B.K.L. Walawalkar Hospital’s Preparation Report on COVID-19

On 30 January 2020 WHO declared the outbreak of Covid 19 outbreak to be a Public Health Emergency of International Concern as per the advice of International Health Regulations (IHR) Emergency Committee and recognized it as a pandemic on 11 March 2020. Since then more than 1,010,000 cases of COVID-19 have been reported in over 180 countries and 200 territories, resulting in over 53,000 deaths. More than 210,000 people have recovered.

In India first case of Covid 19 was confirmed on 30 January 2020, in Kerala. The patient was a student returning from Wuhan. Surveillance was been strengthened in health facilities and in the community including contact tracing and follow up around the confirmed case. Public health preparedness including surveillance, diagnostics, hospital preparedness, infection prevention and control, logistics and risk communication was done.

As a part of Public Health Preparedness our hospital BKL Walawalkar Rural Medical College, under the leadership of Medical Director, a meeting was conducted on 14/3/2020 and the following points were laid.

1) Preparation of Isolation Ward
2) Training and allotting of responsibilities.
3) IEC activities.
4) Questionnaire for Screening
5) Screening of OPD patients.
6) Procurement / ordering necessary drugs/ Sanitizers/ PPE etc
7) Necessary communication with District health Authorities
8) House to House survey in the campus.
9) E- learning activates for Students.
**Preparation of Isolation Ward** –
Isolation ward was set up as per the guidelines of National Center for Diseases Control. Hospital Disaster plan was prepared and a committee was set up. After having a brief discussion with the committee Isolation facility was established with the following points –

- It is located away from main hospital IPD building with separate entry and exit on the ground floor. The isolation facility is well ventilated with windows permitting cross ventilation and is clearly segregated from other patient care areas.
- Two separate wards are dedicated for admitting COVID-19 patients. Both these wards have attached changing rooms, dirty utility, clean utility, separate bathrooms for males and female and staff with nursing station, doctor’s rest room.
- The distance between two beds is kept at least 3 meters.
- Enough PPE will be kept in changing rooms whenever it becomes available. Used PPE will be discarded as per the standard biomedical waste disposal guidelines after disinfection.
- Different colour coded waste bins/bags and puncture proof containers are made available for the isolation ward. The Waste bags will be labeled with COVID-19 Infectious Waste label.
- Infection prevention and control practices – Separate hand wash facility is available. Hand sanitizers and liquid soaps available.
- 1% sodium chloride is made available for disposal of disposables used by the patient and staff as per the Government guidelines.
- Disinfection of floors is done every 8 hourly
Also daily routine cleaning was followed with –
- Mop the floor with 1% Sodium hypochlorite.
- Mopping of the floor should be done at least three times a day using 1% Sodium hypochlorite. (8 hourly)
- Allow drying.
- If the area is visibly dirty, mop also with soap & water.
- Wipe the side tables with 1% Sodium hypochlorite.
- Allow drying.
- Clean the basin and its taps with detergent.
- Clean the mop in running water, detergent and hot (boiling water) water, squeeze and allow to dry.
- Treat any spillage of blood or body fluids as per NACO guidelines using 10% sodium hypochlorite.
- Change visibly soiled bed sheets immediately, otherwise change once a week or after every patient.
- All mattresses should have an impervious cover of plastic or Macintosh sheet.
- All used bed sheets and other linen which is soiled with blood or body fluids which need to be reused should first be disinfected with 1% Sodium hypochlorite for 30 minutes and then washed, dried and reused.
- Dispose waste properly. See section on waste disposal.
- Keep the dressing trolley hygienic at all times.

**Training and allotting of responsibilities** – Training teams were formed and training was given for Doctors, Paramedics. Nursing Staff, Ward boys, Drivers, Canteen Workers, etc.

**Administrative team** –
- Dr. Suvarna Patil
- Dr. Netaji Patil
- Dr. Prasanna Nakate
- Dr. Rambadan Chauhan
- Mr. Milind Yashwantrao
- Mr. Gautam Tendulkar
- Mr. Vinayak Gaikwad

1. **Training teams** – To train the hospital staff regarding COVID-19 and other related issues

