SUMMER TRAINING

AT

INDIAN SPINAL INJURIES CENTRE (ISIC)

FROM 4th MAY, 2021 to 3rd JULY, 2021

A STUDY ON CHALLENGES FACED BY COVID HOSPITALIZED PATIENTS ATTENDANTS DURING THE SECOND WAVE IN INDIA

BY

DR. URVASHI KAPOOR

ROLL NO. 1230

UNDER THE GUIDANCE OF

DR. SHEENU JAIN, ASSOCIATE PROFESSOR

IIHMR UNIVERSITY, JAIPUR

MBA HOSPITAL AND HEALTH MANAGEMENT (MBA-HM)

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Indian Institute of Health Management and Research, Jaipur

ACKNOWLEDGEMENT

The summer training at Indian Spinal Injuries Centre was an incredible prospect for my personal and professional development. It provided me the necessary exposure to the duties of a Hospital Administrator throughout my internship period. It was indeed an honour for me to work closely with skilled and professional people in a reputed and prestigious hospital.

I would like to extend my deepest gratitude towards Dr. K Preetham (organizational mentor), Addl. CMA cum MS, ISIC Hospital, Delhi for providing me guidance and managing his busy schedule to facilitate my training.
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The summer training has been an important part of my career development and I would like to express wholehearted thanks to all the individuals taking me ahead in this journey. I shall endeavour all the skills and learning I procured while doing this study to the best of my abilities and will strive for improvement every step in my career.

Dr. Urvashi Kapoor
Roll No. 1230
HM Batch-25

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ABBREVIATIONS

BME	Biomedical Engineering
CCU	Critical Care Unit
CSSD	Central Sterile Supply Department
ECG	Electrocardiogram
ICD	International Classification of Diseases
ICU	Intensive Care Unit
ISIC	Indian Spinal Injuries Centre
IT	Information Technology
MD	Medical Director
MLC	Medico-Legal Case
MRD	Medical Records Department
MRI	Magnetic Resonance Imaging
OPD	Outpatient Department
OT	Operation Theatre
OTDC	Operation Theatre Day Care
PMS	Preventive Maintenance System
PPE	Personal Protective Equipment

OBSERVATIONAL LEARNING

BRIEF DESCRIPTION OF THE ORGANIZATION

"Spinal Injury Management is the most complex because it requires a multi-disciplinary team. Nothing, we ever do is enough. Until we have revived hope and joy in the heart of every patient, we have not completed our jobs. It is not sufficient to perform a successful surgery or provide an effective prosthetic. We must transform the lives of the families who come to us. Healing the spirit is as important as healing the body. We truly believe that inner peace and joy are the best healers."– ISIC Team

Indian Spinal Injuries Centre (ISIC) offers world-class medical management, comprehensive rehabilitation, research, and training in the field of spinal cord injuries. It spans 15 acres of land and has 20,000 square meters of covered building area. The hospital is a 200 bedded-facility with six operation theatres (OTs) backed by the latest diagnostic and treatment facilities, state-of-the-art intensive care units (ICUs), 24-hour ambulance, and emergency facilities. ISIC's medical and support staff are highly skilled to provide excellent medical care with compassion.

MISSION

ISIC aims to reinstate hope and joy in the hearts of all patients by focusing on patient safety, clinical excellence, and an unwavering commitment to providing outstanding physical, emotional, and spiritual care.

VISION

1. ISIC aspires to be New Delhi's first choice for spinal and orthopedic healthcare.
2. To foster an educational culture throughout all its activities as well as supporting excellent health sciences innovation and research in a rational and respectful environment.
3. Unwavering commitment to providing high-quality, cost-effective health services to all those served through education, outreach, and other innovative services in the spine and other spinal ailments.
4. To bolster its relationships by partnering with prestigious institutions of higher learning by providing modern facilities and technological advancements.

5. ISIC hopes to make a difference in the lives of thousands of new spinal injury cases every year by providing brilliant medical guidance via compassionate therapy.

VALUES & COMMITMENTS

- ISIC aspires to raise knowledge and awareness in the subject of disability and to introduce appropriate legislation for prevention of disability and the equal opportunity bill enforcement in collaboration with policymakers
- ISIC will continue to place a strong emphasis on the development of human resources via educational programs majorly focussing on the courses in Rehabilitation Sciences, both graduate and post-graduate.

CORE SPECIALTIES

SPINE SERVICES

ISIC's spinal service is a one-stop facility for the treatment of patients suffering from various conditions related to spinal disorders. ISIC has evolved itself into an exceptional and dedicated team that provides exclusive care for patients with spinal problems. It is currently recognized as one of the world's leaders in spinal surgery, research, and training both in India and internationally.

ORTHOPEDICS

ISIC's orthopedics department is committed to providing skilled care for all musculoskeletal components. In the last two decades, there has been a significant evolution and knowledge expulsion in the area of injury and fracture. The main objective, however, is to provide mobility without pain. ISIC aspires to be 'the one-stop' for patients suffering from disorders related to muscles and bones as well as students seeking to stand out in clinical care.

NEUROSURGERY

Neurosurgery is a branch of medicine that deals with an array of procedures involving the brain and spine. At ISIC, a broad spectrum of neurosurgical procedures that ranges from the management of head injury to functional neurosurgery is offered. ISIC has a world-class facility and cutting-edge technology for neurosurgery including dedicated trauma management, specialized ICU care, and fully equipped neurosurgical theatres with neuromonitoring equipment.

REHABILITATION

At ISIC, Rehabilitation has two meanings-

1. To provide aid for improvement in the physical conditions of the patients and promote recovery via appropriate treatment
2. To strive to make the patient independent irrespective of his injury to advance reintegration into society.

For the treatment of neurological strokes, paralysis, backaches, arthritis, spondylitis, and postoperative complications, ISIC has had extraordinary achievements. The goal is to improve mobility, boost independence, build up muscles and reduce the dependence on medications as well as to reduce pain, improve mobility, strengthen muscles and enhance self-reliance.

FLOOR PLAN OF INDIAN SPINAL INJURIES CENTRE

BASEMENT	GROUND FLOOR	FIRST FLOOR	SECOND FLOOR
CSSD	EMERGENCY	CHAIRMAN OFFICE	DIALYSIS
MRD	OPD	D.G & M.D OFFICE	OTDC
PURCHASE	MRI/X-RAY	OT COMPLEX	BLOOD BANK

TECHNICAL DEPARTMENT	DENTAL	CATH LAB/CCU	MEDICAL LAB
LAUNDRY	HEART COMMAND CENTRE	CHAI KHANA	EDUCATION
ORTHOTIC DEPARTMENT	GENERAL WARD	CONFERENCE/MINI-CONFERENCE	
MAIN GENERAL STORE	HERITAGE WARD	AUDITORIUM	
CATH LAB	SODEXO	MARKETING/IT/	
PHARMACY	KITCHEN/CANTEEN	QUALITY DEPARTMENT	
	MAIN LOBBY	MUSEUM	
	ADMIN BLOCK	DR'S LOUNGE	
	TRADITIONAL MEDICINE	NANDA DEVI WARD	
	ICU	CLINICAL RESEARCH	
	REHAB	EVEREST WARD	
	ASSISTIVE TECHNOLOGY		

MEDICAL FACILITIES AT ISIC

SPINAL DISORDERS AND SURGERY
ALTERNATIVE MEDICINE
ANAESTHESIA
DENTAL
EMERGENCY (24*7)
EXECUTIVE HEALTH CHECKUP
GYNAECOLOGY
JOINT DISEASE SERVICES (RHEUMATOLOGY)
NEUROSURGERY
OPHTHALMOLOGY

PAEDIATRICS
PLASTIC SURGERY
PSYCHOLOGY AND STRESS MANAGEMENT
SURGERY
UROLOGY

REHABILITATION

ORTHOPAEDICS
CARDIOLOGY
CHEST AND RESPIRATORY MEDICINE
DERMATOLOGY
ENT (EAR/NOSE/THROAT)
GASTROENTEROLOGY
INTERNAL MEDICINE
NEUROLOGY

NEPHROLOGY & DIALYSIS
OBESITY AND WEIGHT MANAGEMENT PROGRAMME
PAIN CLINIC
PSYCHIATRY
PHARMACY (24*7)

RADIOLOGY
SPEECH THERAPY

- √ Physiotherapy
- √ Occupational Therapy
- √ Hydrotherapy
- √ Assistive Technology
- √ Social Work
- √ Prosthetics & Orthotics
- √ Peer Counselling
- √ Vocational Counselling

MODE OF DATA COLLECTION

- The primary data was collected by direct observation in the Hospital Administration department.
- The data was also collected by visiting various wards and departments to understand their functioning and role in the hospital.

GENERAL FINDINGS ON LEARNINGS

HOSPITAL ADMINISTRATION DEPARTMENT

- The entire duration of the internship (8 weeks) was completed in the hospital administration department under the guidance of Duty Administrators.
- The primary role was to observe and understand the functioning of the department in close collaboration with all other departments at the hospital.
- Responsibility to enter correct information of COVID-19 positive patients on the COVID-19 Data Management Portal for the procurement of Remedisvir doses for further treatment.
- Responsibility for addressing the queries of patients and their attendants.
- To understand and observe the work of the department in close collaboration with the consultants, nursing, and other clinical services to ensure delivery of healthcare services.
- During the peak of the second wave of the COVID-19 pandemic, major responsibilities were:
    - Handling the phone calls and conveying the messages and concerns received to the authoritative person for necessary actions to be taken.
    - Acting as a connecting link between the patients/their attendants and the nursing staff/doctors.

- Assisting the duty administrators by timely updating the management of COVID-19 bed and patient statistics data on the COVID-19 Data Management Portal.
- Responsibility for timely entering/checking the 24-hour death data in the COVID-19 Data Management Portal.
- Helping patients with their reports and other documentation

- The weekly activities throughout the internship are mentioned in **Table 1**.

