



Mental Health Challenges During COVID-19 Pandemic Guidance for Psychiatrists

**INDIAN PSYCHIATRIC SOCIETY
&
DEPARTMENT OF PSYCHIATRY
NATIONAL INSTITUTE OF MENTAL HEALTH AND NEUROSCIENCES
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MESSAGE

I am glad to know that Indian Psychiatric Society in liaison with the Department of Psychiatry, NIMHANS, Bengaluru is coming out with a manual “Mental Health Challenges During COVID-19 Pandemic: Guidance for Psychiatrists”. This manual succinctly addresses the safe practices for mental health care professionals, patients and their care givers during COVID-19 crisis. Varied challenges in inpatient, outpatient care and special populations have been pertinently addressed in this guidance.

The Indian Psychiatric Society is privileged to be associated with NIMHANS, Bengaluru for this project that will benefit the members of IPS to overcome these testing times.

Prof. PK Dalal
Head of Department, Psychiatry
KGMU, Lucknow
President, IPS



MESSAGE

I am happy to know that the Indian Psychiatric Society (IPS) is bringing out this guidance “Mental Health Challenges During COVID-19 Pandemic” for Psychiatrists. The guidance I am given to understand addresses the Specialist Psychiatrist to ensure a 'safe practice' minimizing risk to themselves, their co-working health care professionals, and patients' given the unprecedented infectious disease outbreak.

The Department of Psychiatry NIMHANS is privileged to be associated with this project of the IPS and we hope that the guidance will benefit the members of IPS to overcome these taxing times.

Dr B N Gangadhar
Director, NIMHANS

Foreword

The Indian Psychiatric Society (IPS) established in 1947, is the largest society of mental health professionals in India with over 7000 psychiatrists as members. Most are front-line leaders in the current health care response to tackle mental health impact of the COVID-19. Alongside, they face the daunting task of continuing care for the psychiatrically ill in a period of heightened risk given the unprecedented infectious disease outbreak. Most of its members with busy practice will experience time constraints limiting their ability to examine a vast body of quickly transforming information in public domain and synthesise it to their settings often with limited resources.

To address this, IPS is collaborating with the Department of Psychiatry, NIMHANS to prepare a guidance for Psychiatrists. The guidance will focus on the needs of Specialist Psychiatrists to ensure a 'safe practice' minimizing risk to themselves, their co-working health care professionals, patients and their families in the times of COVID-19 pandemic. It borrows heavily from the larger guidance document recently released by the Department of Psychiatry, NIMHANS (Mental Health in the times of COVID-19 Pandemic- Guidance for General Medical & Specialised Mental Health Care Settings [<http://nimhans.ac.in/wp-content/uploads/2020/04/MentalHealthIssuesCOVID-19NIMHANS.pdf>]).

In preparing the sections, the contributing authors who are faculty at the Department of Psychiatry, NIMHANS have reviewed all published research on psychiatric practice in COVID-19, in addition to appraising guidelines published by CDC, WHO and Government of India. In this context, it may be underlined that at this point there is very little research based evidence and most published work represent early results or expert consensus. This booklet includes sections proposing recommendations for rearranging practice settings and establishing telemedicine consultations. It addresses needs of children/adolescents, geriatric, perinatal populations and rehabilitation settings. The guidance also dwells on common issues in day to day practice including psychotropic safety and ECT in COVID-19 times. The section which collates updated information on recommended standards of personal hygiene and sanitation is useful for all practice settings. All contributors are well aware of the need to ensure that any guidance be with manageable costs and adaptable to our unique socio-cultural setting. The guidance summarizes information as a fact sheet without references, using bullet points wherever possible for ease of reading.

As clinicians who primarily offer mental health and psychosocial support to their patients, it is evident that psychiatrists would be required to provide counselling and support to persons who might present with worry, anxiety or other emotional problems in the context of COVID-19. Further, contracting COVID-19 also comes with a range of emotional reactions including guilt and the fear of stigma. In these stressful times, patients may present with a common mental disorder to the psychiatrist, or with an exacerbation of pre-existing conditions, particularly anxiety, depressive and obsessive-compulsive disorder. In such cases, the psychiatrist would need to follow the general principles of psychosocial and pharmacological management. From the point of brevity, these are not included here, but form the core essential of care and support.

Janardhan Reddy YC

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**PERSONAL PROTECTION
AND
SAFETY MEASURES**

Precautions in Psychiatric Outpatient Settings

This section suggests guidance to reduce risk of COVID-19 patients and mental health professionals (MHPs) in out-patient settings in hospitals, nursing homes or private consultation rooms. The guidance provided suggests the minimum standards expected and needs to be updated as per Government guidelines issued from time to time.

The guidance on out-patient assessments are as follows:

1. See patients on an appointment basis. Out-patient appointments should be staggered. This helps to prevent over-crowding.
2. Use visual alerts (in appropriate languages) in the clinics/ examination rooms instructing patients and escorts (e.g., family, friends) to notify health care personnel of COVID-19 symptoms or risk.
3. At the point of first contact (registration desk/counter), a trained staff with appropriate safety equipment may assess COVID-19 risk of both patients and bystanders using verbal and temperature screening.
 - Verbal screening – Use latest version of the ICMR COVID-19 screening questionnaire (see annexure). Subjects/bystanders with Score of ≥ 4 to be deemed as high risk.
 - Temperature check- using touchless thermometers with a cut-off temperature of 100°F.

Patients with high risk need to have a separate holding area and assessed in a separate room quickly with minimum wait times. Bystanders with high risk may be requested to wait outside. If pertinent, educate both patient and bystander about the symptoms of COVID-19 and give details of the nearest testing centre/COVID-19 hospitals and refer there.

3. Principle of only “one-attendant-per-patient” to be enforced.
4. Social distancing (at least 1 metre or more) should be practised as much as possible in the registration halls.

5. Chairs in waiting areas to be separated or seating restricted to ensure social distancing.
6. Health care professionals who are assessing patients at high risk/COVID-19 positive patients need to do brief diagnostic assessments and use appropriate protective equipment.
7. Provide masks to symptomatic patients to prevent the spread of infection through coughing and sneezing.
8. Consultation room to be well-lit with adequate ventilation. Air-conditioning may be avoided.
9. Violent or disturbed patients should be examined separately or in a separate room identified for the purpose to prevent contact with other patients.
10. Vulnerable populations should be seen early (e.g., elderly, pregnant, children, and those with pre-existing medical conditions).
11. Routine outpatient assessments should focus only on relevant history and examination and a quick management plan. Detailed assessment can be done after the crisis is averted.
12. To explore telepsychiatry options, especially for patients who are stable and require only a repeat prescription. (See section on Telepsychiatry).
13. Consider giving a repeat prescription for a longer time. This helps to reduce contact-time and reduces the frequency of visits to the MHP.
14. Hand washing as per the WHO recommendations i.e. for 15-20 seconds with all 8 steps using soap and water/sanitizer should be practised. Handwashing must be followed in these situations:
 - Before touching a patient
 - After a procedure involving risk of exposure to body fluids
 - After physical examination
 - As part of safe injection practices
 - Before medication preparation
 - After touching the patient's objects/surroundings.
15. Cleaning/sanitation recommendations for waiting areas/consultation rooms to be strictly followed (see Cleaning/Sanitation recommendations).

2

Protective Measures for Inpatient Services

There are three main likely sources of COVID-19 infections within in-patient settings in psychiatric institutions are:

1. Visitors
2. Health care professionals
3. Patients.

Therefore, in addition to improving general sanitation for infection control, restrictions to sources of infections can be preventive.

These aspects are being discussed in detail below:

1. **Restrict Visitors**

- Restrict entry to only essential individuals (e.g., immediate caretakers)
- Allow access only to the visitors' area.
- Provide a mask
- Insist on hand sanitization with soap and water or alcohol based hand sanitizer before entering ward (See section on cleaning/sanitation).
- Entry into wards should not be permitted if visitors have any of the following:
 - Signs and symptoms of upper respiratory tract infections
 - Temperature $\geq 100^{\circ}$ F

- History of international travel in the past 14 days
- Contact history with an international traveler in the past 14 days
- Known or suspected of having COVID-19 positive status

2. Health care professionals

- Ensure care by a few designated staff with decreased staff rotation
- Staff to be trained in hand hygiene/cough etiquette
- Hand hygiene to be ensured before entering/leaving unit, in addition to activities related to patient care
- Staff to be provided a mask
- Pre-screening of staff for fever before the shift. If having features of infection, ensure exclusion from duty

3. Patients

- Restrict admissions
- Only one bystander per patient who has no risk of COVID-19 or no features of COVID-19 infections
- Review whether stable patients can be discharged
- Ensure patients who are older and those with medical comorbidities are placed in less crowded areas
- Create an isolation ward within the long-stay facility.
 - Any patient having signs and symptoms of URTI to be transferred to the isolation ward
 - Provide food separately
 - Restrict interactions with other patients
 - If symptoms worsen or develop other features of suspected COVID-19, refer to the nearest testing centre

- Teach all the inmates social distancing.
- Teach all the inmates hand hygiene.
- Encourage to greet by NAMASTE rather than handshaking.
- Monitor body temperature of long stay patients at least once in a day.
- No group interventions to be conducted in the ward.
- To ensure the dining area is less crowded, provide food over a staggered period.
- If any patient is tested COVID-19 +ve, inform health authorities and follow instructions.

In addition, enhanced cleaning is of critical importance and all institutions need to follow the latest recommendations of WHO, CDC or Government of India. The current recommendations are discussed in the section on Sanitation/Cleaning.

Personal Hygiene and Sanitation during COVID-19

Vigilance in hand hygiene practices, wearing of surgical masks in the hospital, appropriate use of PPE in patient care, and regular cleaning and disinfection practices are key infection control measures to prevent nosocomial transmission of COVID-19. **This chapter is a compilation of sanitation measures recommended for COVID-19 by the World Health Organization (WHO), Centre for Disease Control and Prevention (CDC)-USA and the Ministry of Health & Family Affairs, Government of India. The images used in this chapter are free to download for non-commercial use from the above websites and are appropriately cited.**

Transmission

There are two main routes of transmission of COVID-19: respiratory and contact. Respiratory droplets are generated when an infected person coughs or sneezes. Infective droplets may also remain on environmental surfaces; thus, the immediate environment of an infected individual can serve as a source of transmission (known as contact transmission).

This summary includes information on hand hygiene, personal protective equipment, and cleaning and disinfection practices.


Hand Hygiene

It is one of the important practices to reduce the transmission of COVID-19. It includes hand washing with soap and water, and use of alcohol-based products.

- 1) **Hand Washing (takes about 40-60 seconds)** with soap and water.

The figure 1 below shows the steps involved in hand washing as advised by the World Health Organization.

