

***Establishing and Operationalising the COVID care
isolation centres and
Hospital management during pandemic COVID-19
in Batala, Gurdaspur***

Presented by:

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MBA Health management

0819

INTRODUCTION

- The first case of COVID-19 was detected in Punjab on 9th March 2020. This illness is caused by a novel Corona Virus (SARS-CoV-2). This epidemic is at a relatively low level in the State of Punjab in comparison to the rest of India and the World. The morbidity and mortality are under control owing to early preparedness of the State administration for tackling this epidemic. However, the early decisions taken by the State Government with implementation of lockdown followed by stringent curfew to break the chain of transmission in the community and adoption of other preventive measures, in general, have given reasonably good results in controlling morbidity and mortality in the state.

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- Punjab Government decided to set up COVID Care Isolation Centers (CCICs) as a state-operated isolation facility for positive cases for constant monitoring by trained health professionals COVID patients with very mild symptoms were proposed to be kept in these centers.
 - The total capacity of CCICs is be 20,000 with each having preferably capacity of 500-1000 beds.

➤ **METHODOLOGY**

➤ **Aim of the study:**

Aim of the study is to Establish isolation facility and help the Hospital management to fill the gaps as per isolation unit guidelines formulated by Govt. of India and Punjab Government.

➤ **Specific Objectives:**

- To Assess Newly formed isolation units.
- To identify the gaps in existing basic buildings and prepare them for COVID-19 isolation units
- To suggest appropriate recommendations to bridge those gaps which arrived due to formation of covid-19 isolation units based on recommendations by Govt of India.
- To help the hospital management to take managerial actions to bridge those gaps.

➤ Research Methodology

1. Study Type : Observational Descriptive study
2. Study Area : 100-Bedded Sub District Hospital Batala Gurdaspur, Punjab.
3. Duration of Study : 3 Months
4. Location of study: Sub District Hospital Batala, Gurdaspur, Punjab

➤ Sample size- 62

PHARMACIST	2
DOCTORS	21
NURSING STAFF	29
MATRON	1
SWEEPERS AND WARD SERVANTS	9

➤ **Data Collection Tool:** Data will be collected through a structured isolation set up protocol approved by Ministry of Health and family Welfare, Government of Punjab.

Information was gathered by the following methods-

➤ **Primary data-**

- ☐ Observation(direct)
- ☐ Staff interview

➤ **Secondary data-**

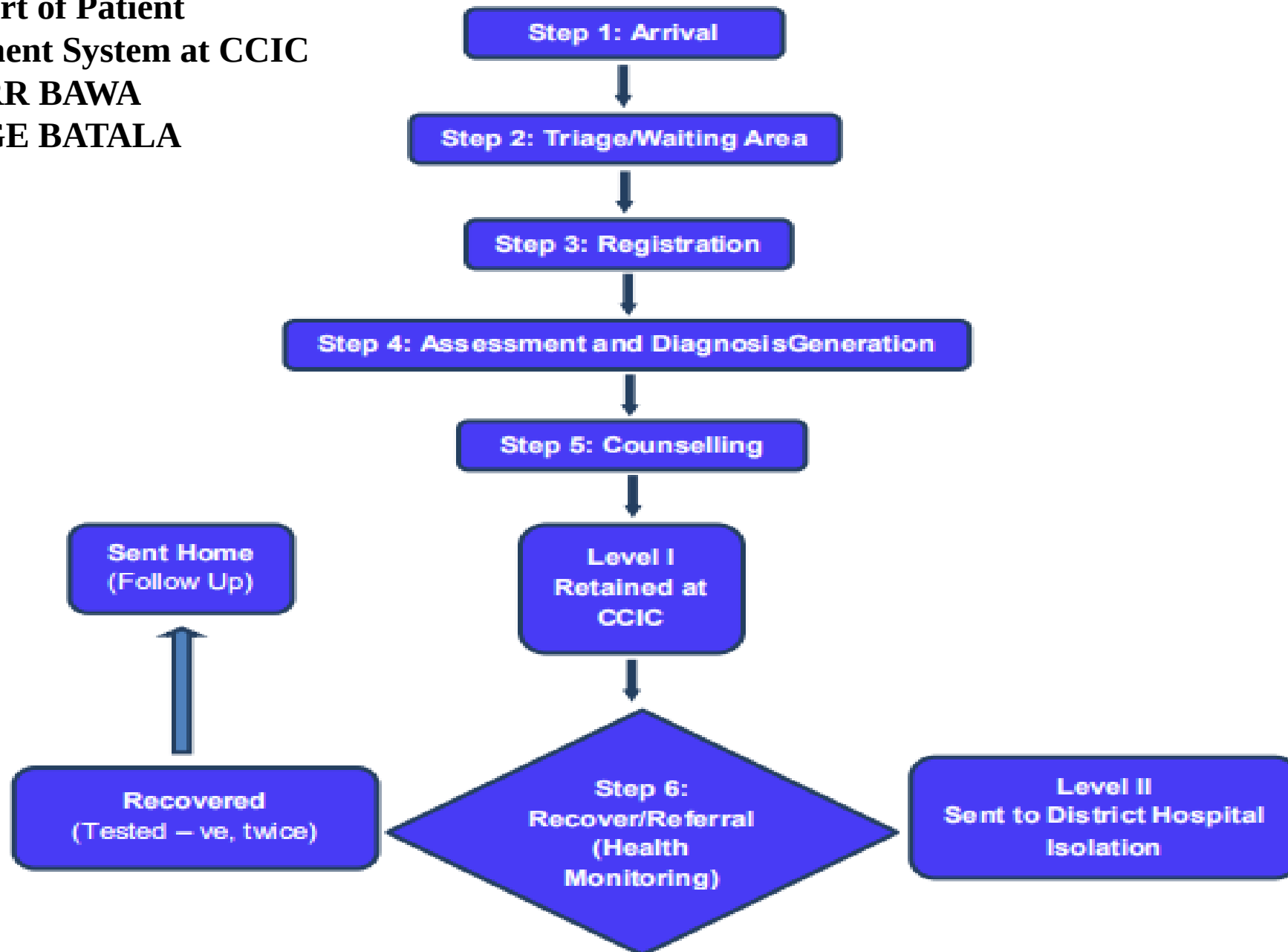
- ☐ Record review -Registers maintained for COVID-19 Management and quantity of content filled, latest manuals and policies.

