on the ascent. All have a typical need as of now, and are running after infrastructure strengthening and extension, to productively contain the pandemic, while Indian states have a fluctuated limit as far as bed and ventilator counts.

As a consequence of burnout, healthcare professionals may also be forced to take sick leave and may even change jobs because of stress and burnout. Healthcare workers experience the ill effects of work-related pressure. There is typically an explanation for this: healthcare workers are faced with high expectations, and they may not have enough opportunities, skills, or social support at work. During this period, people can experience extreme distress, burnout, or health problems. Eventually, medical care laborers might be not able to give top notch medical services delivery.

Cognitive-behavioral procedures work by giving better approaches to feel, think and act in stressful circumstances. Mental and physical relaxation procedures redirect consideration from horrendous stressful thoughts and sentiments and fabricate versatility. The organization can implement changes in work practices in order to enhance the match between workers capabilities and work practices, preventing stressful events from occurring or the feeling of stress or burnout from occurring.

Public hospitals in India are facing numerous challenges due to several factors, including management deficiencies, lack of funds and lack of technology. The situation is what it is due to a combination of factors.

A global health epidemic has abruptly caused specialists and healthcare workers-tasked with securing people, families, and networks in difficult circumstances with limited resources, lack of personal protective equipment (PPE), and other equipment-to become a focus.

The above review of the prevailing difficulties confronting medical care recommends a few key discoveries:

- Frequent errors, Low quality care and patient discomfort and disappointment are the main outcome of poor infrastructure.

- Chronically sick patient needs prompt attention when compared to the acutely diseased. This can be overcome by the joint efforts, coordination and timely fulfilment of patient requirement.

- Technological advances in information technology and research on clinical practice can make a wide change in the healthcare system.

- Patients and consumers are being educated about their health and wellbeing, hence there should be a proper path of relationship to share decision among healthcare worker and the patient.

A lack of adequate facilities, equipment, and infrastructure is another reason cited for the government hospital in India to be in such public health crisis. It is difficult for individuals to get medical aid, and private hospital areas have generally closed down to non-emergency admissions that are not life-threatening. In some cases, family members' aggressive emotional reactions can manifest as threats against medical services facilities or verbal or physical abuse of medical professionals. There is a problem when certain government hospitals' wellness units and specialists do not have protective equipment, but hostile administrations take an antagonistic stance in response. Health experts are perceived as 'new untouchables. COVID-19 is a particularly dreadful disease that people fear getting from clinical specialists or being stigmatized for having contracted it themselves.

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