Hand Hygiene Technique with Soap and Water

 Duration of the entire procedure: 40-60 seconds



0 Wet hands with water;



1 Apply enough soap to cover all hand surfaces;



2 Rub hands palm to palm;



3 Right palm over left dorsum with interlaced fingers and vice versa;



4 Palm to palm with fingers interlaced;



5 Backs of fingers to opposing palms with fingers interlocked;



6 Rotational rubbing of left thumb clasped in right palm and vice versa;



7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



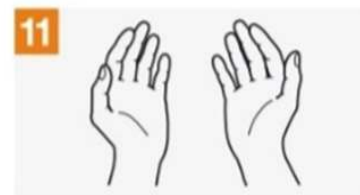
8 Rinse hands with water;



9 Dry hands thoroughly with a single use towel;



10 Use towel to turn off faucet;



11 Your hands are now safe.


[Source: WHO Guidelines on Hand Hygiene in Health Care. Page 155]

2) Cleaning hands with alcohol-based products that do not require water. (takes about 20 seconds)

Use alcohol-based sanitiser/rub with 60% alcohol content.

The figure 2 shows the steps involved in cleaning hands with alcohol rub as advised by the World Health Organization.

Hand Hygiene Technique with Alcohol-Based Formulation

 Duration of the entire procedure: 20-30 seconds



1a Apply a palmful of the product in a cupped hand, covering all surfaces;



2 Rub hands palm to palm;



3 Right palm over left dorsum with interlaced fingers and vice versa;



4 Palm to palm with fingers interlaced;



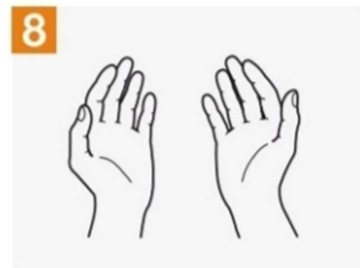
5 Backs of fingers to opposing palms with fingers interlocked;



6 Rotational rubbing of left thumb clasped in right palm and vice versa;



7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



8 Once dry, your hands are safe.

[Source: WHO Guidelines on Hand Hygiene in Health Care. Page 154]

Personal Protective Equipment (PPE)

Personal Protective Equipments (PPEs) are protective gear to safeguard the health workers by minimizing exposure.

Components of PPE

i) Face Shield and Goggles

Mucous membranes of eyes, nose and mouth can be contaminated by -

- Droplets generated by coughing or sneezing by infected person
- During aerosol generating procedures
- Inadvertently touching the eyes/nose/mouth with a contaminated hand

The flexible frame of goggles should provide good seal with the skin of the face, covering the eyes and the surrounding areas and even accommodating for prescription glasses.

ii) Masks

The type of mask to be used is related to particular risk profile of the category of personnel and his/her work. There are two types of masks which are recommended for various categories of personnel working in hospital or community settings:

- Surgical Triple layer mask: This is disposable, fluid resistant, provides protection from droplets of infectious material.
- N-95 Respirator mask: It is a respiratory protective device with high filtration efficiency to airborne particles. If correctly worn, the filtration capacity of these masks exceeds those of triple layer medical masks.

iii) Gloves

Nitrile gloves	Latex gloves
Resist chemicals including certain disinfectants such as chlorine	Can have high rate of allergies and contact dermatitis
Nitrile gloves are preferred but if not available, latex gloves can be used.	
Non-powdered gloves are preferred to powdered gloves.	

iv) Coveralls or Gowns

These protect the healthcare providers working in close proximity (within 1 meter) of suspect/confirmed COVID-19 cases or their secretions. Coveralls typically provide 360-degree protection because they are designed to cover the whole body, including back and lower legs and sometimes head and feet as well. They also have an attached head cover. Medical/isolation gowns do not provide 360-degree coverage (e.g., possible openings in the back, coverage to the mid-calf only). Gowns are easier to don and doff. Head cover should be worn separately.

v) **Shoe covers**

These are used over the footwear/shoes and are made of impermeable material.

vi) **Head covers**

Coveralls come with an attached head cover. Head covers should be used separately with medical gowns. The table below describes the MOHFW, DGHS guidelines for rational use of PPE in different settings

COVID-19: Guidelines on rational use of Personal Protective Equipment

Source - Ministry of Health and Family Welfare, Directorate General of Health Services [Emergency Medical Relief]

Patient Care Activities /Area	Risk of Exposure	Triple Layered Mask	N-95 Mask	Gloves	Gown/Coverall	Goggles	Head Cover	Shoe cover
Triage Area in OPD	Moderate risk	X	✓	✓	X	X	X	X
Help desk/ Registration counter	Moderate risk	X	✓	✓	X	X	X	X
Temperature recording station	Moderate risk	X	✓	✓	X	X	X	X
Holding area/ waiting area	Moderate risk	X	✓	✓	X	X	X	X
Doctors chamber in OPD	Moderate risk	X	✓	✓	X	X	X	X
Clinical Management in Isolation rooms	Moderate risk	X	✓	✓	X	X	X	X
ICU facility / Critical Care Ward where aerosol generating procedures are done	High Risk	X	✓	✓	✓	✓	✓	✓
SARI ward - attending to severely ill patients of SARI	High Risk	X	✓	✓	✓	✓	✓	✓
Sample Collection/Sample testing for COVID-19	High Risk	X	✓	✓	✓	✓	✓	✓
Dead Body Packing	High Risk	X	✓	✓	✓	✓	✓	✓
Dead Body Transport	Moderate Risk	X	✓	✓	X	X	X	X
Mortuary - Dead Body Handling	Moderate Risk	X	✓	✓	X	X	X	X
Mortuary- While performing autopsy	High Risk	X	✓	✓	✓	✓	✓	✓
Sanitary staff	Moderate risk	X	✓	✓	X	X	X	X
CSSD/Laundry- Handling linen of COVID-19 patients	Moderate risk	X	✓	✓	X	X	X	X
Visitors attending OPD	Low Risk	✓	X	X	X	X	X	X
Visitors accompanying Patients in IP facility	Low Risk	✓	X	X	X	X	X	X
Supportive services-Administrative Financial Engineering Security, etc	NO risk	X	X	X	X	X	X	X

[Source:Ministry of Health and FamilyWelfare, Directorate General of Health Services (Emergency Medical Relief) - Novel CoronavirusDisease 2019 (COVID-19): Guidelines on rational use of Personal Protective Equipment. Page 4 to 8]

Sequence of donning and doffing the complete PPE

Donning

1. Shoe covers
2. Gown
3. Head covers
4. Mask
5. Goggles/Face Shield
6. Gloves

Doffing

1. Gloves
2. Gown
3. Goggles/Face Shield
4. Mask
5. Head covers
6. Shoe covers

The figures below explain the process of donning and doffing the PPE as given by Centers for Disease Control (CDC), USA.

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene



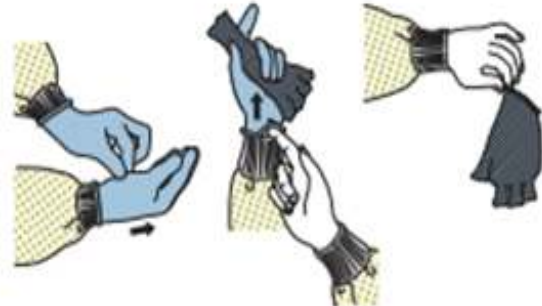
[Source: CDC - Personal Protective Equipment: Questions and Answers.
<https://www.cdc.gov/niosh/npptl/pdfs/PPE-Sequence-508.pdf>]

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

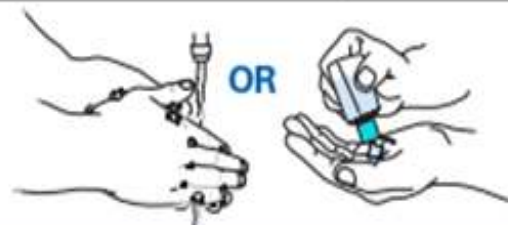


4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — **DO NOT TOUCH!**
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS
BECOME CONTAMINATED AND IMMEDIATELY AFTER
REMOVING ALL PPE**



[Source: CDC - Personal Protective Equipment: Questions and Answers.
<https://www.cdc.gov/niosh/npptl/pdfs/PPE-Sequence-508.pdf>]

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

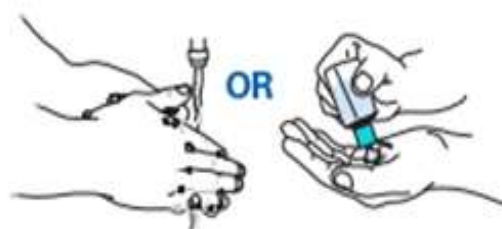


3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS
BECOME CONTAMINATED AND IMMEDIATELY AFTER
REMOVING ALL PPE**



[Source: CDC - Personal Protective Equipment: Questions and Answers.
<https://www.cdc.gov/niosh/nppt/pdfs/PPE-Sequence-508.pdf>]

In addition to proper hand hygiene and rational use of personal protective equipment, it is important to ensure that all surfaces are cleaned and disinfected regularly, adequately, and safely; that a protocol for the same is established; and that infected waste is appropriately disposed of.

CLEANING AND DISINFECTION [Source: Compilation of recommendations by the WHO in Water, sanitation, hygiene and waste management for the COVID-19 virus and CDC- Interim recommendations for cleaning and disinfection for households and communities] (For detailed information please visit official websites)

1) **Infected Waste:** This may include soiled linen, clothes, faecal matter, blood spills, and other contaminated human waste. The main principles include:

- Appropriate protective equipment: PPE (heavy gloves, mask, face shield, long sleeved gown / apron, boots / closed shoes)
- Hand hygiene before and after cleaning
- Removal of organic material (e.g., blood, faeces etc.) with absorbent material prior to cleaning and disinfection

Types of infective waste
Soiled clothes or linen: Place in labelled leak proof bags/ containers → Either 1) Machine wash with detergent at 60-90 degree Celsius and dry Or 2) Soak in hot water and soap, stir with stick → Empty and soak in 0.05% chlorine for 30 min → Rinse with clean water and dry in sunlight.
Faeces / other human waste/ spilled body fluids: Clean with absorbent towels → Place waste in covered containers → Dispose in latrine (if faeces) → Disinfect the area with 0.5% free chlorine solution.

Disposal of water used to clean PPE/ infected areas:

Utility gloves and reusable plastic aprons should be cleaned with soap and water and then decontaminated them with 0.5% sodium hypochlorite solution after each use. Single-use gloves (nitrile or latex) and gowns should be discarded after each use and not reused; hand hygiene should be performed after PPE is removed. If waste water used to clean these items includes disinfectant used in prior cleaning, it does not need to be chlorinated or treated again. However, it is important that such water is disposed of in drains connected to a septic system or sewer or in a soak away pit.