PROTOCOL: COVID- 19 CASE MANAGEMENT

- The COVID patients can be categorized into three groups:
 - **Level I** are the patients having very mild symptoms, such patients are to be admitted to COVID Care Isolation Center facilities
 - **Level II** are the patients with mild to moderate symptoms, they are to be treated at District Hospital/ Government Isolation Facilities
 - **Level III** are the patients who are in critical condition and are to be referred to ICU/HDU/Ventilator Facilities.

- The Level I facilities shall be triggered once 70% of the capacity of Level II facility stands exhausted.
- However, if the patient graduates from very mild to mild symptoms s/he shall be shifted to Level II.
- In critical condition shall further be sent to Level III facilities .
- Only when the sample has been found positive, the patient should be brought to the CCIC to be kept under constant observation by trained health care Professionals

- **Flow Chart of Patient Management System at CCIC**
- **Centre: RR BAWA COLLEGE BATALA**





RR BAWA COLLEGE BATALA

THE WORK FLOW OF COVID Care Isolation Centre (CCIC)

➤ RR BAWA COLLEGE BATALA- 100 Beds

- **Step 1 (Arrival):** The patient who has tested positive and in stable condition without or with mild symptoms will be admitted at the CCIC.
- **Step 2 (Triage/Waiting area):** A volunteer properly attired as per the protocol shall attend to the patient at the entrance and the patient shall be provided with the hand sanitizer and disposable triplelayer mask.
- **Step 3 (Registration):** The patient's details are noted the details shall include their contact details, address, ID generation and generation of file. Details of emergency contact as well as people/institutions/societies, etc that one has contacted during this period.

- **Step 4 (Assessment and Diagnosis Generation):** The case history should be made online through the Health Management Information System (HMIS) and hard copy. Identification and Segregation of high risk patient (co-morbid conditions) shall be done at this stage.
- **Step 5 (Counselling Support):** There shall be a special focus on the mental health of the patients, to speed up their recovery process.
- **Step 6 (Recovery/ Referral):** Mild/very mild/pre-symptomatic cases admitted to a COVID Care Facility will undergo regular temperature and pulse oximetry monitoring. The patient can be discharged after 10 days of symptom onset and no fever for 3 days. There will be no need for testing prior to discharge.

➤ Discharge Criteria

➤ **For mild / very mild / pre-symptomatic cases:**

The patient can be discharged after 10 days of symptom onset and after displaying no fever for three days.

- ✓ The patient is advised to follow home isolation for the further seven days after discharge process

➤ **For moderate cases:**

- ✓ The patient can be discharged if asymptomatic for three days and (b) after 10 days of symptom onset
- ✓ The patient will be advised to follow home isolation for the further seven days after discharge process

➤ **For severe cases:**

- ✓ Clinical Recovery : If the patient tests negative once through RT-PCR (after the resolution of Symptoms)