Table 1- SUMMER TRAINING WEEKLY REPORT

WEEKS	**ACTIVITIES PERFORMED**
WEEK 1 (4^{TH} MAY- 9^{TH} MAY)	- Handed out the documents (cremation certificates and death slips) to patients' families for the disposal of COVID-19 dead bodies - Attended phone calls and noted the messages/queries/issues to inform the concerned person for further action - Attended training for the entry of data on government portal for requisition of Remedisvir - Dedicated two whole days for updating the maximum COVID-19 positive patient's information on the COVID-19 Data Management Portal - Made phone calls on behalf of the hospital to gather required data from the attendants of hospitalized patients for completing the required data in the government portal - Observed and learned the management of patient's queries/requests/grievances by the Duty Administrators
WEEK 2 (10^{TH} MAY- 16^{TH} MAY)	- Made the cremation certificates and handed out the documents (cremation certificates and death slips) to patients' families for the disposal of COVID positive dead bodies. - Attended phone calls and noted the messages/queries/issues to inform the concerned person for further action - Updated details of patients on COVID-19 Data Management Portal for the requisition of Remedisvir drug -Made phone calls on behalf of the hospital to gather required data from the attendants of hospitalized patients for completing the required data in the government portal - Informed the duty in charge in the wards/ICUs to update the patients' condition to their respective attendants who called/messaged the Duty Administrator for updates - Observed and learned the management of patient's queries/requests/grievances by the Duty Administrators

	- Co-ordinated with the nursing staff and consultants to arrange video calls for patients' attendants
WEEK 3 (17^{TH} MAY- 23^{RD} MAY)	- Made the cremation certificates and handed out the documents (cremation certificates and death slips) to patients' families for the disposal of COVID-19 dead bodies. - Observed and learned the management of patient's queries/requests/grievances by the Duty Administrators - Co-ordinated with the nursing staff and consultants to arrange video calls for patients' attendants - Co-ordinated with the duty in charges of the wards/ICUs and updating patient's conditions to their attendants - Learned the reporting of an incident on the ISIC portal - Handed out COVID RT-PCR reports - Arranging X-ray/chest/lab reports of patients according to their requirements - Responsibility of timely entering/checking and updating the 24-hour death data and bed statistics on the COVID-19 Data Management Portal. - Observed and learned the process of verification of the documentation of CGHS/ECHS for reimbursement - Attempted a Pre-test and Post-test as part of the online induction module of ISIC
WEEK 4 (24^{TH} MAY-30^{TH} MAY)	- Observed and learned the management of patient's queries/requests/grievances by the Duty Administrators - Co-ordinated with the nursing and staff and consultants to arrange video calls for patients' attendants - Responsibility of timely entering/checking and updating the 24-hour death data and bed statistics on the COVID-19 Data Management portal. - Observed and learned the process of verification of the documentation of CGHS/ECHS for reimbursement - Co-ordinated with the duty in charges of the wards/ICUs and updating patient's conditions to their attendants - Handed out COVID RT-PCR reports - Arranging X-ray/chest/lab reports of patients according to their requirements
WEEK 5 (31^{ST} MAY- 6^{TH} JUNE)	- Responsibility of managing patient's queries/requests/grievances but with the guidance of Duty Administrator - Observed and learned the resolution of billing payment issues referred by billing manager/ACMA - Responsibility of timely entering/checking and updating the 24-hour death data and bed statistics on the COVID-19 management portal - Learned about the documentation involved for the admissions and billings of ECHS/CGHs/TPAs holders.

	- Observed the documentation verification of free bed patients and handling of their admissions - Handed out COVID RT-PCR reports - Arranging X-ray/chest/lab reports of patients according to their requirements
WEEK 6 (7^{TH} JUNE- 13^{TH} JUNE)	-Responsibility of verification of the documentation of CGHS/ECHS for reimbursement - Responsibility of managing patient's queries/requests/grievances but with the guidance of Duty Administrator - Responsibility of timely entering/checking the 24-hour death data in the COVID-19 management portal. - Responsibility of updating the bed statistics at the government data management portal every 2 hours - Handed out COVID RT-PCR reports - Observing the co-ordination between doctors and duty administrators for smooth OT surgeries
WEEK 7 (14^{TH} JUNE- 20^{TH} JUNE)	- Observed and understood the management of emergency services like Ambulance services - Closely observed the booking of appointments (PET, TRODAT scan) for IPD patients from outsource laboratories - Responsibility of timely entering/checking the 24-hour death data in the COVID-19 management portal - Responsibility of updating the bed statistics at the government data management portal every 2 hours - Handed out COVID RT-PCR reports - Learned the drafting of a formal response to e-mails - Observed the management of some of the difficult cases and how to resolve the matters by keeping in mind all the aspects that are associated with it
WEEK 8 (21^{ST} JUNE- 27^{TH} JUNE)	- Responsibility of updating the bed statistics at the government data management portal every 2 hours. - Responsibility of timely entering/checking the 24-hour death data in the COVID-19 management portal - Handed out COVID RT-PCR reports - Responsibility of booking appointments (PET, TRODAT scan for IPD patients from outsource laboratories - Responsibility of working on the grievances/complaints received via e-mails or letters and studying the complete case to draft a response for the same
WEEK 9 (28^{TH} JUNE- 3^{RD} JULY)	- Responsibility of booking appointments (PET, TRODAT scan for IPD patients from outsource laboratories - Responsibility of timely entering/checking the 24-hour death data in the COVID-19 management portal - Responsibility of updating the bed statistics at the government data management portal every 2 hours

	- Responsibility of working on the grievances/complaints received via e-mails or letters and studying the complete case to draft a response for the same - Visited various departments such as CSSD, BME, Assistive technology, Housekeeping, Technical office and interacted with their HODs to learn the functioning of the departments. - Also, visited all the wards and other departments

Furthermore, various other departments were visited for understanding their functioning like:

- *CSSD*

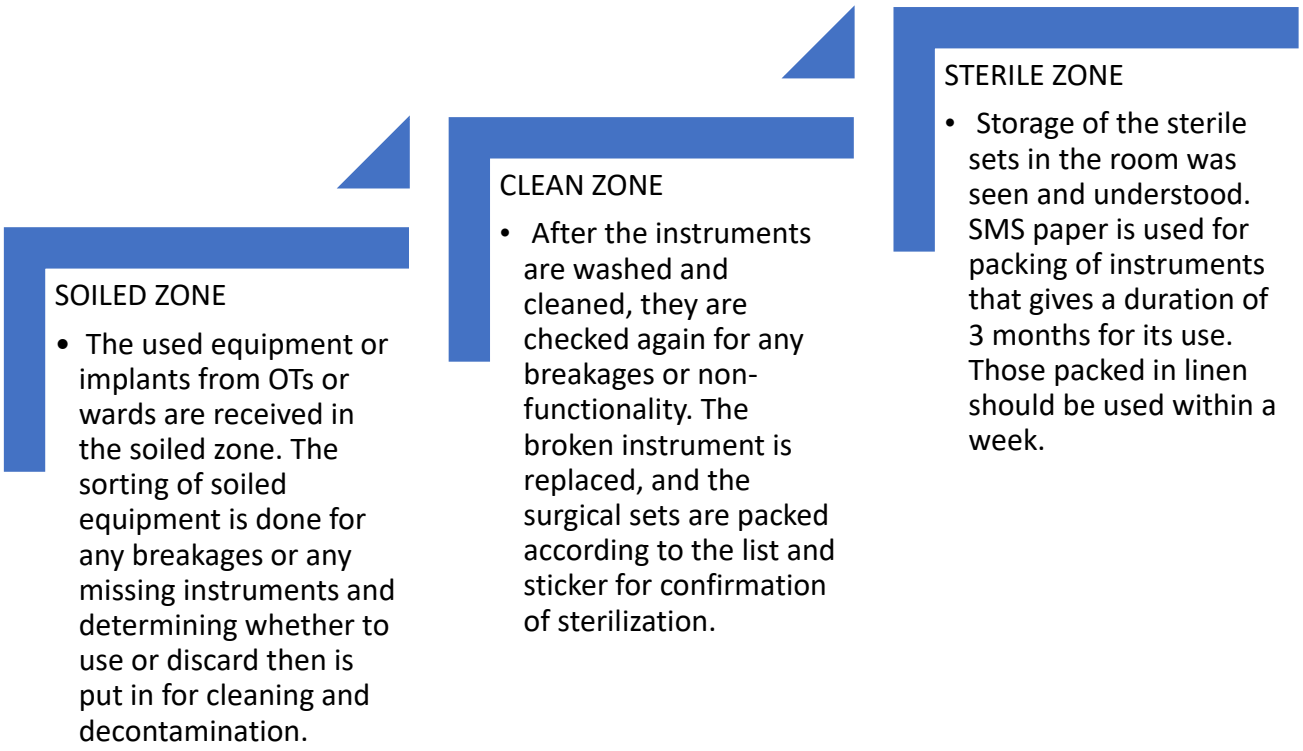

Figure 1 THREE ZONES OF CSSD

- All the three zones were understood as depicted in **Figure 1**.
- Bowie dick test is used for checking the air inside the autoclave. Every day the first load is put in with a Bowie-Dick test pack. If a dark black colour uniform pattern is seen, it stipulates a successful vacuum and full steam penetration. However, if a partial or no colour change is seen, it shows an unsuccessful test cycle.
- The sterile equipment from CSSD to OT is taken from inside the CSSD that has a direct elevator connection to the OT which reduces the risk of contamination of the sterile equipment.

- *BME*

BME's 4 major functions were understood:

- New Installation- A user requirement is noted for new equipment and a pre-installation requirement is to be checked and fulfilled before installation. A user training is provided after the installation of any equipment.
- PMS- Every equipment requires a preventive maintenance service (PMS) to avoid any failures and faults in the future. PMS is different for every machine. Ideally, it is performed in two frequencies as depicted in **Figure 2**.