2) General Surfaces

i) Cleaning

Commonly touched surfaces should be frequently cleaned and wiped. Soap and water can be used for regular cleaning.

ii) Disinfection

After cleaning with soap or cleaning solution, the surfaces should be disinfected. Most disinfecting agents require keeping the surface wet for a period of time (known as the 'contact time') to ensure effectiveness against viruses. Surfaces should be cleaned before being disinfected. It is important to wear gloves and ensure adequate ventilation while using disinfectants. List of advised disinfectants can be found at - <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

Floors are recommended to be cleaned thrice a day, and more frequently in case of contamination or spills. Three buckets- one containing plain warm water, one with detergent solution; and one bucket with hypochlorite (1:50 dilution) are used. After removing and contaminated organic material (described above), the three-bucket technique is used to mop the floor, beginning with the first bucket with plain water, followed by one with the detergent solution. After each dip and use, the mop must be cleaned with water and wrung out. Once the floor is dry, the area must be mopped again using hypochlorite 1:50 dilution and allowed to dry. Water and detergent solution should be discarded and changed frequently, whenever they become dirty. While mopping, the mop should not be moved back and forth over a single area repeatedly. Brooms should not be used. After cleaning, the mop and buckets must be cleaned and disinfected. Personal hygiene measures including hand hygiene must be followed. While constituting disinfectant, precautions must be taken to use cold water, prevent splashes, and ensure protective garb and ventilation.

iii) Soft surfaces

For soft surfaces such as carpets, rugs, mats and curtains, observable contaminants if any should be removed. The surface may then be cleaned using soap and water or routinely used surface cleaners. If possible, soft materials should be laundered or disinfected (refer table above).

iv) Laundry

Disposable gloves must be used while handling laundry, including bedding, towels, and clothing. Laundry items should not be shaken out before washing, to prevent spread of aerosolized infective material. Items should be laundered in the warmest water setting available (if machine laundering) or in hot water stirred with a stick (avoiding spills) if manually washed. Routine detergents may be used

v) Electronics

For electronics, a wipeable cover could be used. If manufacturer's instructions for cleaning are available, they may be followed. Else, alcohol-based wipes or sanitizer liquid/sprays containing at least 70% alcohol should be used. The surface should be dried completely before use.

3) **General Precautions**

- Disposable gloves and gowns must be worn during all steps of the cleaning process. Additional personal protective equipment (PPE) might be required based on the cleaning/disinfectant products being used and if there is a risk of splash.
- Staff should be properly trained on the practices of cleaning and decontamination of hospital surfaces.
- A log of all cleaning procedures must be maintained.
- All housekeeping surfaces (floors/ table tops/ counters) should be cleaned on a regular basis, when visibly soiled and when spills occur. Either hot water or a neutral detergent may be used or a detergent/disinfectant may be used.
- Housekeeping surfaces should be cleaned with a detergent/ disinfectant solution on daily basis or more frequently in specific high-risk areas (ICUs, transplant units, isolation rooms, burns wards, OTs, emergency rooms, or when there are suspected spills of blood/ body fluids) and in areas that have patients with known transmissible infectious diseases. **High-touch surfaces must be cleaned and disinfected more frequently than minimal-touch surfaces.**
- All horizontal surfaces and all toilet areas including washbasins and commodes should be cleaned daily.
- Administrative and office areas with no patient contact require normal domestic cleaning.
- Fresh detergent/ disinfectant solutions must be prepared every day according to manufacturers' instructions. These solutions must be replaced with fresh solutions frequently.
- Diluted disinfectant solutions may become contaminated with resistant pathogens. Therefore, after the day's use, remaining solutions must be discarded and containers must be cleaned with detergent before being dried.
- The methods of cleaning floors include wet mopping, and vacuum cleaning with filters attached. Avoid dry mopping with brooms, as this generates dust aerosols.

- Horizontal surfaces must be wet dusted with a cloth moistened with a hospital disinfectant (or detergent).
- Contamination of cleaning solutions and mops must be minimized. For wet mopping, a two-bucket method should be used. When a single bucket is used, the solutions should be changed more frequently. Used cleaning solutions must be discarded in the sluice. The buckets should be cleaned with detergent and kept inverted to assist drying.
- Mop heads must be changed after cleaning spills and at the beginning of the day.
- Mop heads and cleaning cloths must be decontaminated regularly by laundering (heat disinfection) with detergent and drying at 80 degrees Celsius.
- Walls, blinds and window curtains must be cleaned when visibly soiled or contaminated.

Conclusion

COVID-19 is transmitted by droplets. In addition to social distancing, the critical element is appropriate measures of sanitation. Sanitation measures collated here are recommended by various national and international health control agencies.

CHALLENGES

4

Do-it-yourself Telepsychiatry Video Consultations

- During COVID-19 pandemic, psychiatrists need to provide continuity of care and even first consultations to many psychiatric patients. A video consultation based telepsychiatry provides infection-proof consultations to both users (patients and their families) and providers (psychiatrists).
- **Telepsychiatry** provides patient care to people at distant places utilizing available digital technology.
- This section aims to provide practical tips for do-it-yourself Telepsychiatry Video Consultations.

Requirements for Telepsychiatry Video Consultations (VC)

A. Device

- A laptop or a smart phone for the doctor
- A smart phone / laptop with patients/family .

B. Videoconference applications (such as WhatsApp, Skype call, Google duo, etc) of *laptop or smart phone shall preferably have* end-to-end encryption for data security and privacy.

C. Internet speed: Majority service providers provide good quality speed with 1.5 Mbps which is enough for VC.

Modes of Telepsychiatry Video Consultations

A. Direct to Patient

- *First consultation:* VC may be used for triage, screening, and to provide first consultations with early follow-up.
- *After care:* A follow-up of patients.
- *Sub-clinical / milder illness:* To provide reassurance or counselling, or even brief psychotherapies.
- Counselling for quarantined or COVID-19 patients using telepsychiatry: Appropriate for counselling those with suspected or confirmed COVID-19 who are in home or hospital quarantine. This will reduce the risk of contracting infection for health care personnel and prevent wastage of valuable personal protection equipment too.

B. Collaborative Video Consultations (CVC)

- It is a VC with patients through some intermediary medical [other specialists/ family doctors or paramedical staff (nurses/ pharmacists)] at the patient end.
- This may be used even for emergency purposes during disaster.

C. Home Consultation: Home visit by nurse / social worker augmented with telepsychiatric VC (especially during emergency).

Scheduling Appointments of Telepsychiatry Video Consultations

- It is a challenging issue in disaster situation. However, telephone audio call, or even short message service (SMS), or messaging on platforms such as WhatsApp can be used to fix appointment and to coordinate VC.

Consent / Privacy Issue in Providing Telepsychiatry Video Consultations

- Implied consent is valid for patient-initiated consultations.
- Explicit consent for medical professional-initiated consultations.
- During health care emergencies, at least verbal consent should be obtained for VC, wherever possible.

- Written Informed Consent should be taken in normal situations as per guidelines as there may be privacy concerns in VC.
- Specifically, written consent shall mention about following points:
 - i. No video recording on either side
 - ii. Security of videoconference/internet is dependent on service provider policy and it is beyond the scope of individual who is providing consultation
 - iii. Clinical judgement is based on limited assessment (i.e., to the extent possible on VC) including a partial virtual physical examination (VPE)
 - iv. Not to be used for emergencies.
 - v. Need for in-person consultations whenever VC not possible.

How to conduct Telepsychiatry Video Consultations?

- Start with identifying yourself and ensure / verify the identity of the patient/family member.
- Take informed verbal /written consent and explain limitations of VC.
- Quickly assess any emergency. If present, ask for in-person consultations in emergency settings and abort VC.
- Ensure that your clinical assessment is brief and to the point. Specifically ask for any concerns including medication side-effects.
- VC may be used for counselling/psychotherapy if needed.
- A full physical examination (FPE) which is considered as the corner stone of medical consultations is understandably not possible in telepsychiatry. Only, a partial physical examination called '**virtual physical examination**' (VPE) that includes only inspection without palpation, percussion and auscultation can be conducted in VC.
- VPE can be used assess the side effects of anti-psychotics such as extra-pyramidal symptoms such as tremor, slowness in gait, even akathisia, dystonia, etc.
- There is no standard way to send prescription to patients. A scanned copy of a regular prescription can be sent to the patient soon after VC by any digital means, i.e., WhatsApp messaging, e-mail, etc.

Research suggests there is no contraindication for regular assessments of any psychiatric patients through telepsychiatry video consultations

Advantage of VC during Infectious outbreaks

- Ensures minimum care when there are general restrictions in infectious outbreaks
- Less expensive
- Lesser risk for infections
- Greater patient satisfaction compared to other means such as audio/message based consultations
- Multiple family members can join from various locations in the same multipoint video conference

Readers are advised to further consult “*Telemedicine Practice Guidelines- Enabling Registered Medical Practitioners to Provide Healthcare Using Telemedicine*” released by Medical Council of India on 25th March 2020. It is available at <https://www.mohfw.gov.in/pdf/Telemedicine.pdf>

Severe Mental Illnesses and COVID-19

Pandemics, like other natural disasters, negatively affect the mental health of the community in general and those with pre-existing mental illnesses, in particular. The following section discusses a few key aspects that need to be considered by the treating psychiatrist.

Ensuring Continued Care of Severe mental illness

Most of the psychoses typically need long term maintenance treatment despite symptomatic remission after the acute phase. The risk of relapse is considerably high in severe mental illnesses such as schizophrenia and bipolar disorder if the medications are discontinued. In a limited resource setting with already stressed families, relapse/worsening of symptoms could have serious consequences. This adds to the strain on the already compromised health resources. Though, understandably, handling the pandemic takes precedence, it is important to ensure that the maintenance treatment is not discontinued for pre-existing severe mental illnesses.

Principles of triage can be employed to classify patients into different groups:

- (a) those who need access to medications only i.e., those who only need to refill the medications
- (b) those who need a consultation to continue management on an outpatient basis
- (c) those who need management in a hospital facility

In each of these situations, the psychiatrist must utilise the currently available resources optimally for safe service delivery.

The District Mental Health Program (**DMHP**) **program**/Non-governmental Organizations (**NGOs**): The DMHP can be effectively utilized to provide home delivery of medications to the patients. The treating clinician may also liaise with the NGOs working in the field of mental health care delivery. Further, liaising with the other health delivery organizations or companies providing home-based treatment for other physical conditions can also be involved to supply medications to the patients.

Telepsychiatry: Teleconsultation can be utilized to provide continued care to those who need out-patient based consultations and treatment. This would minimize the potential cross-infection in a hospital setting and would be protective to both the patients and health care workers. In situations where a teleconsultation is required (scenarios where a healthcare worker or another physician needs specialist consultation), the resources in primary health care centres can be utilized.