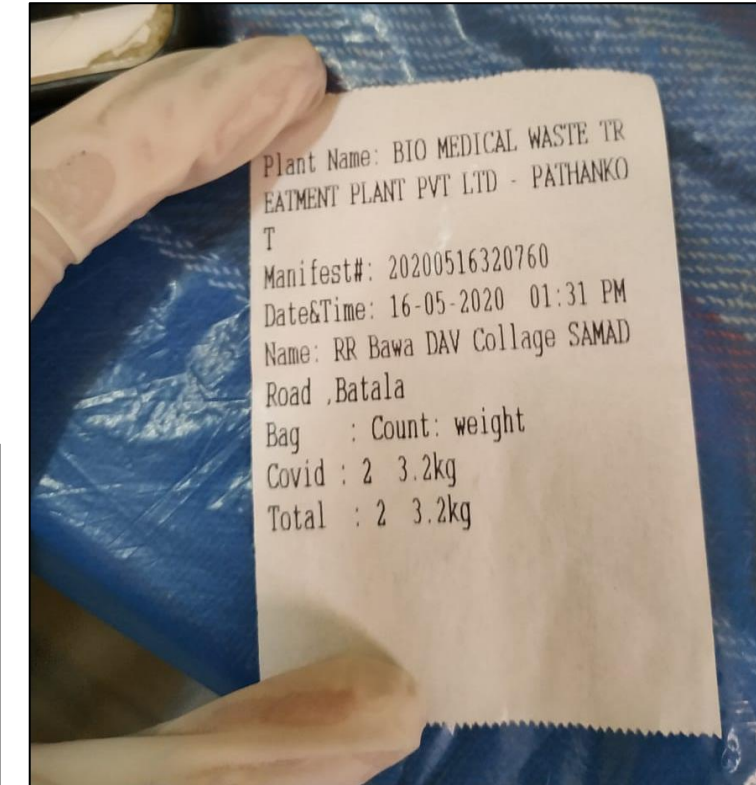
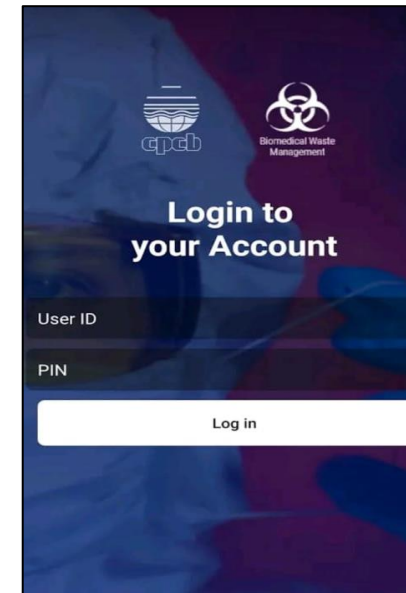
TIER I - QUARANTINE CENTER AT RR BAWA COLLEGE BATALA:

Name of the Quarantine Centre	R R BAWA COLLEGE Batala
Address	SMADH ROAD BATALA DISTT GURDASPUR
Officer In charge	Senior medical officer
Email address	smocivilhospitalbtl@gmail.com
Phone Number	+919814045090
Is Located away from the residential area?	YES
The Distance to nearby residential area?	1.2 KM
Is it Away from an area where gathering expected (Eg: Temples, stadiums, Churches etc)	YES
How far is it from the nearby airport?	55.1 KM

How far is from the nearest railway station?	1.2 KM
How far is the nearest bus station?	1.5 KM BATALA BUS TERMINAL 10
The road to quarantine centre is free from heavy traffic?	YES
The road to quarantine centre is wide enough to have two vehicles at a time?	YES
How far is the nearest Tertiary care centre?	37 KM GURU NANAK DEV HOSPITAL AMRITSAR
How far is the nearest District Hospital or SDH ?	1.5 KM SUB DISTRICT HOSPITAL BATALA

BIOMEDICAL WASTE MANAGEMENT :

- Agreement with CWTF for collection of BMW from each centre.
- Color-coded bins were provided at each centre.
- Dedicated BMW collection area.
- COVID-19 BMW waste is labelled separately.
- CPCB developed a software for tracking COVID-19 waste and it was intimated to update daily collection waste generated by facility and each centre.
- Trainings were provided to staff for Biomedical waste management and implementation of latest Guidelines.