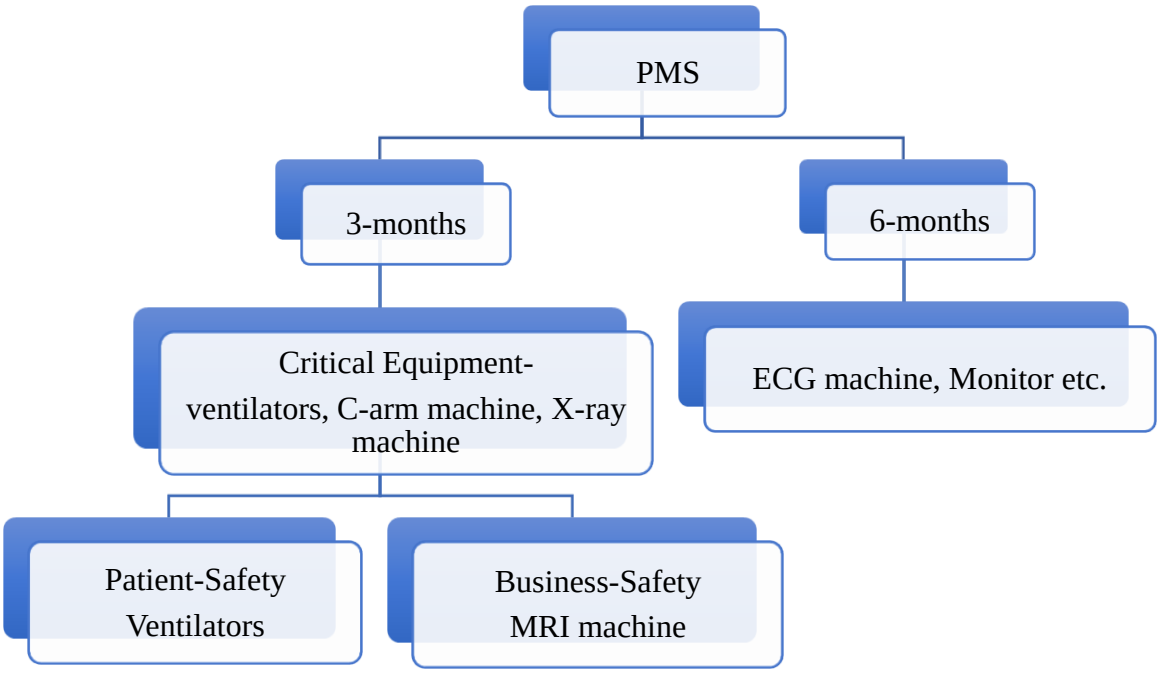

Figure 2 TWO FREQUENCIES OF PMS

- Breakdown- BME is dedicated to the resolution of any complaints related to a fault in the equipment such as ventilators, C-arm, x-ray, ECG machine. The complaint can be done in two modes- either verbal or written in a complaint slip. An engineer is assigned to repair the faulty equipment and downtime is also noted for NABH accreditation.
- Calibration- Proper functioning of the equipment that includes temperature, pressure, and flowrate. For example, a thermometer. Calibration is done to verify the parameters shown in the machines are accurate or not. The equipment such as weighing machine, pipette, centrifuge, deep freezer, OT light, etc. is to be calibrated half-yearly or yearly.

➢ Assistive Technology

- The functioning of the department was understood and how the patient is evaluated and counseled about the technology according to their requirements.

- It was learned how the assistive technology devices are used to fulfill the requirement of the patient. For example, wheelchairs are made according to the injuries, structure, body weight, sitting posture, environment of house/office, if needed.
- Assistive technology helps to bridge the gap between the user (disabled person) and the environment (house, office, etc.).
- The software that evaluates patients' pressure points with the help of sensor sheets was understood.

➢ MRD

- The major responsibilities such as death registration with the MCD, maintaining of MLC data, hospital statistics report as per requirement, etc are performed by the department.

- It was also learned that in the scenario of legal cases, summons from the court are co-ordinated and attended by the department

- Admission/discharges/average length of stay/bed turnover rate/net death rate/ gross death rate/ highest number of occupancy/ occupancy rate etc. are some of the major statistics that are taken care of.

- Medical Audits are also the responsibility of MRD and the deficiencies identified are then discussed and addressed with the doctors and management.

- MRD also has the responsibility of providing a record of patients to the Insurance companies/Police/Government offices according to the law.

- The process of keeping a patient's record is depicted in **Figure *3***.

- The file is retained for 5 years. In the case of MLC, it is retained for 10 years

- After 5 years the file is discarded and for that, a public notice is to be given in the newspaper in a local language and English. if any person has any objection to it can contact the concerned person at the hospital and receive the file within 1 month.

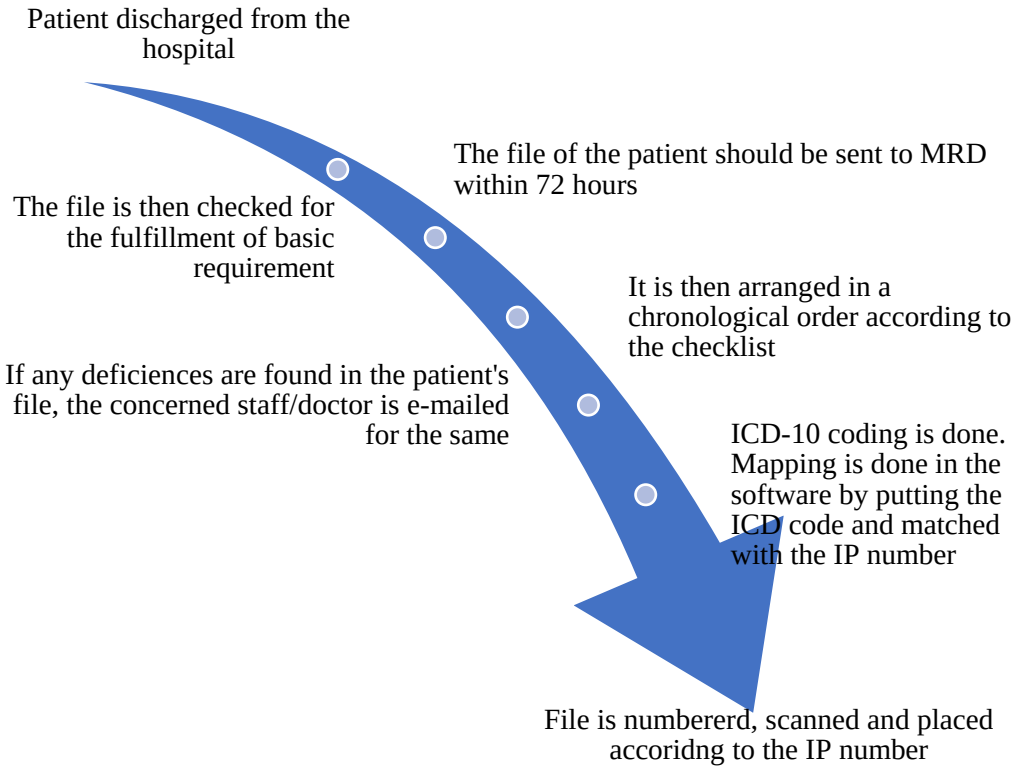

Figure 3 MEDICAL RECORD PROCESS

LIMITATIONS AND SUGGESTIONS

- A grievance desk should be made wherein people can report their concerns/requests/complaints. The grievance desk should forward the complaints to the specific departments and not directly to the Duty Administrator. The flowchart for the same can be seen in **Figure 4.**
- The multiple steps involved in the registration of patients wherein the types of the patient depending on their payment method and the steps involved before their file is made including the initial assessment, panel selection is a big process and is time-consuming.
- Queries of patients regarding the CGHS/ECHS panel should be addressed at the corporate desk initially. In special cases that can only be addressed by the duty administrators, it should be forwarded to them.
- Handing out the RT-PCR reports should be the responsibility of the laboratory personnel, not the Duty Administrator.

- The decision for the validity of COVID RT-PCR should be done by the infection control team or the consultant.
- The PET and TRODAT scan appointments should be coordinated by the Team Leader of nursing staff with the lab and the Duty Administrator should be only kept in the loop for the same.
- All the issues with the non-functionality of ICU tabs or air conditions should be directly informed to the respective departments and not the duty administrator at the initial stage. If the issues are not resolved after repetitive requests, then the Duty Administrator should be contacted.
- The requests for duplicate bills or billing-related queries can be addressed at the Billing desk only.
- The patient or their attendants should be explained the process of discharge by the help desk and the approximate time that the whole process takes should also be told at the time to avoid any issues later.