Medication Availability

If a disruption in the supply chain is anticipated, a switch from an oral antipsychotic to a long-acting injectable antipsychotic may be considered as this approach minimizes the risk of a relapse. It is also advisable to switch to a medication with a production facility and distribution within the country so that the continued supply is ensured.

Emergency Care

A small proportion of patients may need care in the hospital due to the worsening of the illness or relapse of an episode. The emergency rooms would need structural reorganizations so that they can be decongested and social distancing can be achieved. All patients need to be screened using a screening tool and those suspected of the infection or having the infection need to be separated from the rest. In all cases, till proven negative for infection, it is advisable for health care workers to follow universal precautions to protect themselves.

The support staff involved in physical restraining should have access to PPE and be trained to use them. In scenarios where the patient is likely to have increased psychomotor activity and may not adhere to social distancing, one may have to consider physical/chemical restraints to maintain social distancing. To prevent cross-infection, it is also advisable to minimize the time that a patient spends in the emergency setting.

Electroconvulsive therapy (ECT)

A minority of patients who have a significant risk of harm to self or others may need ECT. However, ECT has to be utilized judiciously considering the potential risks of cross-infection to the patient as well as health care workers during the procedure as it generates aerosol.

Other pharmacological aspects for consideration

- **Benzodiazepines**

Many patients with severe mental illnesses may have been receiving benzodiazepines for a long time; an abrupt withdrawal need to be avoided as this could result in rebound anxiety and withdrawal symptoms. In view of the regulatory restrictions, one may not always be able to give an e-prescription for a benzodiazepine. In such situations, patients may be encouraged to consult primary care nurse/physician or DMHP services to obtain medicines. It is also advisable to shift to a long-acting benzodiazepine from a short-acting benzodiazepine.

- **Lithium**

In COVID positive patients who are on treatment with lithium, close monitoring of renal functions is recommended as a few patients with COVID infection are at the risk of developing renal failure. It is also important to avoid NSAIDs in patients on lithium because of the potential risk of renal failure. Unmonitored lithium use enhances risk for toxicity. Teleconsultations or video consultations should specifically ask / look for any symptoms and signs of lithium toxicity and patients should be informed of some simple measures to avoid toxicity.

- **Hydroxychloroquine (HCQ), Psychotropics and QTc prolongation**

A few studies, though preliminary, have suggested beneficial effects of the antimalarial drug hydroxychloroquine (HCQ) or chloroquine in the treatment of COVID infection. Though rare, HCQ can prolong the QT interval and precipitate arrhythmia. As several antipsychotics and a few antidepressants are also known to increase the QTc interval, one needs to consider the potential precipitation of arrhythmia in individuals taking psychotropics. In all patients with severe mental illnesses, it is advisable to do an electrocardiogram and evaluate QTc (corrected QT) before prescribing HCQ. It is important to note that while a few antipsychotics increase QTc interval (e.g. amisulpride, ziprasidone, asenapine) others do not (e.g. lurasidone, aripiprazole). Among the antidepressants, specific serotonin reuptake inhibitors (SSRIs) with the exception of citalopram are safer compared to tricyclic antidepressants (e.g. Amitriptyline, Imipramine). Citalopram is associated with QTc prolongation and Torsades de Pointes in higher doses.

- **Induced psychiatric illness with COVID-19 treatment**

A few medications used for the treatment of COVID, namely HCQ, ivermectin, and corticosteroids are reported to cause psychosis and mood disturbances. Hence, one needs to be cautious when treating a patient with severe mental illness and watch for these side effects. Suicidal ideation has also been reported with HCQ and one preferably avoids the same in patients with recent suicidal attempts.

Psychotropic Use in COVID-19 Patients

COVID-19 raises myriad challenges for prescription of psychotropics. First of all, psychotropic medications may have drug-drug interactions with medications used for management of COVID-19. The pharmacotherapeutic management of COVID-19 is still evolving and there is no single universally accepted regimen to treat this condition. At the moment, commonly employed drugs include hydroxychloroquine/chloroquine, antiviral drugs (e.g. ramdesivir, lopinavir/ritonavir etc.), antibiotics like azithromycin, interferon- β , bronchodilators, anti-inflammatory agents, antipyretics, corticosteroids etc. Psychotropic medications may also cause deleterious consequences following emergence of a comorbid medical condition (e.g. respiratory insufficiency, renal failure etc.). Hence, it is important to be mindful of the interactions with the ongoing medications and its effect on various organ systems while prescribing psychotropics. In this section, we discuss the challenges in psychotropic use in two scenarios

1. Prescription of psychotropics in those with pre-existing psychiatric illness and currently under treatment/prophylaxis for COVID-19.
2. Acute onset behavioural symptoms in those receiving treatment/prophylaxis for COVID-19.

1. Treatment of patients with pre-existing psychiatric illness

Most psychiatric illness require long-term prophylaxis of psychotropics, which may have to be continued even after remission of symptoms to prevent relapse. Precautions for commonly used psychotropic agents in the context of COVID-19 are discussed below:

I. Antipsychotics

a) Drug interactions

- Some antipsychotics like haloperidol, quetiapine, ziprasidone etc. can prolong QTc interval. Hence other drugs which can prolong QTc such as chloroquine, hydroxychloroquine, azithromycin etc. can have a synergistic effect and should be used

with caution. Certain protease inhibitors like atazanavir, sequinavir, lopinavir/ritonavir can also cause QTc prolongation.

b) Precautions in COVID-19 patients

- Most of the potential drug interactions are secondary to Cytochrome P450 (CYP) inhibition by antiviral medications. Antivirals like lopinavir/ritonavir are CYP inhibitors and can increase levels of haloperidol, risperidone, aripiprazole and quetiapine. Hence, it is imperative to monitor for adverse effects and reduce the dose of these drugs, if required. Conversely, the levels of olanzapine decrease on co-administration with ritonavir.
- Azithromycin and hydroxychloroquine can cause QTc prolongation which can worsen when combined with haloperidol/quetiapine/ziprasidone. They have to be used cautiously, with ECG evaluation. If the antipsychotic has to be changed, lurasidone may be preferred as it has minimal effect on QTc interval, followed by aripiprazole, olanzapine and risperidone.

II. Antidepressants

a) Drug interactions

- Many antidepressants and antiviral drugs are substrates of cytochrome P450 enzyme based metabolism. Antidepressants such as fluoxetine, paroxetine, fluvoxamine and bupropion are CYP enzyme inhibitors, which can interact with antiviral medications. Certain antiviral medications such as lopinavir/ritonavir are also enzyme inhibitors.
- Citalopram, tricyclic antidepressants and mirtazapine can prolong QT_c interval, which might be augmented when combined with hydroxychloroquine, chloroquine

b) Precautions in COVID-19 patients

- Concomitant lopinavir/ritonavir can markedly increase the levels of tricyclic antidepressants and may also increase the risk of cardiac adverse effects. Hence, they have to be prescribed under careful supervision and require dose adjustment.
- The levels of SSRIs can be increased, occasionally even causing serotonin syndrome.
- Similarly, the levels of mirtazapine may increase with these drugs along with risk of QTc prolongation.
- Lopinavir/ritonavir may decrease the levels of bupropion.
- Fluoxetine, paroxetine and fluvoxamine can increase the levels of antivirals due to CYP inhibitory action.

- Escitalopram and sertraline are safer in view of lesser drug interactions and side effects.

III. Mood Stabilisers

a) Drug interactions

- Lithium is excreted unchanged in urine and hence is the least likely to have specific drug interactions with antiviral drugs. Non-steroidal anti-inflammatory drugs (NSAIDs) increase lithium levels, which may lead to toxicity.
- Valproate levels may be decrease with lopinavir/ritonavir, but is generally safe with other antiviral drugs.
- Lamotrigine levels may decrease with ritonavir.

b) Precautions in COVID-19 patients

- Adverse effects of lithium have to be monitored in view of narrow therapeutic index and propensity to cause cognitive effects in patients with multiple medications. Further the levels may increase following dehydration, hyponatremia and renal failure. NSAIDs have to be used cautiously.
- Dose adjustment of valproate and lamotrigine may be required.

IV. Sedatives/hypnotics

- Cumulative or higher doses of benzodiazepines can rarely cause respiratory depression. Hence, longer acting benzodiazepines like diazepam or clonazepam may be avoided. Further, they may have CYP related interaction with antiviral drugs. Lorazepam is preferred as it has the least interaction with antiviral drugs and shorter acting.

2. Treatment of acute onset behavioural disturbances with psychotropics

I. Delirium

- Definitive treatment includes identification and correction of underlying cause.
- Antipsychotic drugs like haloperidol, olanzapine or quetiapine are found to be highly beneficial in the management of the agitation. Haloperidol can be given at doses from 2.5-5mg orally or intramuscularly. Intravenous administration should be accompanied by ECG monitoring. Promethazine may worsen delirium. Olanzapine 5-10mg can also be considered either orally or intramuscularly. Oral quetiapine (25-50mg) may also be helpful.

- Avoid benzodiazepines (except in cases of delirium tremens), as cumulative doses run the risk of respiratory depression and may cause paradoxical disinhibition.

II. Mania

- Standard antimanic/antipsychotic treatment like risperidone or olanzapine can be given, mindful of the drug interactions mentioned above. Mood stabilizers can also be prescribed in patients with bipolar disorder based on clinical need, with the above mentioned precautions.
- Catatonic symptoms can be treated with intravenous/oral lorazepam, but should be used with caution in individuals with compromised respiratory status in view of risk of respiratory depression.
- Parenteral haloperidol 5-10mg can be used alone or in combination with promethazine (only through intramuscular route) in severe states of agitation as a chemical restraint.

III. Depression

- Depression is a common comorbidity with chronic medical illnesses. It may also be seen in those with acute illnesses and is often under recognized.
- As discussed earlier, escitalopram and sertraline are preferred as they do not modulate CYP enzymes in a major way. However, they are themselves substrates of CYP metabolism and their levels may be altered by CYP inhibitors, such as lopinavir/ritonavir. Hence they should be initiated at a lower dose, with gradual increase in dosage in those taking these medications.

IV. Anxiety

- Low dose benzodiazepine preferably a short acting drug like lorazepam orally or parenterally can be helpful in acute management. SSRIs like escitalopram or sertraline can be considered for long term treatment of anxiety disorders. SSRIs can cause hyponatremia in the elderly.

V. Insomnia

- Benzodiazepines are the most commonly used sedatives/hypnotics. They are faster acting and hence preferred in medical settings. Oral or parenteral lorazepam (1-2 mg) may be used with caution in COVID-19 patients.
- Zolpidem (2.5-5mg) is relatively safer in terms of respiratory functioning, but levels are increased in patients taking ritonavir.

- Low dose antidepressants (eg. amitriptyline 25 mg, trazadone 50 mg) or antipsychotics (quetiapine 25 mg, olanzapine 5mg) can be used as short term hypnotic agents, if respiratory insufficiency is a concern.