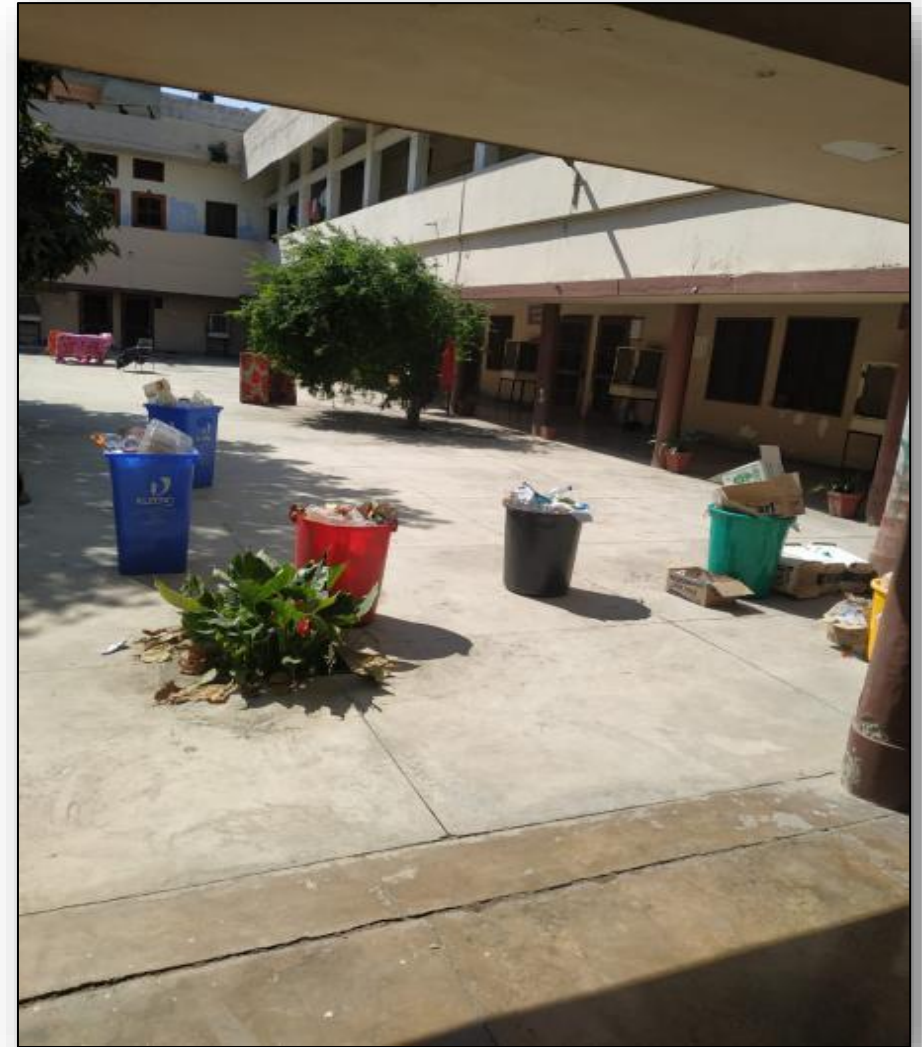




Daily checking of Biomedical waste management and distribution of color coded bins At Quarantine centre.



Medical team regular visits At Quarantine centre.



Color coded Bins were provided at quarantine canters and ensured daily collection of BMW.

**Distribution of color-coded bins
for biomedical waste collection
at each Quarantine Centre**



**Training was given at each centre to
medical team regarding Biomedical
waste management**

TIER II FACILITY ISOLATION WARD AT S.D.H BATALA

- **Triage in the isolation room** : Early identification of patients with SARI associated with COVID infection is to be done by ems /Specialist on call or nodal officer of covid 19.
- Patients with severe/critical illness laboured breathing will be immediately referred to the higher level of health care facility viz GURU NANAK HOSPITAL AMRITSAR i.e. tier 3 facilities with appropriate case history and initial management and after detailed discussion with covid -19 management team.
- Information regarding referral is to be given to Patient and referred by designated ambulance for covid 19 with driver and assistant taking all precautions.

IMPLEMENTATION OF IPC MEASURES:

- As Infection Prevention Control (IPC) is a critical and integral part of clinical management of patients and it is been initiated at the point of entry of the patient to hospital (from Emergency Department).
- Standard precautions are applied in routine by facility, Standard precautions include hand hygiene; use of PPE to avoid direct contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin.
- Standard precautions also include prevention of needle- stick or sharps injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.