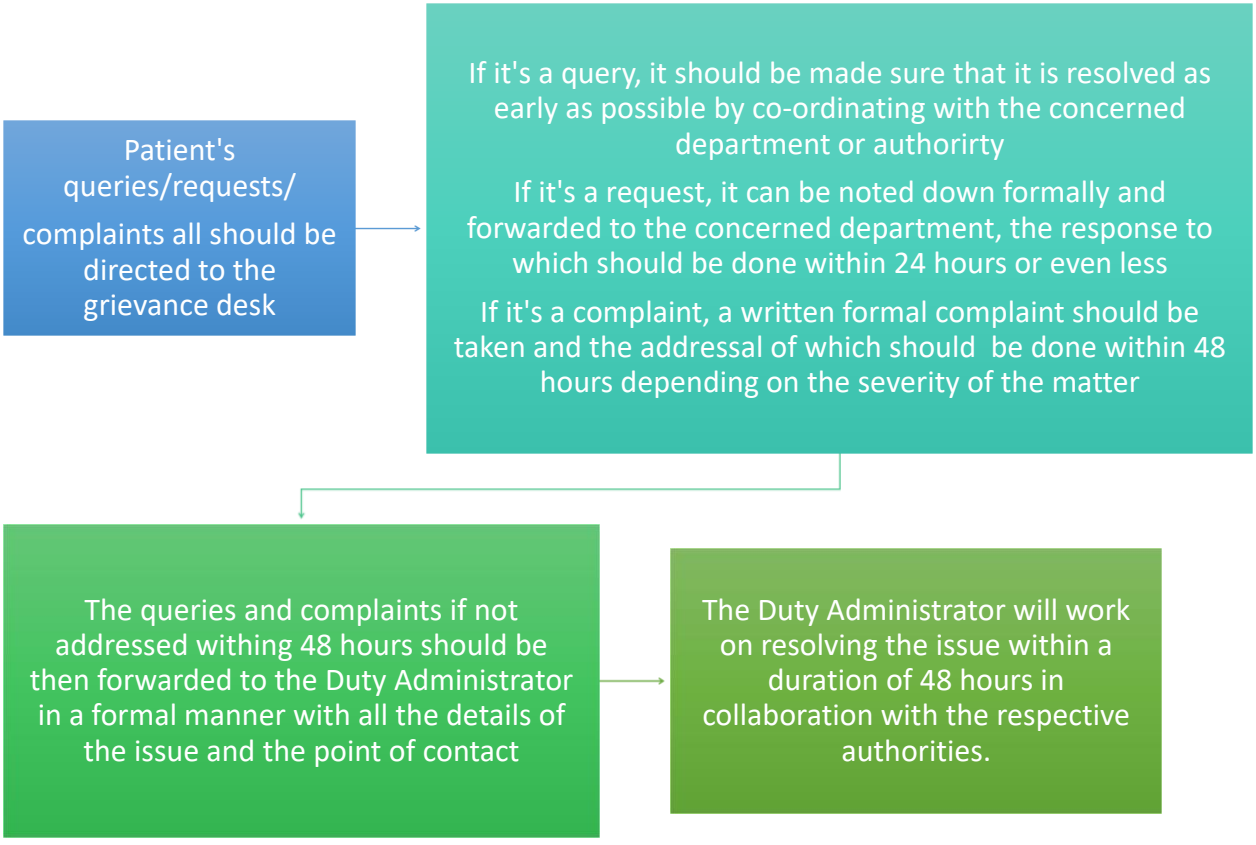

Figure 4 PROCESS OF SOLVING QUERIES/GRIEVANCES

PROJECT REPORT

A STUDY ON CHALLENGES FACED BY COVID HOSPITALIZED PATIENTS ATTENDANTS DURING THE SECOND WAVE IN INDIA

ABSTRACT

According to the National Centre for Disease Control guidelines, the isolation facilities that were set up for the treatment of COVID-19 were did not allow visitations. Hospitalized people had to stay without their families all alone with no moral support. This study aims to focus on the experience and challenges faced by patients' attendants during their hospitalization due to COVID-19

This is a descriptive study that has a sample size of 124 participants with the exclusion of 1 participant who disagreed to participate in the study. Data were collected by a questionnaire that had two sections: demographic section and questions about the hospitalization information of the patients. The secondary data was collected via the e-mails, phone calls, and messages that were received from the attendants whose patients were hospitalized in May and June at ISIC.

The results from both sets of data showed that 42.6% and 36.9 % requests were made to ask the patient's condition as they had not received updates on their patients' current status and 42.6% found that their patients mental health were deteriorating during their hospitalization because of the inability to meet their family members and staying away from them for so long.

This approach to addressing the challenges faced by the people may not be the solution but we have to start somewhere. The more we learn about the problems and challenges they are currently facing, the more we can be prepared for it.

Keywords

COVID-19, Challenges, Family members, Patients, Hospitalization.

INTRODUCTION

COVID-19 can be called the world's worst health crisis in over a century. The COVID-19 disease has spread worldwide infecting millions of people globally and affecting the healthcare systems since the first case which was identified in December 2019. According to WHO, there have been 183,934,913 confirmed cases and 3,985,022 deaths worldwide as of 05th July 2021. Reportedly, India has 30,619,932 confirmed cases and 403,281 deaths. Currently, India has 459920 active cases. During the wave, a nationwide lockdown was imposed by the central government on March 25, 2020; the COVID-positive cases in the country were under control. However, during the second wave, the spread of the virus increased and there was a shortage in the availability of beds, oxygen, plasma therapy, and other required drugs for the treatment of COVID-19 with increasing cases. The number of COVID-19 cases increased so much so that India became the first country to report 408,323 new cases in a single day.

A wildly infectious new variant hit a population that had forgotten the social distancing norms and was not following any guidelines to limit the spread. All the social networking platforms had either a tweet, an Instagram story, or a post requesting an update on the information of available beds, drugs (Remedisvir, Tocilizumab), plasma to save their loved ones. Some people were battling this disease from their homes while some needed help and care of a healthcare institution or hospital.

According to the National Centre for Disease Control guidelines, the isolation facilities that were set up for the treatment of COVID-19 did not allow visitations. Hospitalized people had to stay without their families all alone with no moral support so as to limit the spread of the infectious virus.

Over time, the healthcare knowledge-dependent system has given importance to enhance the clinical knowledge which includes the perspective of a patient. However, the quality of care and patient experience has emerged as an important part of knowledge in the healthcare industry but is usually overlooked. We must understand the challenges faced by the patients and their family members during their hospitalization. This study aims to focus on the perspective of the family members/relatives/friends of the patients hospitalized for treatment of COVID-19 and their experience so far.

RESEARCH QUESTION

1. What were the challenges faced by COVID-19 patients' attendants during hospitalization?
2. What recommendations can be given for further improvement?

OBJECTIVES

1. To learn the challenges faced by the patient's attendants.
2. To give recommendations for addressing the challenges faced.

METHODOLOGY

RESEARCH DESIGN

This is a descriptive study.

STUDY POPULATION

1. The first set of data was collected with the help of a structured questionnaire
2. The second set of data from the E-mails/messages/phone calls received from the patients' attendants who had been already hospitalized during May and June at ISIC.

STUDY TOOLS

i. Questionnaire- people's perspective
ii. Direct observation
iii. Internal Organization records

RESEARCH APPROACH

The research is conducted on a Qualitative approach.

SAMPLE SIZE

A sample size of 124 is taken. Of which only 1 participant was excluded on the grounds of refusal to participate in the study.

SAMPLING TECHNIQUES

Convenient sampling

ETHICAL CONSIDERATIONS

All the participants were informed prior about voluntary participation. Along with the questionnaire, ethical consent had also been forwarded to all the participants. The purpose of this survey had been mentioned prior to all the participants. Furthermore, no questions were asked based on any issues which can cause the mental morale down of the participants. Also,

it was made sure that at any point in time, the participant can quit the survey if not feeling comfortable. All the responses had kept confidential and the anonymity of the data had been preserved.

RESULTS

The first set of data that was collected via a questionnaire that demonstrated the following results:

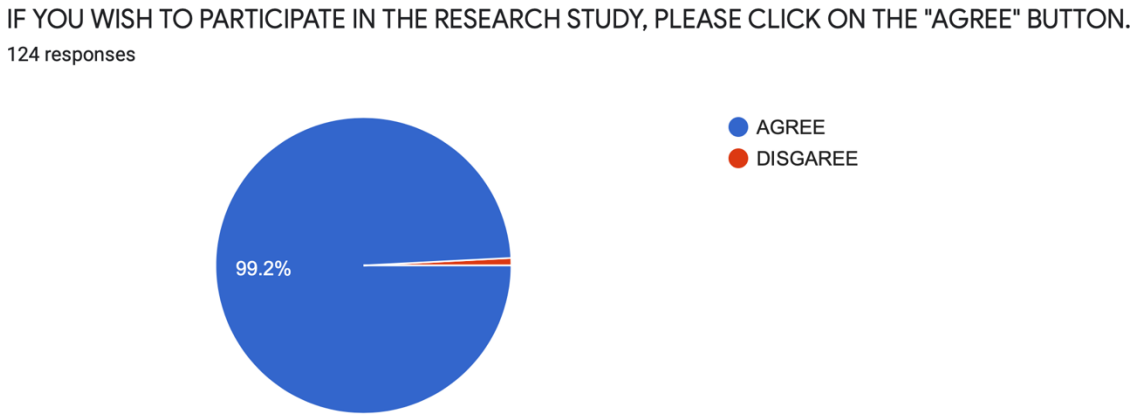

Figure 5 CONSENT *FOR PARTICIPATION*

Of the 124 responses, 123 agreed to be a part of the study except for 1 (0.8%) participant who refused to participate. The questionnaire ended for the participant when he/she chose not to participate in the research study.