Table-1 Prominent interactions of psychotropic drugs and drugs used for COVID-19

Drug	Interactions/precautions with psychotropics		
Hydroxychloroquine/ Chloroquine	Augmentation of QTc prolongation when given with ziprasidone, haloperidol, quetiapine, amisulpride, citalopram and tricyclic antidepressant		
Azithromycin	Can prolong QT _C interval and thus should be used cautiously with the above drugs, especially in elderly and those with pre-existing cardiac illness		
NSAID	Increase the levels of lithium		
Lopinavir/Ritonavir	Increases the levels of	Decreases the levels of	Levels increased by
	Haloperidol	Olanzapine	Fluoxetine
	Risperidone	Bupropion	Fluvoxamine
	Aripiprazole	Valproate	Paroxetine
	Quetiapine	Paroxetine*	
	SSRIs		
	TCA's		
	Alprazolam		
	Diazepam		
Zolpidem			

- NSAID – Non-steroidal anti-inflammatory drugs, SSRI - Selective serotonin reuptake inhibitor, TCA – Tricyclic antidepressants
- * there is evidence to suggest that paroxetine levels might decrease in contrast to other SSRIs

Conclusion

COVID-19 patients may require concomitant psychotropic medications both for acute control of psychiatric conditions and prophylaxis. CYP related interaction and QTc prolongation are the major concerns when combining psychotropics with currently used COVID-19 treatment. Further, the prescription has to be modified based on the physical condition of the patient.

7

Aggression and Rapid Tranquilisation

Introduction

Aggression can be a symptom of bipolar disorder, psychosis, substance use disorders, and delirium. In the background of the recommendation of chloroquine as a prophylactic and treatment agent in COVID-19 cases, it is important to note that there are reports of chloroquine induced psychosis. Aggression has to be managed systematically, and in a COVID-19 patient additional precautions have to be taken to prevent the spread of disease to health workers, other patients, and caregivers by strictly adhering to guidelines.

Intervention

S.A.F.E.S.T approach is a simple strategy that may be used to manage aggression and may be extrapolated to COVID-19 treatment settings.

The steps are as follows:

S-Spacing: Maintain distance from the patient.

A-Appearance: Maintain empathetic professional detachment. Appear calm. Build rapport.

F-Focus: Focus on patient's hands and nearby potential weapons. Watch for escalating agitation

E-Exchange: Engage in conversation and try **verbal de-escalation**. Avoid punitive or judgmental statements.

S-Stabilization: Stabilization techniques include **chemical and mechanical restraints**.

T-Treatment: Once the patient is more manageable, treatment should be initiated for the underlying disorder.

The three major strategies in **S.A.F.E.S.T** approach, verbal de-escalation, mechanical and chemical restraint are detailed below:

Verbal de-escalation: De-escalation is a technique where the health care professional calmly communicates with an agitated patient to understand, manage, and resolve his/her concerns. It should help reduce the patient's agitation and potential for future aggression or violence.

Interview settings

- Even though the patient is isolated due to COVID-19, try to ensure privacy during the interview
- The patient should be under constant observation by keeping the patient near the nursing area
- There should be a clear exit point for the health care professional
- Maintain a safe distance of at least two arm distance
- Never examine a potentially violent patient alone and call for more help when required

Interview technique

- Stay calm and listen to the patient carefully
- Talk to the patient softly yet firmly
- Stay non-provocative and be non-judgmental
- Try to understand his concerns and reasons behind aggression
- Address the patient's concerns that are valid and offer valid solutions

Stabilization techniques

When verbal de-escalation fails, the commonly used method includes mechanical and chemical restraints.

- *Mechanical restraint:* Mechanical restraint should be used sparingly, never used as the first choice and only used if
 - there is a risk of disruption to life-saving measures
 - aggression is present even after adequate sedation or
 - if there is a contraindication for chemical restraint

- Fourpoint restraint with a designated person for each limb and the lead manages the head and airway. The soft bandage should be used. Restraint should be done in a supine position with both legs nearby and one hand above the head and the other hand beside the trunk.
- Regular monitoring of vitals, circulation to extremities and injury due to restraints should be done once in 15 minutes. Regular assessment for the continuation of restraint should be done and once the person becomes calm, restraint should be removed one limb at a time.

Restraint should not extend beyond two hours and should be continued only after a thorough reassessment of risk

Chemical restraint

- If verbal de-escalation fails or cannot be used and with imminent risk of violence, chemical restraint can be used. Informed consent should be taken from the patient or bystander as far as possible.
- If there is no immediate risk of violence, medications may be offered by the oral route. It is preferred as there is less risk of exposure to health care personnel. The following agents can be used –olanzapine, haloperidol, lorazepam, promethazine.
- T. Olanzapine 5mg stat dose may be the first-choice oral agent to be given is the patient is willing to take
- *Benzodiazepines should be used with caution in case of respiratory compromise.*

Rapid tranquilization

Rapid tranquilization (RT) is often used in clinical practice as a last resort to de-escalate acutely disturbed behavior when all other strategies have failed. The decision of giving RT need to be taken after clear consideration of both risk and benefits. Mental health professionals need to ensure a written record in the patients' files.

The recommendations here are based partly on research data and theoretical considerations, and partly on empirical experience.

Steps

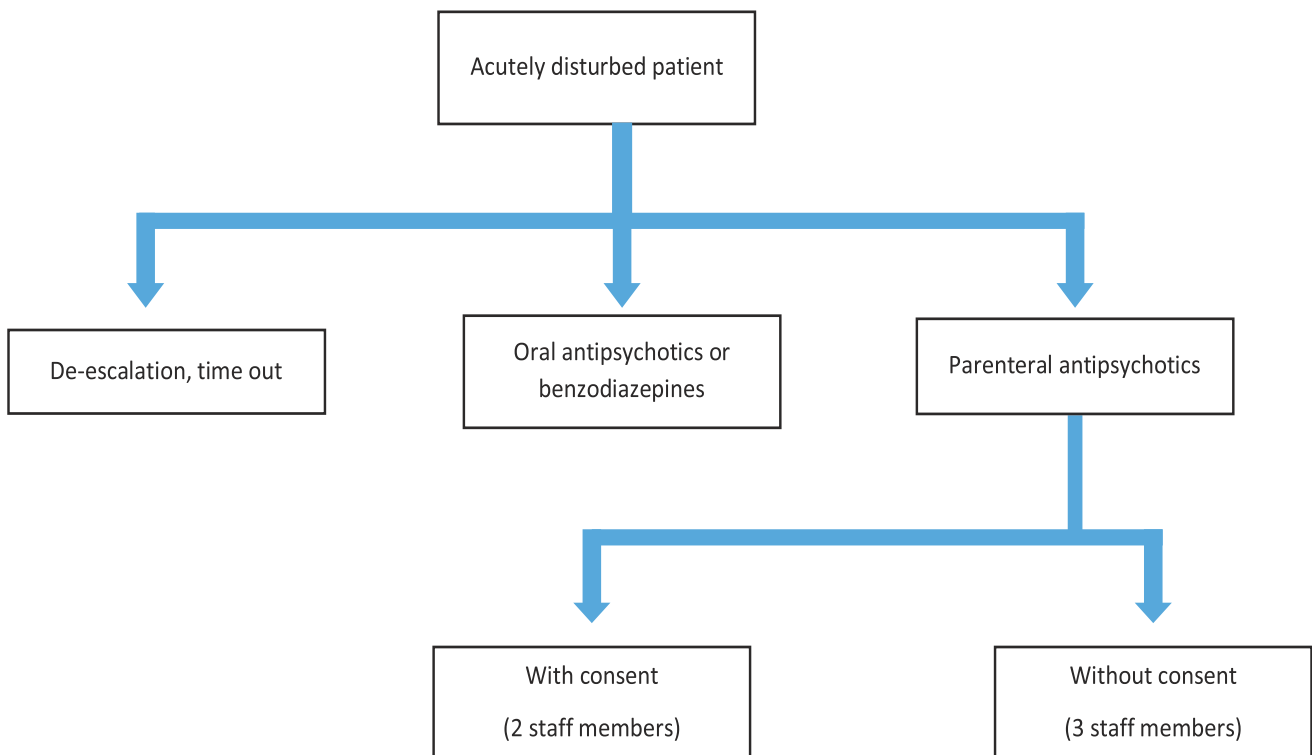
1. Standard protocols should be followed for the management of acutely disturbed patient – drug selection, pretreatment investigations, etc. - as detailed elsewhere (Maudsley Prescribing Guidelines in Psychiatry, 13th Edition)

2. Empirical recommendations specific to the management of COVID-19 patients
 - a. PPE should be worn as per the standard protocols wherever available
 - b. Not more than 2 (one nurse and one security) or 3 staff (one nurse and 2 security personnel) should be involved in RT to reduce the exposure to frontline workers.
 - c. Intramuscular (IM) is the preferred route of administration for RT compared to intravenous (IV) route
 - d. Gluteal IM injections may be preferred over deltoid injections to increase the distance between respiratory secretion/droplet of the patient and the staff
 - e. IM olanzapine has the following advantages over IM haloperidol
 - Minimal effect on QT_c interval; as we are aware the medications used in the management of COVID-19 such as hydroxychloroquine and azithromycin are known to increase the QT_c interval
 - Possible cardiac injury by COVID-19 in some of the patients may be a risk factor for sudden cardiac death; systematic research is needed
 - No need for promethazine or lorazepam injections
 - Lesser risk for EPS

*PS: IM olanzapine has been shown to cause respiratory depression; should be taken into consideration in a patient with COVID-19; start with a low dose (5 mg) of olanzapine and a maximum daily dose of IM olanzapine should be less than 15 mg. Benzodiazepines also carry the risk of respiratory depression. Whenever needed, a low dose of short-acting benzodiazepines such as lorazepam, midazolam should be used.
 - f. Whenever IM haloperidol is used, start with a low dose (2.5 to 5 mg of haloperidol) along with 12.5 to 25 mg of IM promethazine. Maybe preferable to keep the maximum daily dose of IM/oral haloperidol to less than or equal to 15 mg/day.
 - g. Should wait for at least 45 minutes before repeat RT
 - h. Regular monitoring of vitals (blood pressure, respiratory rate, pulse rate) should be done once in 15 – 30 minutes
 - i. Concurrently, where feasible, ECG and lab investigations (electrolytes, blood sugar, renal function and other important parameters as per the emergency medicine guidelines) have to

be obtained.