ESTABLISHING ISOLATION WARDS



Before establishing into
isolation ward

FACILITIES AT FLU CORNER

➤ STAFF AT FLU CORNER

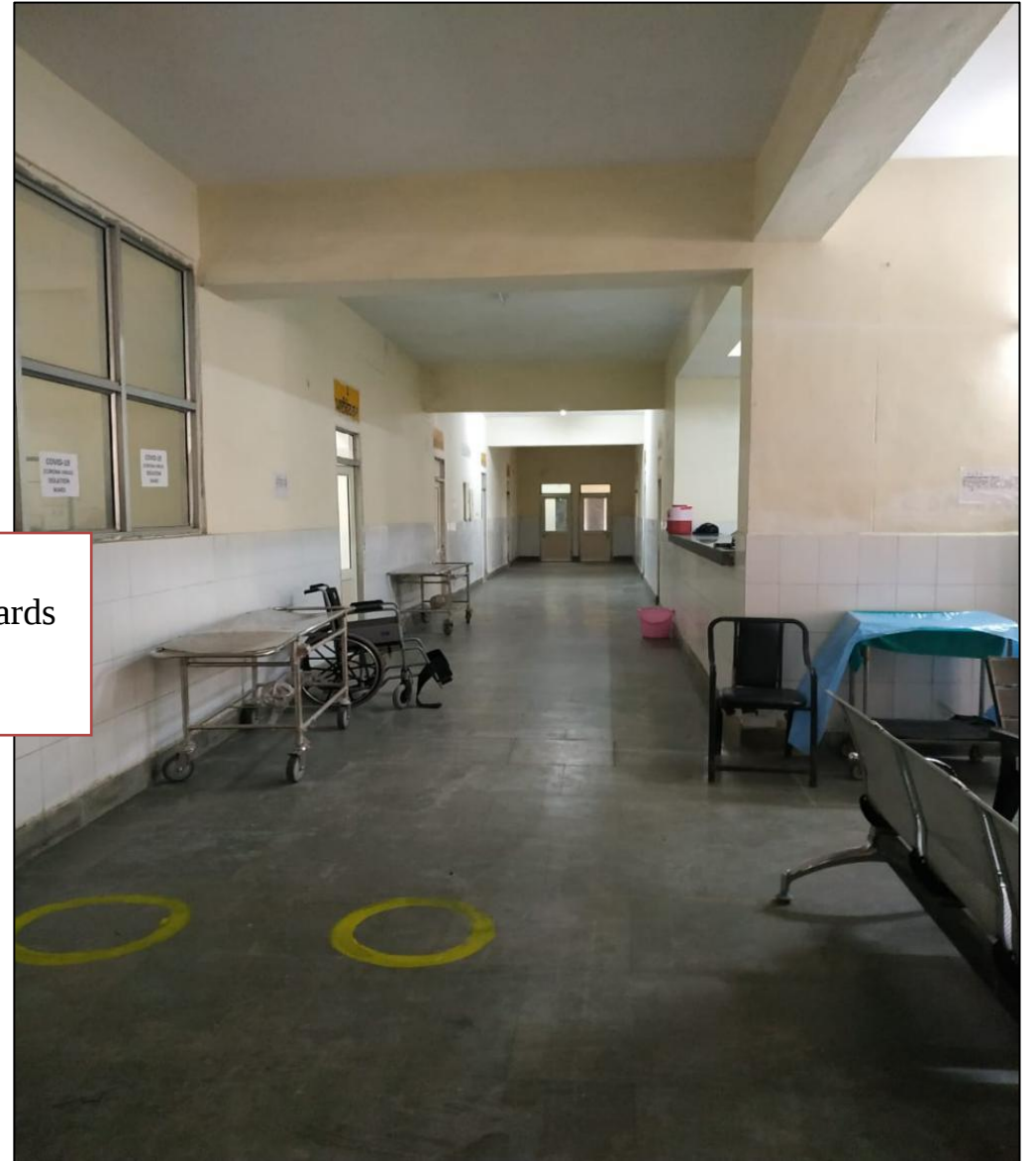
DOCTOR	1
NURSING STAFF	1
CLASS IV	1
SECURITY GAURD	1

- 1) Hand washing
- 2) Sanitiser
- 3) Triple layered medical masks and N95 masks
- 4) Personal Protective Equipment (PPE) for staff and doctors
- 5) A screening proforma
- 6) Hospital waste management facility
- 7) Health education





functional isolation wards
Were Established





WALK-IN Kiosks were established for sample collection in isolation wards, for quarantine centers and if samples are to be collected from a huge area the intervention in ambulance was done by adding gloves and set up.

TRAININGS PROVIDED AT FACILITY

- Training provided to staff regarding Handling COVID-19 in special populations:
 - In Pregnant patients:
 - Testing to be prioritised
 - Steroids may be given for foetal indications as per obstetrician's advice
 - Obstetrician to monitor fetal well-being daily
 - Breastfeeding patients:
 - Currently there is no data suggestive of viral transmission via breast milk.
 - Mothers was asked to apply all necessary precautions by IPC while feeding.



Tests being done in
isolation area.

- Breastfeeding Awareness session was given to mothers with New born and precautions to be taken during Pandemic.
- As per WHO guidelines women can breastfeed but they should observe these precautions :
 1. wash hands with soap and water or use alcohol based hand rub frequently.
 2. wear a medical mask during any contact with baby
 3. Sneeze or cough in a tissue.
 4. Routinely clean and disinfect surfaces touched