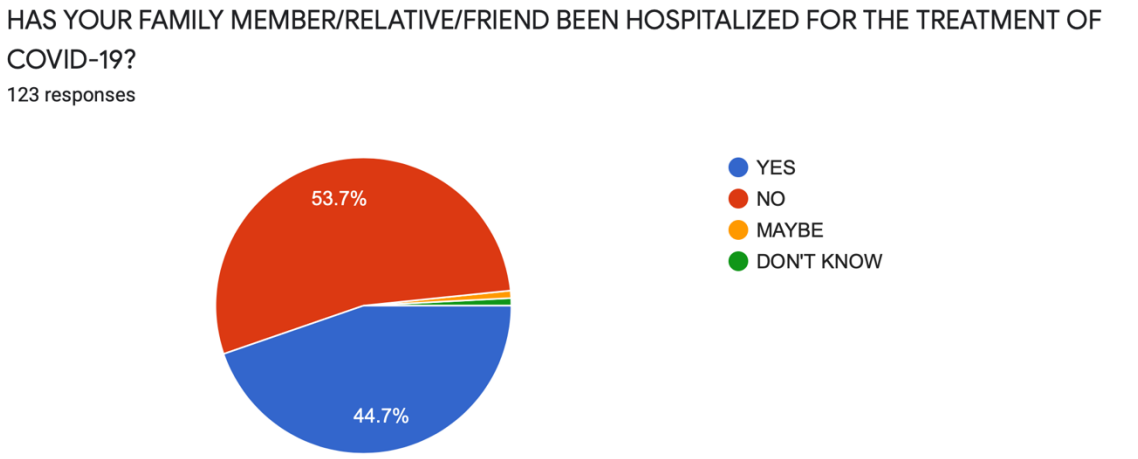

Figure 6 HOSPITALIZATION STATUS

This multiple-choice question demonstrates that out of the 123 participants, the family members/relatives/friends of 66 (53.7%) participants were not hospitalized. However, that of 55 (44.7%) participants were hospitalized. 1 (0.8%) participant was not sure of the hospitalization of his/her family members/friends/relatives and 1 (0/8%) participant did not know about their hospitalization.

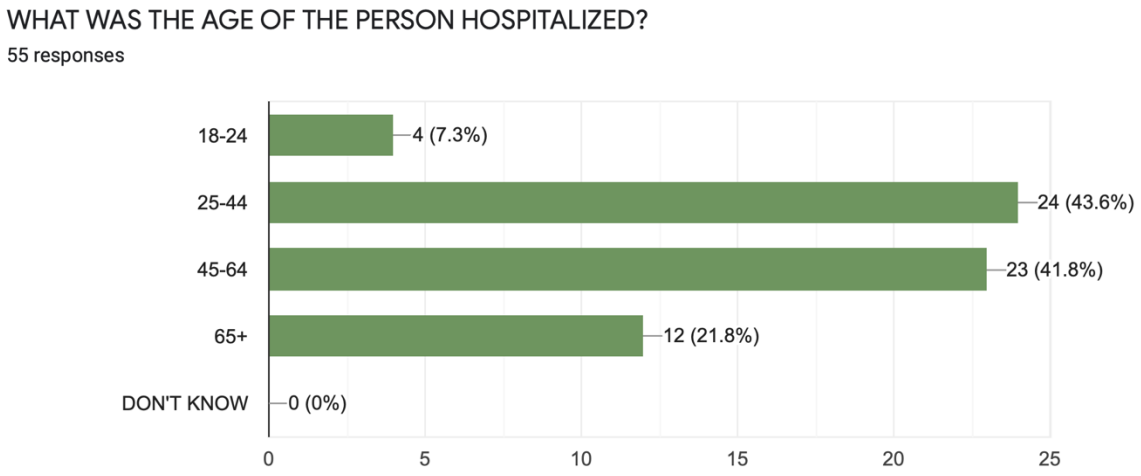

Figure 7 AGE OF THE HOSPITALIZED PERSON

Fifty-five participants' family members/relatives/friends were hospitalized as seen in **Figure 7**. Of which majority were in the age group of 25-44 years of age i.e., 24 (43.6%) and 23 individuals (41.8%) were in the age group of 45-64 years. The third highest is the people falling in the age category of 65 and above i.e., 12 (21.8%). However, only 4 (7.3%) members of the participants were aged 18 to 24 years.

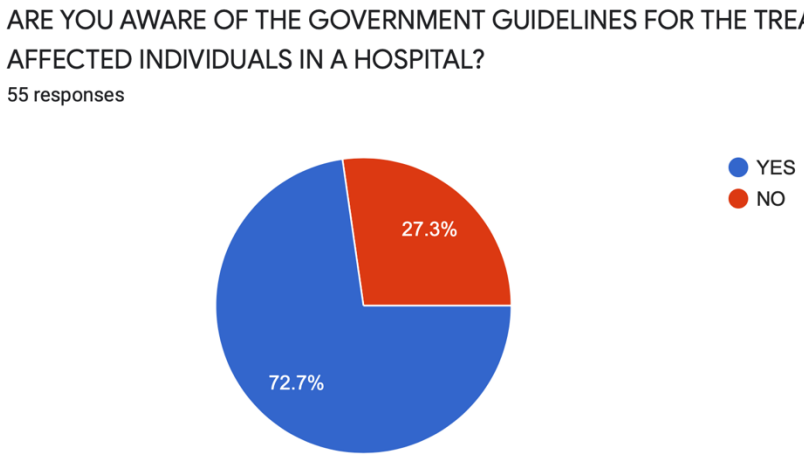

Figure 8 AWARENESS OF THE GOVERNMENT GUIDELINES

The survey also assessed the awareness and knowledge of people about the guidelines for the treatment of COVID-positive individuals in a hospital setting. Reportedly, 40 (72.7%) people were aware of the government guidelines, and only 15 (27.3%) of the 55 people whose family members/relatives/friends were hospitalized were not aware of the guidelines.

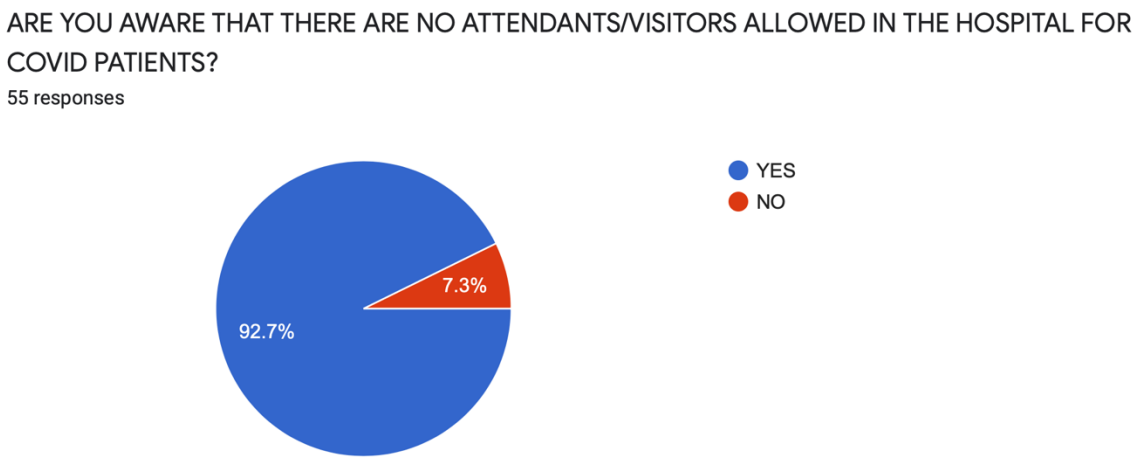

Figure 9 NO ATTENDANTS/VISITORS POLICY

The results of the question mentioned in **Figure *9*** demonstrates that 51 (92.7%) participants were aware that attendants/visitors are not allowed with the COVID-19 patients. However, only 4 (7.3%) were not aware of the same.

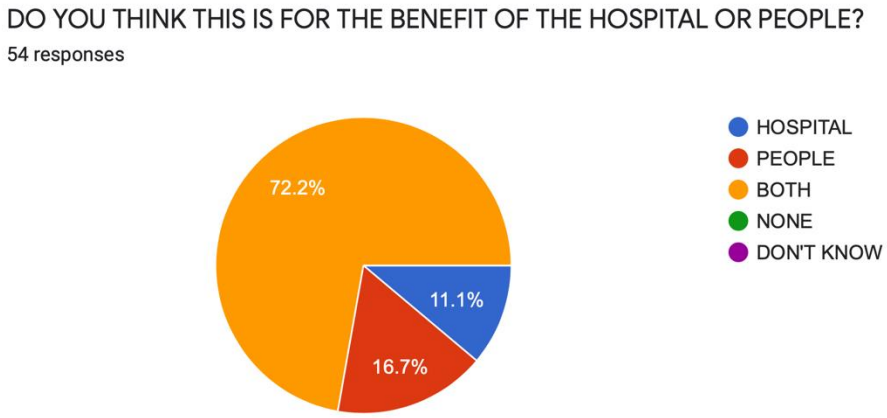

Figure 10 BENEFICIAL OR NOT

As depicted in the **Figure *10***, 54 responses of the 55 were received in this question that shows 72.2% of the 54 people think that it is for benefit of the people as well as the hospital that the attendant and visitation policy was suspended for the people who were infected with COVID-19 virus. Only 11.1% think it was for the benefit of the hospital and 16.7% thought that these guidelines are for the benefit of people.

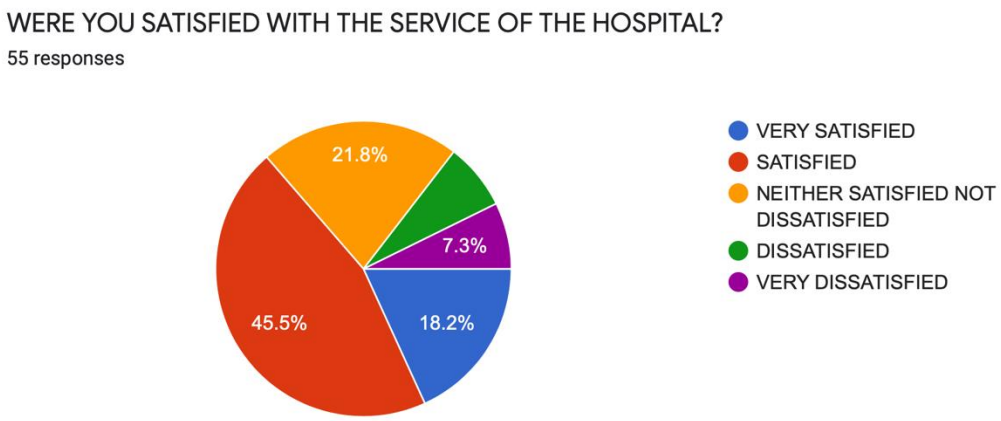

Figure 11 SATISFACTION STATUS

Twenty-five (45.5%) of the 55 people were satisfied with the service of the hospital their family members/relatives/friends had during their hospitalization. Ten (18.2%) people were very satisfied with their experience of hospitalization. However, 12 (21.8%) people showed neither satisfaction nor dissatisfaction in terms of their hospitalization experience. The number of people who showed both “very dissatisfaction” and “dissatisfaction” was 4 (7.3%) each.