- j. If a patient develops dystonia secondary to a parenteral antipsychotic, promethazine 25 mg IM should be used.
- k. Avoid using multiple antipsychotics for RT
- l. Wherever possible informed consent should be obtained from the patient. Most often, the patient may not be in a clinical state to offer informed consent - for such circumstances, consent from a legal guardian or caregiver should be taken as done for minor intervention procedures.
- m. For doses of oral antipsychotics in the management of acutely disturbed patients, refer to the Maudsley Prescribing Guidelines in Psychiatry 13th Edition. Dose adjustment should be done for the elderly and children as suggested by the Maudsley Prescribing Guidelines in Psychiatry 13th Edition.



(Non-consenting patients are more likely to have poorer insight and more severe aggression. Hence it may be necessary to consider additional staff (2 security plus one nurse) for rapid tranquilization)

Management of Mental Health Issues in ICU Patients with COVID-19 Infection

Patients infected with COVID-19 could manifest various psychiatric symptoms and disorders based on the stage of infection, this chapter focuses only on potential psychiatric issues that could be encountered and management of same in those receiving COVID-19 based ICU care.

Mechanical Ventilation

Mechanical Ventilation is required in a small proportion of COVID-19 patients, given that the COVID-19 infection particularly targets the lungs and causes respiratory compromise. Weaning off Mechanical Ventilation with transition from unconsciousness to consciousness is at times associated with acute and severe anxiety that could result in delay in extubation and might mimic the inherent nature of infection resulting in respiratory distress leading to reintubation, prolonging the need for ventilatory support. Hence, appropriate psychiatric medication that reduce anxiety (low dose antipsychotics- listed further in this chapter) in such scenarios is advisable. A plethora of psychiatric conditions are associated with mechanical ventilation including anxiety, sleep disturbance, depression, delirium, communication problems, pain and fear of being dependent on the machine for breathing.

Delirium and ICU psychosis - Patients admitted to the ICU are prone to developing delirium. Elderly individuals and people with decreased cognitive reserve such as those with pre-existing dementia are at higher risk of developing delirium. It is usually multi-factorial and identifying the cause(s) is central to the management of delirium.

Symptoms that indicate the presence of possible delirium include the following:

1. Inattention, confusion or disorganized thinking
2. Fluctuation in levels of consciousness and altered psychomotor activity
3. Rapid fluctuation in emotions

4. Presence of auditory and/or visual hallucinations.

Delirium usually can be differentiated from psychosis on the basis of its rapid onset, fluctuating levels of consciousness, and association with medical etiology in the former.

If a COVID-19 infected patient becomes disruptive then, management of disruptive behavior in COVID-19 infected patient in ICU care is of utmost importance as behavioral disruptions could result in break in the isolation protocol and may place health care professionals at higher risk of exposure to infection. This may place the neighboring patients' life at risk by interfering with their treatment such as removal of mechanical ventilation/ life supports.

Management of delirium:

1. Identification and resolution of primary cause for delirium is most effective and of prime importance. This includes evaluation and management of electrolyte, metabolic disturbances, substance use, polypharmacy (drug interactions/ toxicity), other infections, vascular causes and traumatic injury should be done.
2. When behavioral symptoms are disruptive or likely to interfere with treatment, use of low dose antipsychotic medication is generally preferred for the short-term management of acute behavioral disturbances in a delirious patient. Among the antipsychotic medications, haloperidol is generally preferred over the other antipsychotics because of its availability in oral as well as injectable formulation, efficacy, safety (lesser anti-cholinergic side effects) and lesser propensity to cause sedation.
 - a. If a patient is in a position to take oral tablets then oral haloperidol should be preferred over parenteral administration. Low dose of haloperidol (up to 2.5 to 5 mg up to twice a day) are generally adequate.
 - b. Alternately Olanzapine 2.5 mg to 5 mg in divided doses can be administered orally, which can be increased to 7.5 mg or 10 mg based on tolerability
 - c. Alternately, Quetiapine 25 mg to 50 mg in divided doses can be administered orally
3. After administration of haloperidol, monitor for acute extra-pyramidal symptoms and other side effects like cardiac arrhythmias especially if the patients has hypokalemia and prolonged QTc. *Preliminary evidence suggests a role for hydroxychloroquine in the management of COVID-19 infection and with its potential adverse effect of QTc prolongation, cardiac arrhythmias, the treating doctor should be cautious about concurrent use of hydroxychloroquine and parenteral haloperidol. This necessitates regular cardiac monitoring.*
4. In extreme cases ONLY SHORT ACTING low dose oral benzodiazepines (e.g. Lorazepam 1mg to 2 mg) may be considered ONLY for those on FULL VENTILATORY SUPPORT. As RESPIRATORY DISTRESS AND RESPIRATORY FAILURE are fatal manifestations of

COVID 19, ADMINISTRATION OF BENZODIAZEPINES SHOULD BE CAUTIOUSLY DONE AND PREFERABLY AVOIDED ESPECIALLY FOR PEOPLE ON CPAP (Continuous Positive Airway Pressure) Machines OR THOSE BEING WEANED OFF VENTILATORY SUPPORT.

Primary prevention using non-pharmacological behavioural interventions

Preventing onset of ICU delirium has been proven to be a useful strategy. Even if delirium occurs despite these measures, it happens to be of a less severe nature and of shorter duration.

These interventions typically include

1. Efforts to help in orientation
2. Enhance sensory efficacy (e.g., encouraging patient to use their glasses or hearing aids)
3. Promote sleep
4. Adequate and appropriate pain management
5. Preventing complications of immobility (bed sores)
6. Optimization of physiological parameters (e.g., electrolytes, hydration)
7. Foster physical therapy/early mobilization.

Electroconvulsive Therapy and Transcranial Magnetic Stimulation in COVID-19 Patients

Electroconvulsive Therapy (ECT)

ECT with bag and mask ventilation and suction to clear secretion involves aerosol production. COVID-19 virus is known to be present in aerosols. The decision regarding ECT for patients should be taken based on the risk of community spread in the locality, available resources to protect patients from possible cross-contamination, protect health care personnel from infection with COVID-19 and risk/benefit analysis of individual cases.

1. Screening for COVID-19

- a. For screening patients who are planned to receive ECT, the standard procedure outlined by the ICMR may be used and only those with score < 4 (please see annexure) should be taken up for ECT.
 - i. There is not a fool proof method to establish the absence of COVID-19 infection. Ideally, personal protective equipment (PPE) should be worn in all cases during the period of the pandemic. However, this may lead to the utilization of precious PPEs for relatively low-risk indications. Hence, general safety precautions for COVID-19 have to be taken at all times during the administration of ECT:
 1. It has to be ensured that social distancing is practised in the waiting area as well as the ECT administration and recovery area.
 2. Protective three-layered surgical mask, gloves and goggles should be worn by all professionals involved with the ECT procedure.
 3. Care should be taken by all professionals to avoid touching the face and mouth area at all times.

- ii. Use of ECTs should be minimized as much as possible. It may be used only as an emergency treatment when the risk of harm to self or harm to others is substantial. In addition to these, ECTs might also be indicated in case of risk of violation of social distancing due to severe mental illness.
 - iii. Until it is reasonable to suspect COVID-19 even in those scoring <4 on the screening questionnaire, it is best to avoid the use of ECT for 'elective' indications such as refractory conditions, maintenance/continuation ECT, etc.
- b. If the score is 4 or more and the test results are still awaited, the ECTs must be deferred until the test results come negative. Until then, if ECT needs to be given, then the patient may be administered ECT with all standard precautions as detailed in the section on ECT in COVID-19 positive patient (below).

2. Administering ECT for patients with COVID-19

ECTs should be administered in wards/ operation theatres designated for COVID-19 positive patients.

- a. Patients who have significant respiratory symptoms: They might be deemed unfit for ECT by the anaesthetist.
- b. Patients who have mild / no respiratory symptoms: In these cases, there is still a high risk of contamination. For this, the following precautions are required:
 - i. PPEs should be worn by all healthcare professionals involved in the procedure. Professionals involved in ECT administration should be kept at a bare minimum.
 - ii. Equipment used during the procedure should be handled as per the standard hospital infection control guidelines.

For example:

- Disposable equipment such as breathing circuit, reservoir bag, patient mask, gas sampling tubing should be discarded after use for each patient.
- All exposed surfaces including the railing cots should be cleaned with a detergent solution followed by a disinfectant (e.g., 1% sodium hypochlorite). After this, the surfaces should be wiped off with a wet disposable wipe since chloride solutions can damage surfaces.
- The ECT device with the electrodes can be cleaned using containing alcohol-based (e.g., 70% alcohol) solution.
- The linen used for the bed need not be cleaned separately; can be washed in warm water and detergent along with the other laundry.

- iii. The team should foresee possible respiratory complications including tachypnea, prolonged apnea, hypoxia and desaturation, excessive secretions and be prepared to handle them. It should be remembered that any procedure which can induce coughing, such as suctioning of secretions, can potentially aerosolize the virus. Hence, proper safety measures should be ensured.

3. Changes in the ECT procedure

- a. During the pandemic, since all ECTs are considered as 'emergency' treatments, clinicians may err on the side of efficacy at the cost of cognitive deficits.
- b. ECT with the highest likelihood of success - bilateral (bifrontal or bitemporal) ECTs with brief-pulse ECT - may be preferred to unilateral and ultra-brief-pulse ECT.
- c. To avoid the possibility of a failed seizure, particularly during the first session, ECT psychiatrists may err on the side of administering stimulus with a higher charge. E.g., 120 mC in relatively younger patients; 180–240 mC in those aged > 45 years. If patients are on antiepileptic medications, the charge may be adjusted keeping in mind possible higher threshold.
- d. During the pandemic, unless contraindicated, it is advisable to use anticholinergics to reduce secretion formation and aerosolization.

B. Transcranial Magnetic Stimulation (TMS)

- a. Transcranial Magnetic Stimulation (TMS) is a recommended treatment of depression with well-established safety and effectiveness profile.
- b. One clinical applicability of TMS in depression during the ongoing pandemic is when patients have been prescribed medications or other treatments like ECT, but their general medical condition precludes their use. For example, in elderly patients with recurrent medication-induced hyponatremia or severe cardiac failure, medications and ECTs may be contraindicated.
- c. If such situations present in the context of severe depression with high suicidal risk, TMS can be considered as one alternative.
- d. In the present context, if individuals with COVID-19 infection present with severe depression and other medical comorbidities that prevent the use of antidepressant medications or ECTs, TMS may be considered as an alternative treatment option.
- e. To keep the treatment sessions short, 600 pulses (2s on; 8s off; total time 3min) of intermittent theta-burst stimulation (TBS) at 120% of resting motor threshold (RMT) delivered to the left dorsolateral prefrontal cortex, should be the first choice TMS protocol to be used.

- f. In settings where TBS is not available, low frequency (1Hz) continuous rTMS to the right dorsolateral prefrontal cortex at 120% RMT for 20-30 minutes may be used.
- g. All necessary safety protocols (e.g., sanitization, personal protective equipment) should be used by the health care professional before, during and after treatment delivery.
- h. Duration of treatment may be determined based on clinical judgment but ranges between 10-30 sessions. Routine screening for TMS adverse events and safety monitoring should be implemented.