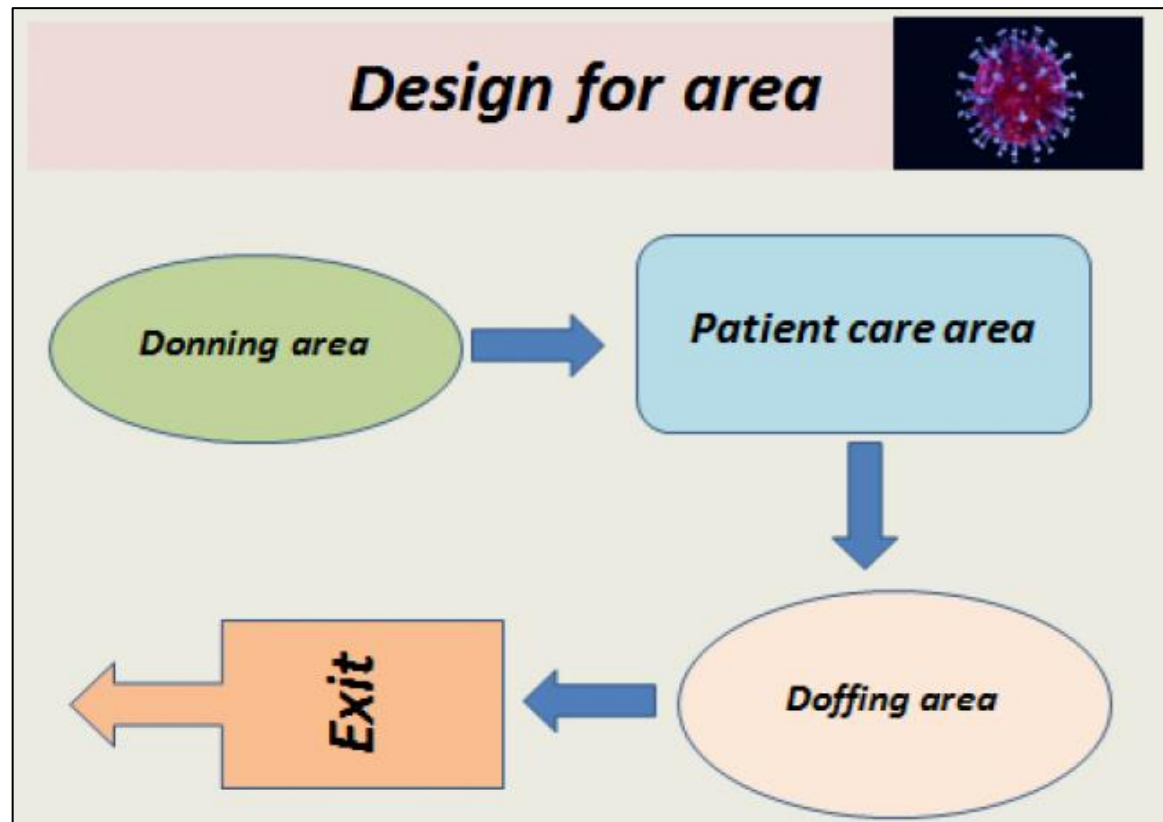


Training was provided to staff regarding Infection prevention control and disinfection in Labor room, it was explained to take proper precautions during delivery cases. (HIV)

➤ **The Perinatal and Neonatal Management:**

1. All pregnant patients with the history of overseas travel or exposure to the suspected or proven COVID-19 patient will be isolated.
2. The criteria for taking sample and laboratory testing of pregnant women with suspected or proven COVID-19 infection should be isolated.
3. There should be a separate operation theatre and labour room for conducting Caesarean sections and deliveries respectively. All these rooms should have a dedicated new-born care corner at least 2 meters away from delivery table.
4. All the isolation rooms including operation theatre and labour room should have negative air pressure, if this facility not available then provision of appropriate number of exhaust fans can be made.

- Design of isolation area :
- Donning Area: For putting on PPE
 - Doffing Area: For removing the PPE



Dedicated donning and doffing area under construction at S.D.H BATALA.

➤ Donning of PPE

1. Remove home clothes and wear clean hospital scrubs.
2. Wash hands with soap and water or alcohol rub
3. Wear shoe cover first provided in PPE kit. Tie the laces in front of shin.
4. Wash hands and Wear first pair of gloves. The gloves can be sterile or non sterile and should be fit in hands
5. Wear gown provided in PPE kit
6. Wear N95 mask or respirator