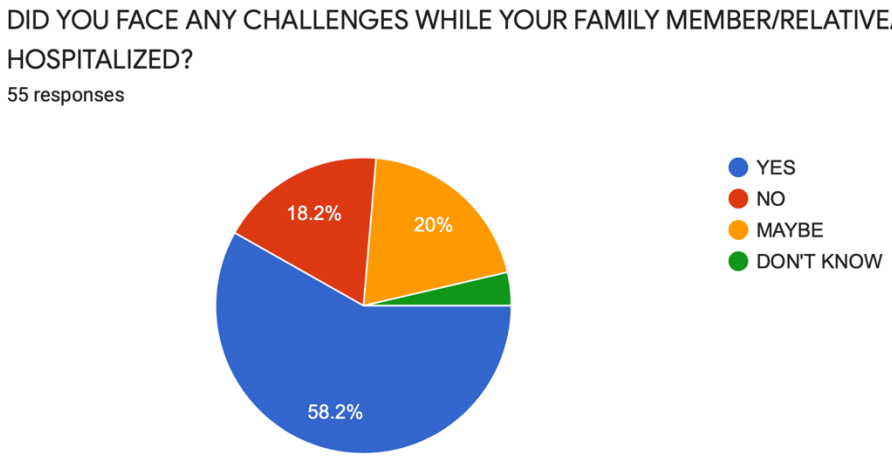

Figure 12 CHALLENGES STATUS

As depicted in the **Figure *12***, 32 (58.2%) of the 55 participants' family members/relatives/friends faced some challenges during their stay at the hospital. 10 (18.2%) participants did not face any challenges during their relatives/friends' stay at the hospital. 11 (20%) participants were not sure and 2 of them did not know if their family members/relatives/friends had to face any challenges while hospitalization.

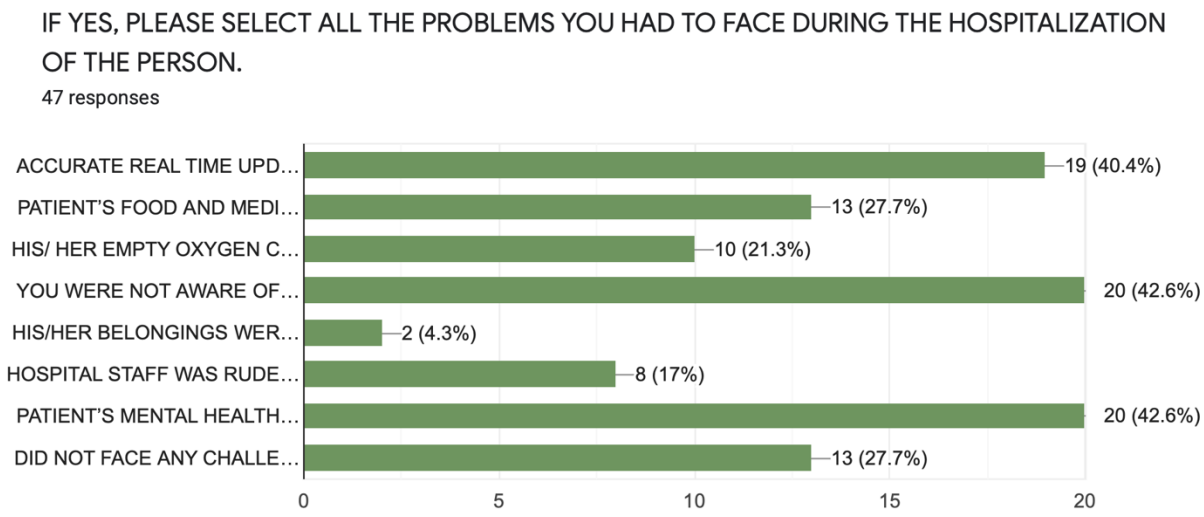

Figure 13 CHALLENGES FACED DURING HOSPITALIZATION

This question had an option of selecting multiple answers that resulted in participants choosing all that applied to their situation i.e., all the challenges they had to face while hospitalization of their patients.

The major problems that were selected 20 times (42.6%) were-

1. The attendants were not aware of the patients' condition during their hospital stay
2. They think that their patient's mental health deteriorated because of the inability to meet their close ones.

19 (40.4%) times the participants selected the problem of not receiving accurate real-time updates of their patient's condition. Thirteen times (27.7%), it was seen that the food and medicines of the hospitalized patients were not taken care of. On the other hand, 13 (27.7%) participants did not face any challenges during their members' hospitalization. 21.3% of participants faced the issue of timely not replacing their member's empty oxygen cylinder or concentrator. 17% of people thought that the hospital staff was rude and not co-operative with their family members and them and 4.3% had to face the issue of losing their members' personal belongings during their stay at the hospital.

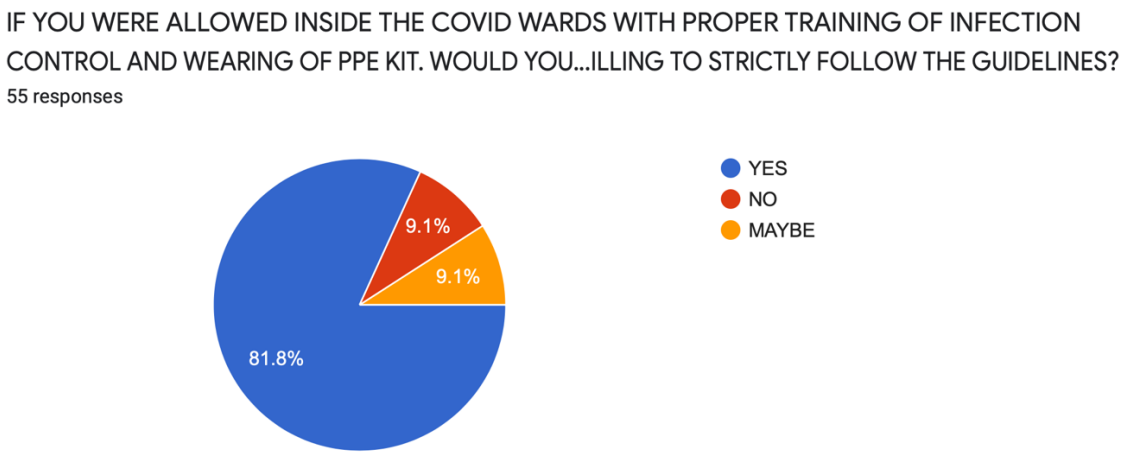

Figure 14 WILLINGNESS TO STAY IN THE HOSPITAL

A question about the willingness of the participants to be with their family members wearing a PPE kit and following proper infection control protocols was permitted by the government or hospital was asked. Surprisingly, 45 (81.8%) of the 55 responses were agreeing to be with their family members/relatives/friends during their hospitalization. However, 5 (9.1%) were not sure if they would be willing to do that and 5 of them denied doing the same.

A total of 187 requests were received via e-mails, phone calls, and WhatsApp messages. Of which 60 were e-mails, 76 phone calls that were noted as a record for this study, and 51 WhatsApp messages. Most of the requests that were received during the two months were that of the update on the patient's condition. Of the 60 requests/queries/complaints received via e-mail about the COVID-19 positive patients hospitalized, 8 (13.3%) of them were requests to update the status of the patient to their respective attendants and 2 of them wanted to talk to the treating doctor about patient' status. Of the n number of phone calls received during the two months, approximately 76 calls could be sorted out. Of which, 42 (55.3%) were about the requests for an update on the patient's condition. Out of the 51 WhatsApp messages received, 19 (37.3%) messages had requests about the update on the patient's condition. The second maximum number of requests were received that of attendants requesting their patients' reports and summaries i.e., 29 (48.3%) were received via e-mails as a formal request, 11 (14.5%) were requested over phone calls and 8 (13.3%) were requested via WhatsApp messages. The results of other requests can be seen in the figures as per their

mode of contact.