   **Doctors training** –
   - Training Included -
   - Covid 19 – Introduction, Symptoms, Modes of transmission, Risk factors, Complications, Prevention, clear doubts/myths, Treatment options
   - Isolation and quarantine and social distancing
   - Universal safety precautions
   - Use of PPE
   - Cleaning and disinfection
• Biomedical waste disposal – Disinfection and disposal of material used by COVID-19 patients and their treating staff
• Screening of patients for suspected COVID-19 should be done outside the OPD building at separate fever OPD which will run for 24 hrs. Patients suspected to have COVID – 19 should be referred to Civil hospital. Other patients (Patients in labour, medical and emergencies after totally ruling out the possibility of COVID -19) can be admitted after informing to the Medical Director.
• Special precautions to be taken while treating confirmed COVID-19 cases at BKL Walawalkar Hospital.
• If any issue occurs or there is some doubt, please inform/ask the administrative team
• **Nurses training –**
  **Training Included -**
  • Covid 19 – Introduction, Symptoms, Modes of transmission, Risk factors, Complications, Prevention, clear doubts/myths, Treatment options
  • Isolation and quarantine and social distancing
  • Universal safety precautions
  • Use of PPE
  • Cleaning and disinfection
  • Biomedical waste disposal – Disinfection and disposal of material used by COVID-19 patients and their treating staff
  • Screening of patients for suspected COVID-19 should be done outside the OPD building at separate fever OPD which will run for 24 hrs. Patients suspected to have COVID – 19 should be referred to Civil hospital. Other patients (Patients in labour, medical and emergencies after totally ruling out the possibility of COVID -19) can be admitted after informing to the Medical Director.
  • Special precautions to be taken while treating confirmed COVID-19 cases at BKL Walawalkar Hospital.
  • If any issue occurs or there is some doubt, please inform/ask the administrative team
Lab Technician’s training - 
Training Included -
- Covid 19 – Introduction, Symptoms, Modes of transmission, Risk factors, Complications, Prevention, clear doubts/myths, Treatment options
- Isolation and quarantine and social distancing
- Universal safety precautions
- Use of PPE
- Cleaning and disinfection
- Biomedical waste disposal – Disinfection and disposal of material used by COVID-19 patients and their treating staff
• **Ward boys training** – 
  **Training Included** - 
  • Covid 19 – Introduction, Symptoms, Modes of transmission, Risk factors, Complications, Prevention, clear doubts/myths, Treatment options
  • Isolation and quarantine and social distancing
  • Universal safety precautions
  • Use of PPE
  • Cleaning and disinfection
  • **Biomedical waste disposal** – Disinfection and disposal of material used by COVID-19 patients and their treating staff

• **Drivers** – 
  **Training Included** - 
  • Brief about COVID-19 and safety precautions
  • Isolation and quarantine and social distancing
  • Universal safety precautions, hand hygiene
  • Use of PPE
  • Transport of suspected COVID-19 patient, clinical sample to NIV Pune, dead bodies of patients
• **Pharmacy training** –
  
  **Training Included** -
  
  • Brief about COVID-19 and safety precautions
  • Isolation and quarantine and social distancing
  • Universal safety precautions, hand hygiene
  • Use of PPE
  • Drugs and other equipment that may be required on large scale for management of COVID-19 cases
  • Timely ordering in adequate quantity, follow up of orders, resolve issues with distributors etc.

• **CSSD training** –
  
  **Training Included** -
  
  • Brief about COVID-19 and safety precautions
  • Isolation and quarantine and social distancing
  • Universal safety precautions, hand hygiene
  • Use of PPE
  • How to handle CSSD work in case of increased demand
• **Operation theaters staff training –**

  **Training Included -**

  - Covid 19 – Introduction, Symptoms, Modes of transmission, Risk factors, Complications, Prevention, clear doubts/myths, Treatment options
  - Isolation and quarantine and social distancing
  - Universal safety precautions
  - Use of PPE
  - Cleaning and disinfection
  - Biomedical waste disposal – Disinfection and disposal of material used by COVID-19 patients and their treating staff
  - Screening of patients for suspected COVID-19 should be done outside the OPD building at separate fever OPD which will run for 24 hrs. Patients suspected to have COVID – 19 should be referred to Civil hospital. Other patients (Patients in labour, medical and emergencies after totally ruling out the possibility of COVID -19) can be admitted after informing to the Medical Director.
  - Special precautions to be taken while treating confirmed COVID-19 cases at BKL Walawalkar Hospital.
  - If any issue occurs or there is some doubt, please inform/ask the administrative team
• **Security training –**  
  **Training Included -**  
  - Brief about COVID-19 and safety precautions  
  - Isolation and quarantine and social distancing  
  - Universal safety precautions, hand hygiene  
  - Use of PPE – in brief  
  - Careful handling of any security related issues  
  - Try to identify and solve the problems at an early stage  
  - Inform the Administrative team about any unsolved problem

• **Canteen training –**  
  **Training Included -**  
  - Brief about COVID-19 and safety precautions  
  - Isolation and quarantine and social distancing  
  - Universal safety precautions, hand hygiene  
  - Use of PPE – in brief  
  - Avoid using unnecessary gloves while preparing or handling food  
  - Wash hands frequently (Every 30 min)  
  - Maintain adequate stock of food material, milk  
  - Arrange UPI payment if possible

2. **Department wise Hospital emergency committee/ Team – (Routine/ Other than COVID-19) –.**  
   - Establishes the Hospital Emergency Risk Management Program to develop, implement and maintain the coordinated system for the overall management of the hospital's emergency risks covering risk assessment, prevention, preparedness, response and recovery.