We acknowledge the kind inputs provided by Dr Prachi Sharma, Postdoctoral Fellow in Neuroanaesthesia and Critical care, NIMHANS, in preparing this chapter.

SPECIAL POPULATIONS

Deaddiction Services

Due to the prohibition and non-availability of the substances of abuse, Substance-Use and related Disorders (SUD) patients' are expected to be increase in the emergency room, outpatient and inpatient services. Therefore, mental health professionals need to prepare themselves for such challenges which may be encountered while managing people with substance use disorders during the COVID-19 lockdown.

OUTPATIENT SERVICES

- During COVID-19 crisis, outpatient services for the management of substance use disorders need to considered only for those for whom it is absolutely necessary.
- While running the OPD services, it is essential to implement COVID-19 screening procedures as advised by the ICMR (please see section on OP services for details).
- Ensure
 - Adequate social distancing amongst patients and health care workers.
 - Adequate hand hygiene facilities
 - Use of face masks by all
 - Display informative posters in OPD premises about measures to be followed to curtail human to human transmission of COVID-19. Such posters are available free of cost on the website of MoHFW, India.
- **Evaluation:** As far as evaluation of the patients for SUD is concerned, it is essential to be empathic with the patient and to appreciate their willingness to take treatment. The COVID-19 lockdown can be a stressful situation for various reasons and many individuals may report with the increased use of substances to manage their stress levels. Therefore it is necessary to discuss the challenges they are facing due to their substance use during the COVID-19 lockdown and to address their specific concerns like sleep disturbances, anxiety, etc. The use of medications for the treatment of substance use disorders should be supplemented with discussions on healthier ways of coping with stress. Adequate screening and treatment of other psychiatric comorbidities

should also be undertaken. A follow-up consultation whenever needed should be planned only after a considerable lapse of time to avoid a visit to the hospital during the lockdown.

- **Tobacco cessation advice**

In view of poor outcomes in COVID 19 patients with comorbidity of smoking tobacco, all psychiatric patients need to be asked about tobacco use. All users need to be provided tobacco cessation counselling and judicious prescription of Nicotine Replacement Therapy needs to be given. The National Tobacco Quitline number (1800-11-2356) and mCessation (011-22901701), which provides SMS-based guidance to quit can be provided to patients requiring cessation support.

- **Ensuring outpatient follow-up of existing patients**

The OPD services are particularly needed to cater to those who are already in treatment and are being maintained on certain medications. Sudden discontinuation of treatment not only increases the chances of relapse but at times also leads to potentially dangerous consequences like seizures due to abrupt cessation of a benzodiazepine. During the lockdown, it may be advisable for clinicians to reach out to all these patients through various electronic medium and inform them the ways to safely continue/discontinue the treatment (example, a gradual taper of certain medicines) or to facilitate their visit to the nearest treatment center (example, by providing a digital referral letter). Leaving such patients unsupported in a difficult time may be disheartening for the patient as well as the caregiver.

- **Opioid Substitution Therapy-** One group of patients who may be particularly vulnerable to treatment discontinuation forced upon them due to the lockdown is the patients maintained on the opioid substitution treatment. So there should be an active attempt to reach out to these patients and we should advise them to reach out to the nearest OST centre run by NACO or other medical institutes where OST is available. Letters may be issued to facilitate their travel to such centres also. Optimal rationing of the available number of medicines may also be attempted so that they do not end up with withdrawals or relapse.

EMERGENCY SERVICES

The COVID-19 pandemic has the potential to cause certain substance-related emergencies.

Withdrawal Syndromes

The most common is severe withdrawal syndrome produced due to the non-availability of the substances. In Indian settings, the most common form of substance withdrawal to be encountered by a clinician is alcohol withdrawal syndrome. Majority of the people are likely to have minor forms of alcohol withdrawal syndrome which may not need any clinical attention. However, for some patients, the withdrawal may be quite distressing and they may need medical help to safely withdraw from the substances. A very small minority of dependent users, however, can develop severe and potentially life-threatening complications like alcohol withdrawal seizures and delirium tremens. This is particularly

so for the people who had a history of a complicated withdrawal. Such patients may need immediate medical help in the form of detoxification with benzodiazepines, multi-vitamin supplements, and fluid therapy. Laboratory investigations including imaging may be necessary to rule out other causes of seizures or delirium in some cases. Managing delirious patients may be particularly challenging due to their inability to give information on the risk of exposure to the COVID-19 or report their symptoms. In such cases, it is advisable to implement all the protective measures to prevent a possible spread of infection to other patients, healthcare workers, or relatives of the patients. A careful evaluation of and management of medical comorbidities like diabetes, hypertension, etc. is also important in the patient undergoing withdrawal which will prevent the development of additional complications and reduce the duration of care. Also many of the patients with complicated alcohol withdrawal are chronic smokers with high risk of COPD. They may present with symptoms of pneumonia which is difficult to differentiate from COVID symptoms. The clinician should adopt all the precautionary measures to keep themselves, patients and the caretakers safe.

Overdose – related issues

- **Opioids:** Patients using opioids, particularly injectable opioids, may develop overdose due to the altered availability of street drugs. Similarly, those patients who could not continue their opioid substitution treatment are also at the risk of relapse and hence at risk of overdose. Therefore, during the time of COVID-19 lockdown, it is prudent to ensure the availability of the medicines and equipment necessary to handle such situations at hospitals providing emergency care.

- **Excessive consumption of certain substances like cannabis, MDMA etc**

Some people carry a risk of development of psychiatric disturbances secondary to heavy use of such substances and may present to the emergency services. Therefore, the clinicians and other hospital staff should be prepared in handling patients with severe psychological disturbances who may not participate in infection control strategies due to their altered mental state. The facility to isolate such patients along with the appropriate use of mechanical or chemical restraints may be necessary to prevent them from breaking the social distancing protocol at a hospital. Although psychiatrists are considered as low risk in COVID-19 protocol, those who work with SUD related emergencies are at a very high risk and needs to take all the necessary precautions.

INPATIENT SERVICES

A small number of patients presenting to outpatient services or emergency services in the various scenarios discussed above may require inpatient care. Once again it is needless to emphasize that during COVID-19 lockdown inpatient services should be considered only for the patients in whom it is necessary. Such patients will be those who possess a risk of harm to themselves or others due to their impaired judgment secondary to severe withdrawal state or a psychiatric condition. In such situations, an inpatient service may be a lifesaving option. However, while doing so it is also necessary to keep in mind that such patients may not have the capacity to understand and follow the infection control measures and hence hospital should prepare all the health workers involved, in advance, to handle such patients effectively. As far as possible the duration of hospitalization to be kept to a minimum and to deliver service with the least risk of exposure to the HCWs as well as to patients and their attenders.

Perinatal Mental Health Services

Introduction

Perinatal period in women is one of the high-risk periods for relapse of pre-existing psychiatric illness. Women with schizophrenia, bipolar disorder, depression, and anxiety disorders tend to stop their medications as soon as they realize that they are pregnant. It is well-known fact that psychiatric illness during pregnancy is associated with small for gestational age, low birth weight babies and preterm delivery. Postpartum period is highest risk for relapse of psychiatric illness, and it can lead to poor bonding with her infant. In the current period of COVID-19 pandemic, even routine visits to health care facilities for antenatal care and infant immunization are likely to create a great sense of anxiety in mothers about their health and that of their unborn or newborn baby. It is thus a matter of priority to address these concerns to ensure positive mental health during perinatal period.

Perinatal Mental Health of pregnant women under psychiatric care

A pregnant mother who has a preexisting mental health problem and is already under psychiatric care needs to observe following steps that might help in reducing her concerns about her psychiatric condition as well as protect against exposure to the COVID-19 virus.

- Avoid hospital visits. If required, you can call your psychiatrist. In India, you can contact the NIMHANS Perinatal Mental Health Helpline Number (8105711277) or any local telephone helpline for mental health issues.
- Medications prescribed by the psychiatrist can be refilled at the local hospital or pharmacy.
- Not to stop psychiatric medications at any point in time without advice of your psychiatrist.
- If you are in the 3rd Trimester or nearing for your delivery, please contact your doctor/obstetrician and inform regarding the expected date of delivery.
- Do not stop your medication during the postpartum period without the advice of your psychiatrist. Your medications might need to be optimized during the postpartum period. You can call the helpline if you have any concerns.

Perinatal Mental Health of postpartum women under psychiatric care

Postpartum mothers who breastfeed their infants needs to do following steps that might help her.

- Based on the available data, human breastmilk is negative for the COVID-19 virus even if the mother had COVID 19.
- The benefit of breastfeeding outweighs any potential risk of transmission of the virus through breastmilk
- For women wishing to breastfeed, precautions should be taken to limit viral spread to the baby
 - Hand washing before touching the baby, breast pump or bottles
 - Try and avoid coughing or sneezing on your baby while feeding at the breast
 - Consider wearing a face mask while breastfeeding, if available
 - Follow recommendations for pump cleaning after each use;
 - Consider asking someone who is well to feed expressed milk to the baby
- Call the NIMHANS Perinatal Mental Health Helpline Number (8105711277) or any local telephone helpline for mental health issues if you have any concerns about your mental health.
- Regarding the immunization of your infant, please talk to your pediatrician.

Role of Partner and Family

- It is important to support the women with mental health issues during her pregnancy and postpartum period at the time of COVID-19 pandemic and lockdown.
- Partner and family need to follow the social distancing as prescribed by the authority.
- Prepare yourself for emergency hospital visit in case of emergency (postpartum worsening of symptoms, infanticidal ideas or behaviors).
- Do not stop her medication during postpartum. Dose of medicines might need to be increased during postpartum in view of relapse of symptoms
- It is important to keep good mental health of you to help the mother in this situation.

- In case you need help regarding your mental health you can visit E CONSULT @ COVID 19 available at http://vlc.nimhans.ac.in/?page_id=4045

In case you need help regarding mental health of your pregnant or postpartum partner then visit our website <https://www.perinatalpsynimhans.org/>

Children & Adolescents

Introduction

- All of us are trying to make sense of the overwhelming uncertainty in front of us due to the global pandemic caused by the Coronavirus (COVID-19).
- Mental health professionals need to understand the impact of COVID-19 on the mental health of children and adolescents, who constitute 39% of India's population. COVID-19 pandemic has resulted in sudden disruption of daily routine of children and their parents.