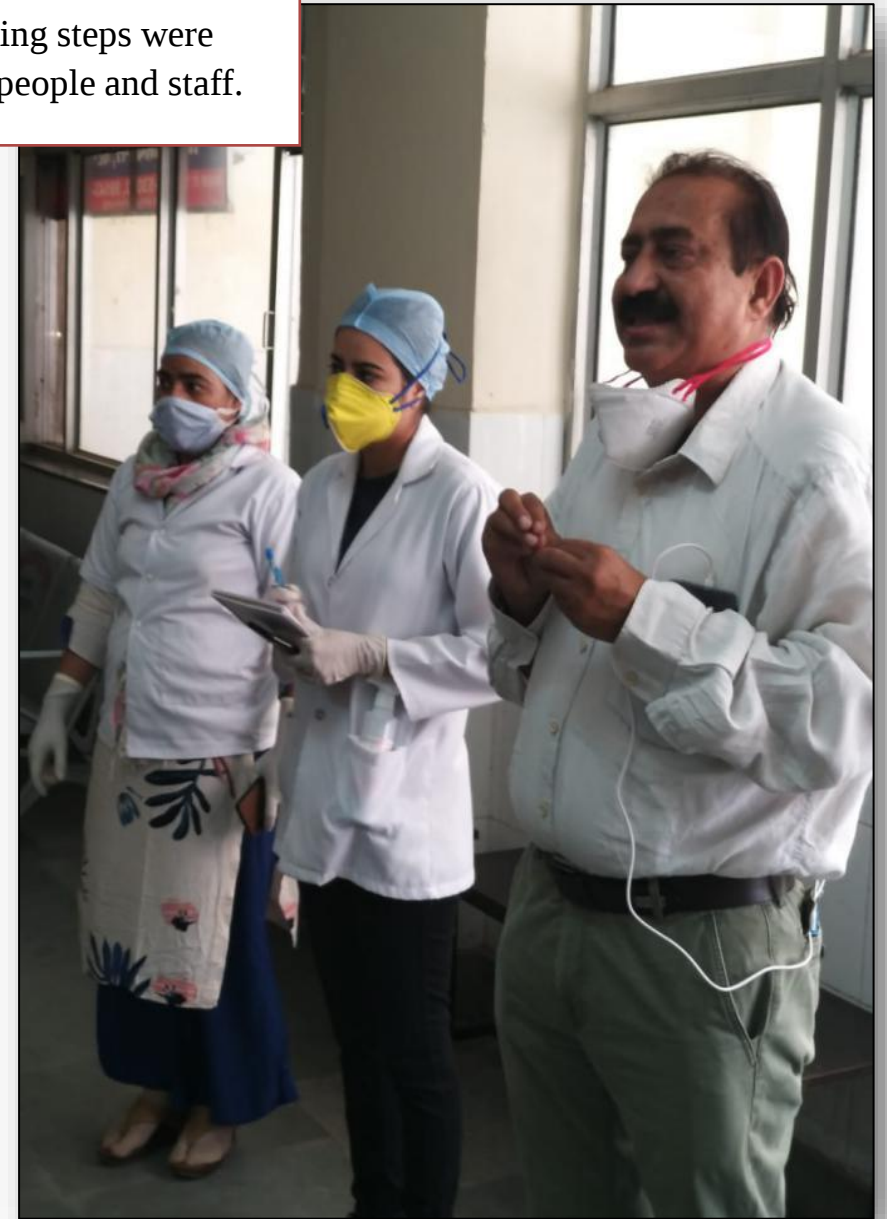


7. Wear goggles/ eye pieces and adjust according to size.
 8. Wear 2 pair of gloves. Check the gloves should not be already torn and the size of outer gloves should be larger than first wearing pair of gloves
- Sequence of removing PPE in doffing area:
1. Never touch outer surface of gown to prevent contamination of hands
Unfasten gown ties without making any contact of sleeves with body
 2. Pull away gown from neck and shoulder from touching inside of gown only
Fold or roll into bundle and discard in waste container
 3. Wash hands with soap and water and alcohol rub



Rapid kit test training: As soon as hospital received the rapid kits for tests a training was given by senior medical officer to the laboratory staff.

Hand washing steps were explained to people and staff.



BIOMEDICAL WASTE MANAGEMENT

➤ COVID-19 Isolation Wards:

1. Reporting the opening or operation of COVID-19 ward to SPCBs
2. Dedicated sanitation workers separately for BMW and general solid waste
3. Reporting the opening / operation of COVID-19 sample collection centers and laboratories to concerned State Pollution Control Board.
4. Collection and storage of biomedical waste separately prior to handling over the same CBWTF.
5. A dedicated collection bin labeled as “COVID-19” to store COVID-19 waste