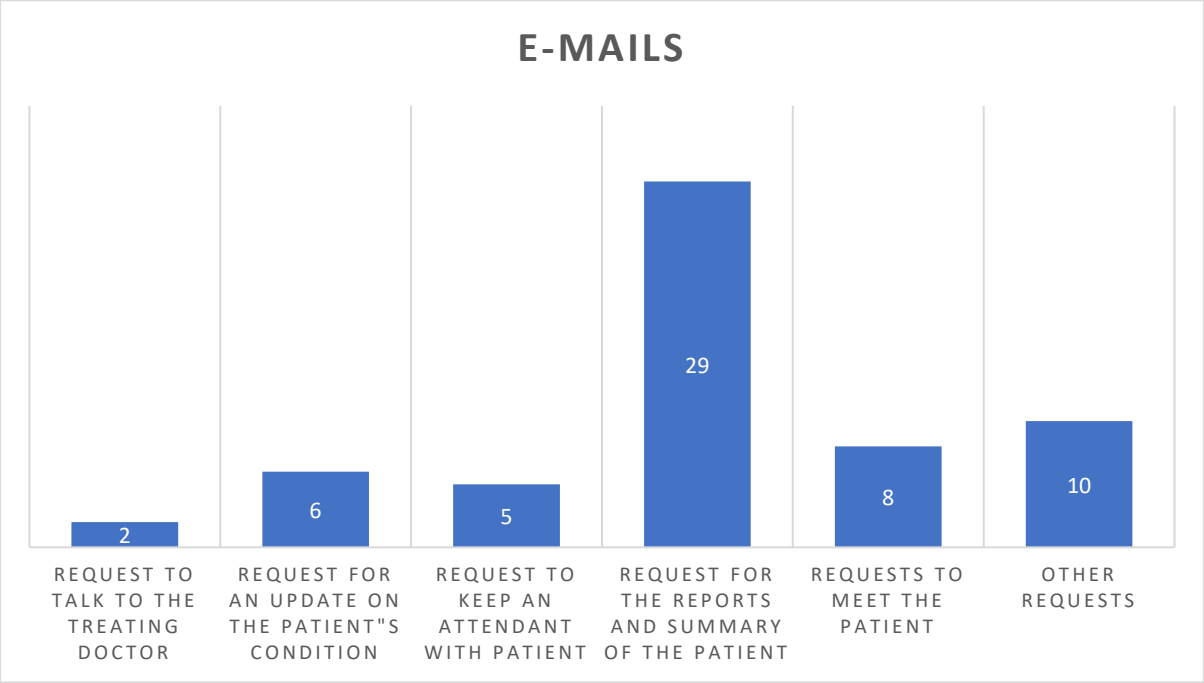

Figure 15 REQUESTS RECEIVED VIA E-MAILS

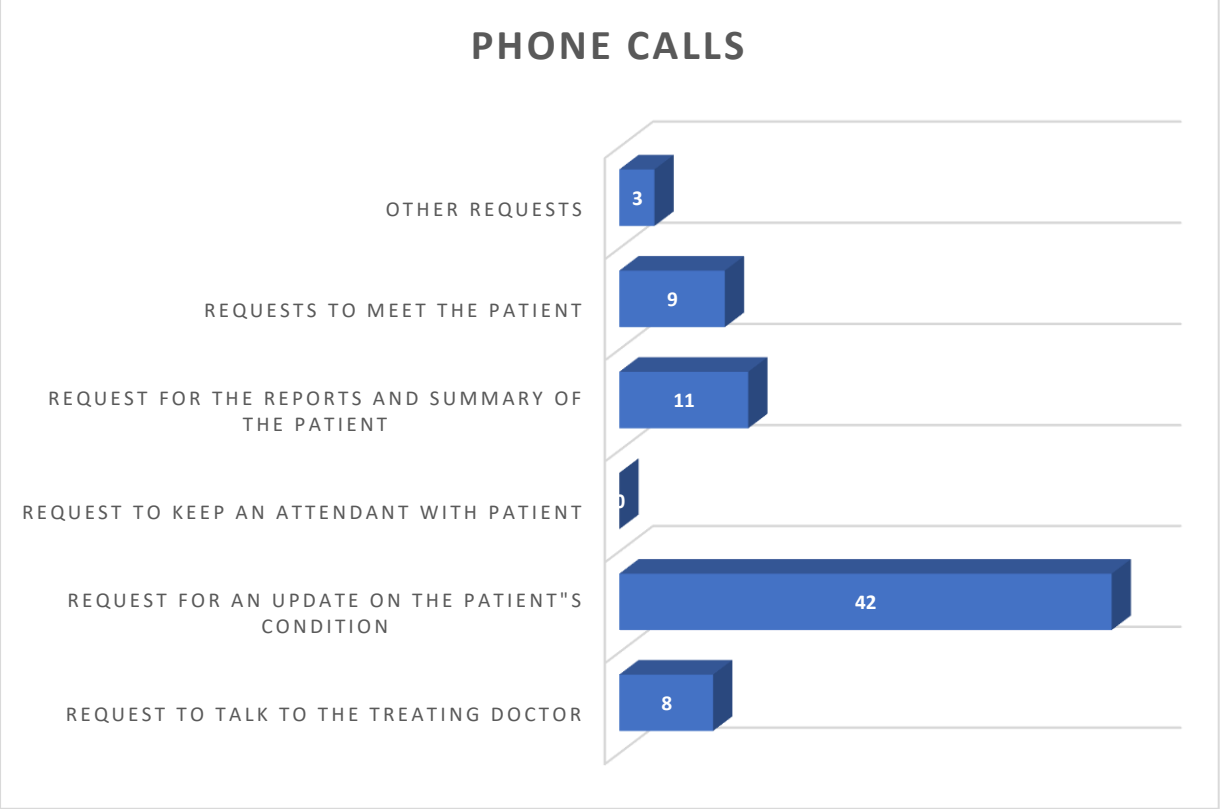

Figure 16 REQUESTS RECEIVED VIA PHONE CALLS

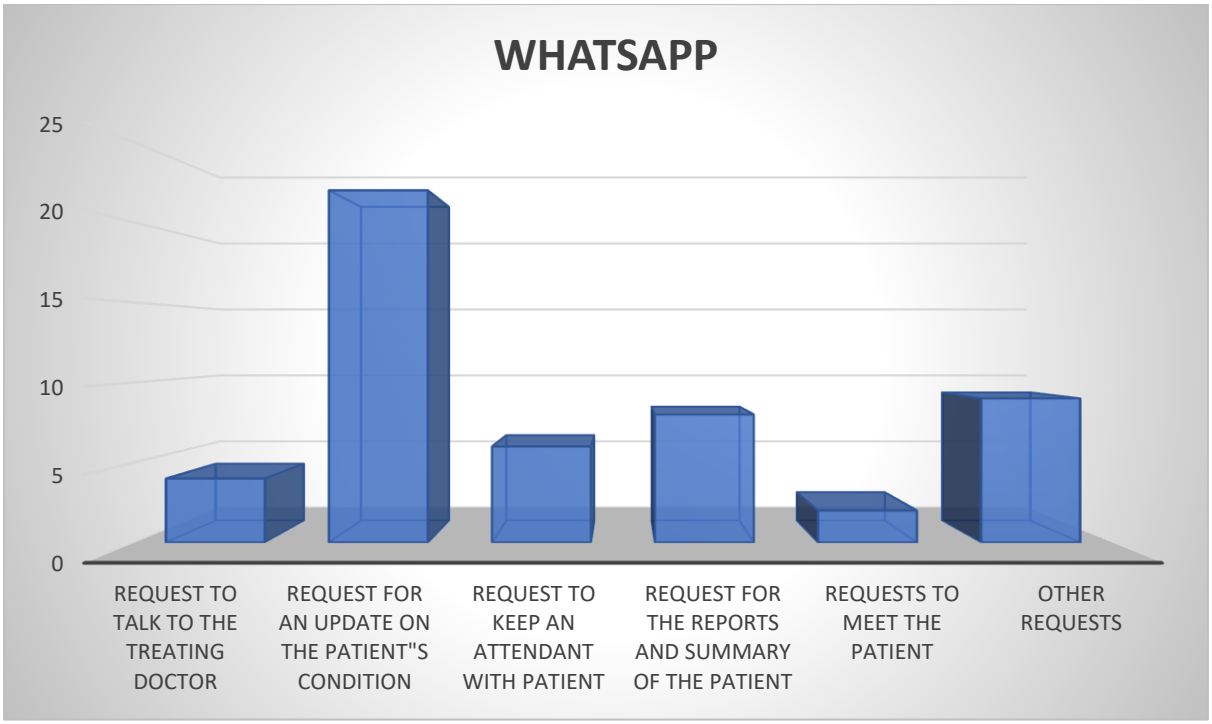

Figure 17 REQUESTS RECEIVED VIA WHATSAPP MESSAGES

DISCUSSION

COVID-19 has completely changed the lives of people around the globe over the past so many months. This devastating pandemic has majorly affected the hospitalized individuals, their attendants, and even caregivers. Since the virus tends to spread through contact with respiratory droplets of a COVID-19 positive individual, most hospitals in India have restricted the visitors to enter the hospital premises and meet their patients even if there is a low chance of their survival.

This study aimed to determine the challenges faced by patients and their family members during their hospitalization due to COVID-19. This study explored what family members/relatives/friends were facing during the hospitalization of their patients. Unfortunately, many people who died of COVID-19 during their hospitalization had to die alone due to the strict infection control measures restricting the visitation to the hospital facility. Family members have missed out on the chance to meet their patients and comfort them in their last moments.

As seen in the results, the primary data that was collected with the help of a questionnaire gave us a good amount of information on the challenges faced by people. Also, the second set of collected data about the patient's/family members experience is very important here. In the questionnaire part, the first question asked was about the age group of people hospitalized due to COVID-19. The question played a major role as that it showed that majority of the people who were hospitalized were in the age group of 25 years to 44 years subsequently followed by the age group 45-64 years.

The next question was asked about the awareness of people about the COVID-19 treatment guidelines for hospitalized patients that showed that the majority of the people were aware of the COVID-19 guidelines and that no attendants/visitation allowed in the COVID wards. Followed by that, this focuses on their perception of this policy. The results demonstrated that major people think that these policies were for the benefit of the people as well as the hospital and that shows that the people of India are willing to co-operate with the healthcare facility and the government during their hospitalization.

However, when it comes to the satisfaction aspect of their hospitalization, maximum people were satisfied with their stay but many of them were not sure whether they were satisfied or

dissatisfied. At the same time, only a few were very dissatisfied with their hospitalization experience.

The results from both sets of data show that there was a major issue faced by the family members in getting a regular update on their patient's condition. Reportedly, quick feedback on the status of the patient was given to the family by calling them once a day leaving little or no room for questions. However, the news is not always positive and some calls are even made in a shorter time frame. The multiple options selecting questions about the challenges faced by people in the questionnaire depicted that people also thought their patient's mental health was deteriorating due to homesickness or lack of meeting their loved ones. The pandemic has made it so that there is no face-to-face contact—neither between the doctors and patients nor their loved ones.

The data that was collected via e-mails, phone calls, and messages showed that the majority of the people had requested the hospital administrator/nursing staff/doctors to get their patients' latest reports and treatment summaries. Similarly, just as some people had a very satisfying experience during their patient's hospitalization, some of them did not face any such challenges during the hospitalization of their patients.