3. **Infection control team –**  
  **Training Included -**  
  - Covid 19 – Introduction, Symptoms, Modes of transmission, Risk factors, Complications, Prevention, clear doubts/myths, Treatment options
- Isolation and quarantine and social distancing
- Universal safety precautions
- Use of PPE
- Cleaning and disinfection
- Biomedical waste disposal – Disinfection and disposal of material used by COVID-19 patients and their treating staff
- Screening of patients for suspected COVID-19 should be done outside the OPD building at separate fever OPD which will run for 24 hrs. Patients suspected to have COVID – 19 should be referred to Civil hospital. Other patients (Patients in labour, medical and emergencies after totally ruling out the possibility of COVID -19) can be admitted after informing to the Medical Director.
- Special precautions to be taken while treating confirmed COVID-19 cases at BKL Walawalkar Hospital.
- If any issue occurs or there is some doubt, please inform/ask the administrative team
  - To train and provides guidance for reduction of transmission of healthcare-associated infections and thereby to enhance the safety of all who are present in a hospital, including patients, staff and visitors.
  - To enhance the ability of a hospital to respond to an epidemic.
  - To lower or eliminate the risk of the hospital itself amplifying the epidemic.

4. Hospital pharmacy –
   Training Included
   - Brief about COVID-19 and safety precautions
   - Isolation and quarantine and social distancing
   - Universal safety precautions, hand hygiene
   - Use of PPE
   - Drugs and other equipment that may be required on large scale for management of COVID-19 cases
   - Timely ordering in adequate quantity, follow up of orders, resolve issues with distributors etc.
• To make appropriate medicines and other pharmaceutical products available in the hospital for distribution to individuals affected by an emergency. To ensure that medicines and other pharmaceutical products continue to be available and distributed to hospital patients during an emergency.

5. Hospital laboratory (CCL) & Blood bank – Responsibilities –
• To provide laboratory services in support of the hospital’s preparedness and response activities and to do so in a timely, efficient manner.
• To contribute to the health sector’s surge capacity by providing laboratory services at the hospital.

6. Food and nutritional services. Responsibilities –
• To ensure that adequate quantity of grocery, milk, food items, vegetables etc. are available in the grocery shop for all doctors and other staff and their families residing in the campus & hostels.
• To ensure uninterrupted delivery of safe food and water, and nutritional services (including dietary counseling) to all hospital occupants.
• Maintaining effective food supply during an epidemic may be hampered by such factors as increased demand for food and water, disruption of the supply chain and shortage of trained staff.

7. Hospital waste management – Responsibilities -
• Staff providing waste management, cleaning and laundry services should have been trained in infection prevention and control in order to ensure occupational safety and compliance with infection control requirements.
• Coordination between clinical staff and waste management and cleaning staff is essential for preventing or controlling infectious diseases in a hospital.
• Hospital waste management can face serious difficulties in an emergency situation, such as increased quantities of contaminated or potentially
contaminated waste, including sharps, syringes and blood-contaminated materials, limited capacity for storing and managing hospital waste, lack of transport or of facilities for disposal of hazardous waste.

- To provide laundry and cleaning services and manage hospital waste with the aim of reducing the risk of further spread of infection during an epidemic.
- Disposal of excreta of pet animals – The pet owners are solely responsible for disposal of excreta of their pet animals. They should ensure that their pets do not spoil the campus which will pose an extra burden on cleaning staff.

8. Mortuary services –

- To provide safe, effective management of human remains, including identification, recovery and handling of the body, family services, temporary storage, and burial or cremation.

9. Psychological services - To reduce the adverse psychological and social impact of an emergency situation on hospital patients and staff, and on members of the affected community.

- Hospital staff may require specific psychological support, aimed partly at enabling them to return to work as soon as possible, as distinct from the more general support required by the community at large.

- **Hospital staff required to care for ill relatives** may be particularly vulnerable to psychosocial distress as they face a conflict between their professional responsibilities in the hospital and their family commitments.

- Psychosocial support services should have enough resources to be widely available and culturally appropriate.

- Psychosocial support should be offered as an optional, not mandatory, service.

- Psychological support services should be administered as a component of the hospital’s occupational health department rather than its human resource department.
IEC activities – Health awareness about Covid 19 through IEC.