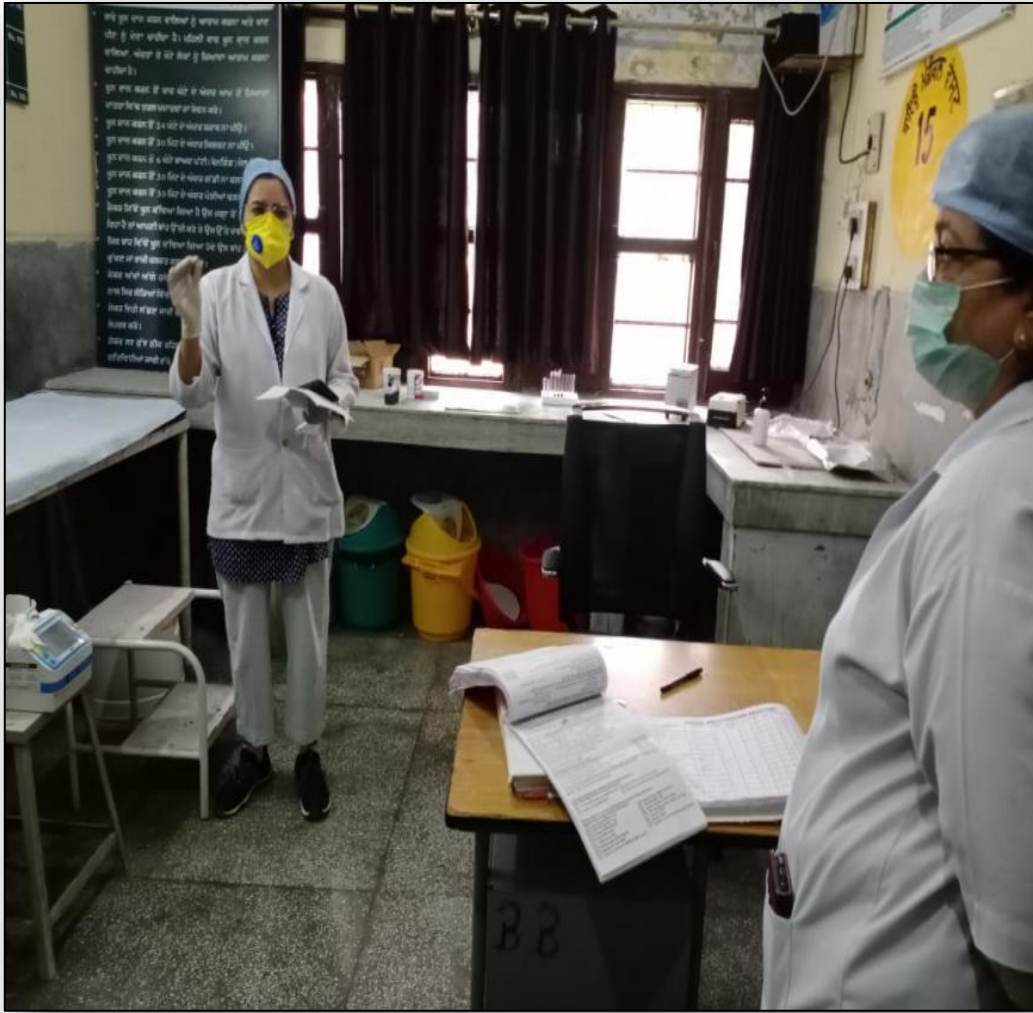
6. General waste not having contamination should be disposed as solid waste as per Solid Waste Management Rules, 2016.

7. Disposable plates, left over food, paper napkins, thermocol/cardboard foodbox used by patients may be considered contaminated and disposed as yellow category waste and plastic water bottles as red category waste.

8. Facility has to maintain separate record of waste generated from COVID-19 isolation wards.

9. Trainings were provided for spill managemnet, Disinfection in isolation wards and Self precautions to be taken.





Training provided for Risk assessment and precautions to be taken in general and during covid 19 pandemic in Blood bank

➤ ACTIONS ADVISED AND INITIATED:

- Dedicated Infection Control Committee
- Staff deployment to run multiple shifts
- Provision of Television in Isolation ward for Patients
- Dedicated Biomedical waste collection Room
- Availability of Emergency case medicines
- Maintaining COVID-19 biomedical waste registers for Record
- Daily collection of waste from Quarantine centres and record of Slips
- Maintenance of biomedical case management.
- Dedicated doctors and nurses room with privacy in isolation unit
- Dedicated Donning And Doffing Area
- Portable Hand wash can be provided as there is no separate Hand washing area

- Portable Hand wash facility with soap and tissue was provided at flu corner.
- Staff was educated about filling screening performa
- Staff was given orientation about handling and use of thermoscanner
- Dedicated breast feeding room in isolation ward.
- Immunization area established in a separate building
- As per Govt guidelines COVID-19 testing for pregnant women with symptoms made mandatory before c-section.
- Seprate Materinty OT and labor room for patients.
- Promotion and use of Telemedicine
- Separate beds and room demarcated for neonates born to positive or symptomatic mothers

Conclusion

- Punjab as a state where majority of the population is NRI returned home, during the time 90,000 people landed from overseas. At this time guidelines And actions framed by government of punjab was used to establish quarantine and isolation wards which were instrumental in not only preventing community spread with same time punjab reported minimal death rate.
- The Sub District Hospital Batala can effectively Manage Pandemic crisis if the staff including Medical Superintendent, Senior Medical Officer, Medical Officers, Staff nurses and Assistant Hospital Administrator collectively works to improve the procedures (clinical, administrative and auxiliary). The hospital also needs some funds to improve its infrastructure so the hospital should demand funds from various NGOs and State Government.

THANK YOU

*Dedicated all frontline workers, Punjab
Police, Engineers, khalsa Aid and District
Administration.*