The last questions demonstrated the willingness of the people to be with their family members during their hospitalization by wearing a PPE kit and following proper COVID-19 infection protocols.

At the same time, the role of the hospital also comes into the picture. Even the hospitals had to face the most significant challenges focused on testing, maintaining the safety of the staff, and caring for patients suspected and infected with the COVID-19 virus. Reportedly, hospitals had to face substantial challenges in maintaining and expanding the capacity of their facilities to treat COVID-19 patients. One can say that the pandemic has demonstrated a huge failure of the healthcare system globally as the human and medical resources have worn out.

Perhaps, more can be done to preserve the connection between the patients and their families at their last moments. There must be better policies put in place to safely get at least one person to be with a patient despite COVID. Every patient's case is different and the uniqueness makes it important to handle each case on an individual basis on ethical grounds. However, critics may say that families coming to visit their patients in the hospital will put the health of caregivers at risk who are looking after their families and a bunch of other sick

people. But we can do better. Hospitals can give the opportunity for the people taking their last breaths, comfort from their loved ones, and a chance to say the last goodbyes.

RECOMMENDATIONS

1) For critical patients, the visitation of an attendant can be allowed by teaching the donning and doffing of personal protective equipment (PPE). A nurse staff of infection control personnel can be made to stay with the visitor to make sure the maintenance of infection control protocols.
2) If possible, the critical patient can be shifted to a single room within the ICU to avoid exposure to other patients.
3) For visitation, the families can choose one person, nominated as the next of kin who will be allowed in the hospital. The person should be well and fit and have to ensure that they will follow all the infection control protocols
4) It can be ensured that a visitor is only allowed in the isolation area after consulting the in-charge healthcare worker who has the responsibility of keeping a record of the visitors. Also, rosters of all the workers in the isolation areas should be kept, in case of a possible outbreak investigation.
5) A proper communication channel can be made wherein the regular update of the patients' condition should be sent to their loved ones. Regular video calls can be arranged for those who cannot help themselves.
6) A junior doctor/intern can be assigned for each ward to coordinate with the family members and timely updating about the condition of the patient and even can arrange calls with the treating doctor, if possible.
7) Support staff can be trained for the proper donning and doffing of PPE who can assist in arranging video calls
8) A psychological consultation can be arranged for the patients who are hospitalized for a longer duration to help them cope up with the situation.
9) With the shortage of nursing and support staff, it is understood that the food and medicines to patients can be missed, but alarms can be set or a record can be kept for the timely management of patient's food and medicines.
10) A kiosk can be placed at the entrance of the hospital where the patients' family members can check the latest updates on the patient's vitals that should be updated every time the vitals are checked. The same can be provided on the website of the hospital with details accessible to those having the log-in credentials.

CONCLUSION

Pandemics require appropriate management of manpower, equipment, skills, knowledge but it also requires compassion and benevolence to get through it. We have learned so much about the COVID-19 pandemic scientifically as well as socially. Realistically it is not only taking an emotional toll on the healthcare workers but also on the people who have to stay away from their families during such devastating times. This approach to addressing the challenges faced by the people may not be the solution but we have to start somewhere. The more we learn about the problems and challenges they are currently facing, the more we can be prepared for it. Similarly, for a pandemic in the future because history has taught us that it repeats itself.

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ANNEXURE

CHALLENGES FACED AT THE TIME OF COVID-19: PERSPECTIVE OF PATIENT'S FAMILY/FRIENDS

Hey there!

This study has been conducted by a student of IIHMR University as a part of the curriculum. The purpose of this survey is to gather information about the challenges faced by the people whose family members/friends were hospitalized due to the CORONA virus infection during the second wave.

CONSENT:

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you have the choice to withdraw at any time. The procedure involves filling this online survey that will take about 3-4 minutes of your time. your responses will be confidential and we do not collect identifying information such as your contact number or e-mail IDs. To help protect your confidentiality, the survey will not contain information that will personally identify you. If you click on the "agree" option below, it stipulates that:

- you have thoroughly gone through the above-mentioned information
- your participation is voluntarily
- you are above 18 years of age

* Required

1.

IF YOU ARE WILLING TO PARTICIPATE IN THE RESEARCH STUDY, KINDLY CLICK ON THE "AGREE" OPTION. *

Choose only one.

AGREE

DISAGREE

DEMOGRAPHIC DETAILS

All these details will be kept strictly anonymous and used only for research purposes.

2.

YOUR NAME

3.

WHAT IS YOUR AGE? *

Choose only one.

18-24

25-34

35-44

45-54

55-64

65+

4.

WHAT IS YOUR GENDER? *

Choose only one.

FEMALE

MALE

PREFER NOT TO SAY

Other:

5.

WHICH STATE/UT DO YOU BELONG TO? *

Choose only one.

ANDAMAN AND NICOBAR ISLANDS

ANDHRA PRADESH

ARUNACHAL PRADESH

ASSAM

BIHAR

CHANDIGARH

CHHATTISGARH

DADRA AND NAGAR HAVELI AND DAMAN AND DIA

DELHI

GOA

GUJARAT

HARYANA

HIMACHAL PRADESH

JAMMU AND KASHMIR

JHARKHAND

KARNATAKA

KERALA

LADAKH

LAKSHADWEEP
MADHYA PRADESH
MAHARASHTRA
MANIPUR
MEGHALAYA
MIZORAM
NAGALAND
ODISHA
PUDUCHERRY
PUNJAB
RAJASTHAN
SIKKIM
TAMIL NADU
TELANGANA
TRIPURA
UTTARAKHAND
UTTAR PRADESH
WEST BENGAL
6.
EDUCATION STATUS *
Choose only one.
PRIMARY
SECONDARY
DIPLOMA
GRADUATION
POST-GRADUATION
Other:
7.
EMPLOYMENT STATUS *
Choose only one.
STUDENT
EMPLOYED
UNEMPLOYED
BUSINESS

RETIRED

Other:

HOSPITALIZATION DUE TO COVID-19

The following questions are regarding the information about the hospitalization of your family member/relative/friend/you.

8.

HAS YOUR FAMILY MEMBER/RELATIVE/FRIEND BEEN HOSPITALIZED FOR THE TREATMENT OF COVID-19? *

Choose only one.

YES

NO

MAYBE

DON'T KNOW

HOSPITALIZATION DUE TO COVID-19

The following question is regarding your thoughts on the topic

9.

WHAT DO YOU THINK ARE THE CHALLENGES FACED BY PEOPLE WHOSE FAMILY MEMBERS/RELATIVES/FRIENDS WERE HOSPITALIZED?

HOSPITALIZATION DUE TO COVID-19

The following questions are regarding the information about the hospitalization of your family member/relative/friend/you.

10.

WHAT WAS THE AGE OF THE PERSON HOSPITALIZED? *

Check all that apply.

18-24

25-44

45-64

65+

DON'T KNOW

11.

IN WHICH HOSPITAL WAS THE PERSON HOSPITALIZED?

12.

ARE YOU AWARE OF THE GOVERNMENT GUIDELINES FOR THE TREATMENT OF COVID-19 AFFECTED INDIVIDUALS IN A HOSPITAL? *

Choose only one.

YES

NO

13.

ARE YOU AWARE THAT THERE ARE NO ATTENDANTS/VISITORS ALLOWED IN THE HOSPITAL FOR COVID PATIENTS? *

Choose only one.

YES

NO

14.

DO YOU THINK THIS IS FOR THE BENEFIT OF THE HOSPITAL OR PEOPLE?

Choose only one.

HOSPITAL

PEOPLE

BOTH

NONE

DON'T KNOW

15.

WERE YOU SATISFIED WITH THE SERVICE OF THE HOSPITAL? *

Choose only one.

VERY SATISFIED

SATISFIED

NEITHER SATISFIED NOT DISSATISFIED

DISSATISFIED

VERY DISSATISFIED

16.

DID YOU FACE ANY CHALLENGES WHILE YOUR FAMILY MEMBER/RELATIVE/FRIEND WAS HOSPITALIZED? *

Choose only one.

YES

NO

MAYBE

DON'T KNOW

17.

IF YES, PLEASE SELECT ALL THE PROBLEMS YOU HAD TO FACE DURING THE HOSPITALIZATION OF THE PERSON.

Check all that apply.

ACCURATE REAL-TIME UPDATES ABOUT THE PATIENT'S CONDITION WERE NOT PROVIDED

THE PATIENT'S FOOD AND MEDICINES WERE NOT TAKEN CARE OF

HIS/ HER EMPTY OXYGEN CONCENTRATOR/CYLINDERS WERE NOT REPLACED TIMELY

YOU WERE NOT AWARE OF THE PATIENT’S CONDITION

HIS/HER BELONGINGS WERE LOST/NOT TAKEN CARE OF

HOSPITAL STAFF WAS RUDE OR NOT CO-OPERATIVE

THE PATIENT'S MENTAL HEALTH DETERIORATED BECAUSE OF INABILITY TO MEET THE FAMILY

DID NOT FACE ANY CHALLENGES

18.

WERE THERE ANY HYGIENIC OR CLEANLINESS ISSUES FACED BY YOUR FAMILY MEMBER/RELATIVE DURING HOSPITALIZATION? IF YES, PLEASE MENTION IT.

19.

IF YOU WERE ALLOWED INSIDE THE COVID WARDS WITH PROPER TRAINING OF INFECTION CONTROL AND WEARING OF PPE KIT. WOULD YOU BE WILLING TO STRICTLY FOLLOW THE GUIDELINES? *

Choose only one.

YES

NO

MAYBE

20.

ANY OTHER SUGGESTIONS FOR THE IMPROVEMENT OF YOUR HOSPITAL EXPERIENCE. KINDLY MENTION. *