Activities Included were -

- To raise public awareness of an epidemic or other emergency, of the associated risks poses to people’s health and of the measures required to reduce these risks and to respond to the epidemic.
- To provide information to all hospital occupants, including staff, patients and visitors, and to solicit their cooperation.
- To provide the information needed to ensure, as far as possible, continuity of service delivery within the hospital and, beyond the hospital, to coordinate activities in collaboration with local health authorities.
- To limit the spread of unfounded rumors about the emergency.
- If needed people can be educated about the following –
  - Brief about COVID-19 and safety precautions
  - Isolation and quarantine and social distancing
  - Universal safety precautions, hand hygiene
Use of PPE – in brief

IEC activities were carried out with help of Interns by preparing posters and by giving health talk in the OPD’s.

IEC Charts were displayed at the Entrance, Near the reception, Outside OPD’s and near patients waiting Areas, In patient wards and along the corridor.

IEC activity was also conducted in the form of display of Audio Visual at the entrance and at the reception counter.

Questionnaire for Screening
As a part of routine Screening for Covid19 patients a questionnaire was formed so as the screening could be done on a faster aspect.
The questionnaire included the following –

**Patient Details** –
Name: Age/Sex:  
Address: 
Occupation: 
Contact details: 

Please answer following questions.

1. Have you returned from any **of the foreign countries** within the last 14 days?  
   Yes     No 

2. Have you had **close contact with or cared for someone diagnosed with COVID-19** within the last 14 days?  
   Yes     No 

3. Have you been in **close contact with anyone who has traveled to any foreign country** within the last 14 days?  
   Yes     No
4. Have you experienced any **cold or flu-like symptoms in the last 14 days** (to include fever, cough, sore throat, respiratory illness, difficulty breathing)?
   Yes    No

5. Do you have any of these **Pre-existing conditions and medical history** –
   - No risk medical condition
   - Cardiac disease (not simple hypertension)
   - Chronic lung disease
   - Diabetes
   - Haemoglobinopathies
   - Immunosuppressive condition
   - Liver disease
   - Metabolic disease
   - Neurological disorder
   - Obesity
   - Renal disease
   - Other risk medical condition? – Specify

6. Is the person **currently pregnant or pregnant during the illness**?
   Yes    No
   If Yes, number of weeks gestation at symptom onset: _______ (weeks)

7. Are they a **current smoker**?
   Yes    No

8. Do you **drink alcohol**?
   Yes    No
   **If yes, quantity** consumed per week approximately.

9. During the period of interest, did they **visit any animal market (seafood or freshly slaughtered meat), farm, racecourse, zoo**?
   Yes    No

10. Did they have **close contact with domestic (including household pets)**
or wild animals?
Yes    No
If yes, were any of these animals sick or dead?

Screening of OPD patients – Patient who were attending the Out Patient Department were screened for Covid 19 Signs and symptoms such as fever, cough and Breathlessness. Also travel history from Covid 19 affected countries and contact history with Covid 19 positive patients. Also as a precaution for COVID -19, the screening team also ensured that all the staff residing in campus (Doctors, Nurses, Paramedical, maintenance etc.) should report the details of their guests /visitors to the team

- Name, Age, Sex
- Date of visit/Arrival
- Came from
- Symptoms if any
- Avoid gathering of staff, students in the campus

Procurement / ordering necessary drugs/ Sanitizer/ PPE etc was done on daily basis.
- There are no enough PPE available at present. So it should be used sparingly. PPE is ordered from the distributors but they have problems of availability and transport and this problem is informed to civil surgeon on mail on 25 March 2020.
• PPE will be used by staff working for isolation ward only. On duty nurse while performing procedure is allowed to use it. (Only nurse and on duty doctor).
• Ward boy will be given gumboot and rubber gloves for handling the patient’s disposables.

Necessary communication with District health Authorities.
Reporting to Civil Surgeon, DHO, THO, Ratnagiri district.

House to House Survey in the campus –
Was conducted as a precaution for COVID-19, to ensure that all the staff residing in campus (Doctors, Nurses, Paramedical, maintenance etc.) should report the details of their guests/visitors to the team.
  ▪ Name, Age, Sex
  ▪ Date of visit/Arrival
  ▪ Came from
  ▪ Symptoms if any
  ▪ Avoid gathering of staff, students in the campus
  ▪ Please inform all the staff to report to medicine OPD if they have any symptoms of respiratory infections (fever, sore throat, breathlessness etc.) so that they can be managed appropriately.
Own customized PPE designed –

Designed Ozon chamber for instant disinfection of mask and hand –
Incubation hood -