Impact of COVID-19 on child and adolescent mental health

- Pre-schoolers have limited language skills and self-regulation ability. They may have feeding difficulties, sleep difficulties, crying spells, bedwetting (enuresis) etc.
- School-going children may ask questions about their routine being disrupted, express fear or worry about COVID-19 infection to self and to parents. Children may express their worries through their play or art. They may show changes in behaviour like being clingy to parents, throwing temper tantrums, aggression towards parents/siblings, crying spells, oppositional behaviour etc.
- Adolescents will have a better understanding of the COVID-19 related issues compared to children. This has come at a time of ongoing academic stress for many adolescents (especially for those in 10th and 12th grades). There is an uncertainty about competitive exams and other career related future plans. Feelings of anger, sadness, boredom, anxiety, frustration etc. are common in adolescents. Adolescents can have changes in their sleep (hypersomnia or insomnia) and appetite. Lack of physical activity and being under lockdown can result in increase in negative feelings mentioned above. Few adolescents engage in risk taking by not following personal hygiene and social distancing, as they may feel invincible to COVID-19. The availability of gadgets with internet access at home can result in excessive use of these for social media, watching films, gaming etc.
- Stress caused by COVID-19 pandemic can precipitate onset of psychiatric illness in some children and adolescents. Sub-syndromal psychiatric manifestations are more common when

compared to syndromal psychiatric disorders. Anxiety disorders and depression are the most common psychiatric disorders that can occur in children and adolescents. Those with a prior history of psychiatric illness may have relapse of illness and those with current psychiatric illness may have worsening of symptoms.

How parents/caregivers can support their children/adolescents

- Spending quality time with children
- Explaining about COVID-19 in simple language
- Encouraging children to openly communicate about their feelings
- Validating children's feelings as normal and offering reassurance
- Ensuring daily routine
- Limiting screen time
- Ensuring adequate stimulation of language, socio-emotional and motor developmental domains in young children
- Encouraging children to develop a new hobby
- Involving older children and adolescents in social activities through Government welfare agencies and NGOs
- Seeking professional help on time if there are any persistent negative feelings/behaviours
- Providing regular medication for those with ongoing psychiatric illness
- Reaching out to mental health professionals in crisis situations like acute onset behavioural changes, self-harm etc.

What can mental health professionals do to support children/families?

- Create awareness about mental health issues
- Providing telephone or video consultation
- Providing emergency psychiatric care for crisis situations
- Ensure that those who need psychotropic medication get the prescriptions
- Psychotropic medications (SSRIs, Antipsychotics, Mood Stabilisers, Anti-ADHD medication) can be safely prescribed based on IPS Clinical Practice Guidelines for Child and Adolescent Psychiatry.

Older Adults

Risk of COVID-19 in older adults:

The available data on experience of COVID-19 globally as well as from India indicate that older adults have increased vulnerability for COVID-19 infection, related medical complications like severe pneumonia requiring hospitalization, intensive care treatment and mortality. Older adults with chronic mental health problems like dementia, those living in residential care settings have particularly increased risk related to COVID-19.

Psychiatrists have responsibility to provide optimal care for older adults with mental illness and give necessary guidance for the family and professional caregivers of older adults to manage the mental health care as well as the issues related to COVID-19. Psychiatrists will also have a role in promoting mental health awareness to public and health care workers involved in the care of older adults.

Factors contributing to higher risk for mental health problems in older adults during COVID-19 pandemic

- Older age as an important risk factor for medical complications, intensive care requirement with higher rate of mortality due to COVID-19. This information itself can be stressful to older adults.
- Difficulty in managing the requirements of essential services during the lock down period and necessity to depend on others for assistance particularly for those older adults living alone.
- Older adults without access to technology, social media etc may face loneliness during the COVID-19 restrictions.
- Social isolation and perceived loneliness are important risk factors for depression and anxiety in older adults
- Pre-existing medical and psychiatric illness may relapse due to non-availability of medications and difficulty in follow up consultation due to travel restrictions related to COVID-19.

Mental health issues

- Decreased sleep, anxiety and fear about getting COVID-19 infection, worries about contributing to spread of infection to others including family members, fear of death in unnatural circumstances when their family members may not have access to them particularly when children are living abroad are some of the important mental health issues that can occur in older adults during COVID-19 pandemic.
- Many older adults will have sub-syndromal mental health issues like depression and anxiety. Those having some predisposition or other risk factors may develop depression, anxiety or other mental disorders at syndromal level of severity.

Mental health issues in older adults with pre-existing mental illness

- Older adults with pre-existing mental health issues like depression, delirium and dementia are at increased risk of relapse or worsening of symptoms. Increased stress and difficulty in coping during disaster like situations, discontinuation of routine treatment could contribute to relapse and exacerbation of previous illness.
- Patients with dementia, substance abuse etc have a higher risk for delirium. Restriction in mobility and decompensation of medical illness and psychological stress also contribute to risk for delirium. Older adults are prone for atypical presentations during COVID-19 infection. Some of them can present with features of hypoactive or hyperactive delirium without significant increase in temperature.
- Older adults with dementia have challenges in understanding the information about COVID-19 pandemic. Some of them may not cooperate with caregivers in implementing precautionary or preventive measures for COVID-19. They may get agitated if caregivers force them to wear mask and restrict their activities.
- Older adults living alone have increased risk for suicide due to loneliness and depression.

Mental health care of older adults in residential care institutions during COVID-19

- Older adults living in residential care institutions have increased vulnerability for COVID-19 as well as related mental health issues.
- Many of such institutions in India having significant constraints in terms of staff and space will have challenges in implementing the preventive measures.
- Apart from the mental health issues described above for older adults in general, the mental health issues that can be expected in these setting are sleep disturbances, fear of contracting the virus, worry and apprehension about the future and paranoia on other inmates.

- Older adults who are living alone either independently or using assistance from trained caregivers will too have similar problems. Along with that, limitations in availability of caregivers during the pandemic can lead to poor nutrition, poor self-care and can lead to anxiety, panic symptoms, depression and worsening of their medical ailments.

Evaluation and management

- It is preferable to use telemedicine for consultation of older adults with mental health issues to decide about need for personal evaluation and emergency consultation. This will help in avoiding the exposure for COVID-19 related risk.
- However, many older adults will require physical examination and investigations for clinical assessment and preventing adverse effects. The clinician needs to evaluate the benefits and risks and provide guidance related to requirement of personal consultation and investigations.
- Problems with insidious onset and gradual progression like Alzheimer's dementia in a 80 year old may not require urgent evaluation in the COVID-19 situation. However, a 60 year old individual with acute onset and rapid progression of cognitive decline would benefit from relatively urgent evaluation despite the risks related to COVID-19.
- It will be helpful if psychiatrists can promote awareness about mental health issues among the older adults and their family members using technology, media or social media (online programmes, website, online forum, group email or messages).
- Psychiatrists can also help in training old age home staff in basic aspects of psychosocial care during the COVID-19 epidemic and also in identifying those requiring further mental health evaluation and care. These trainings can be done using technology through digital platforms.
- To establish a helpline through which any older adult or family member can approach for minor mental health issues. The helpline can be managed by mental health professionals' on rotation. Though this medium there is basic assessment of problems followed by brief psychological intervention.
- Those with psychiatric emergencies like suicidal risk, severe agitation, catatonia, refusal of food, delirium would require personal evaluation in emergency settings with appropriate precautions related to COVID-19.
- In view of possibility of atypical presentations of COVID-19 in older adults, absence of high fever should not be taken as lack of risk for COVID-19. Psychiatrists should use higher safety precautions and appropriate personal protective equipment as recommended for COVID-19 during the care of older adults with mental health issues.

- If there is improvement in the availability of COVID-19 testing kits, it would be better to test older adults requiring personal medical evaluation for mental health care with conditions such as delirium.
- Older adults on angiotensin converting enzyme inhibitors, lithium (narrow therapeutic index), and clozapine (risk for neutropenia) need special precautions.

Psychological interventions for mental health issues related to COVID-19

- Most of the older adults with sub-syndromal mental health issues can be managed with brief psychological and psychosocial intervention that can be delivered by any health care personnel, volunteers etc with some guidance and training from mental health professionals
- Reassurance that most of the mental health issues experienced in these situations are normal reactions to abnormal stress will be helpful for older adults.
- Getting appropriate information and clarification about various myths and false messages that are being spread through multiple sources will help in preventing mental health distress
- Maintaining routine, physical exercise, yoga, meditation, healthy diet, mental stimulation through home based activities with appropriate safety precautions will be helpful
- Treatment by mental health professionals including medications and other interventions may be required for those with severe mental health disorders and emergencies.

Mental Health Rehabilitation

Introduction

The ramifications of Covid-19 pandemic has been felt across the world. Social distancing and lockdowns have resulted in the temporary closure of several services deemed 'non-essential'. All rehabilitation facilities except residential centres have been closed.

Impact of covid19 pandemic on psychiatric rehabilitation

The closure of rehabilitation facilities due to COVID-19 pandemic can have the following impacts

- Disturb the daily routines and functioning of person with psychiatric disability (PwPD).
- Loss of social connectedness & satisfaction - A PwPD may derive a lot of satisfaction in going to rehabilitation facility, chat with friends and work in vocational sections. Many get a sense of community at rehabilitation facility and feel that 'I am not alone'.
- Difficulties in adjusting to the disruption –boredom and frustration, worsening of psychiatric symptoms/relapse.
- Families need additional resources in caring for PwPD.
- Care-giver/family suffer increased stress (in addition to COVID-19 impact) and may suffer 'burn out'
- Increase in negative expressed emotions and domestic violence in family context
- Set-back in rehabilitation and loss of micro-gains (like PwPD getting up on time, taking up new responsibilities, contributing to family) which offers hope regarding long term prospects
- Economic impact likely to affect employment (current and prospective) options for PwPD

Role of psychiatrists

- Provide accurate Information about COVID-19 and various precautions to prevent spread.
- PwPD and family need to be reassured that the rehabilitation facility will be reopened when the crisis is over and ongoing support will be provided by tele-consultations.
- Tele-consultation can be done by voice (telephone) or video calls (using popular applications like WhatsApp or Skype). It is necessary to explore as to how families are managing the crisis. Periodic tele-consultations can allay concerns, strengthen the rapport, ensure continuity of care and offer confidence to the PwPD and their families.
- Families to be encouraged to try out innovative solutions to keep clients engaged. Practical suggestions to keep the rehabilitation plan on track will be helpful.
- Medication adherence of some PwPD may have been monitored at the rehabilitation facility. In such cases, the family needs to ensure that medicines are provided on time. Dose adjustments may be required.

Group meetings for family caregivers and PwPD using platforms like zoom can be considered. It can give a sense of community and help PwPD be in touch with their friends. Families and PwPD can share ideas to handle the situation. For some PwPD, it can also familiarize them to access technology

Making a rehabilitation plan with PwPD

A home based rehabilitation plan should be jointly developed with PwPD, family, friends and MHP. It may include the following components

- Ensure communication - Family members need to discuss with PwPD about his/her concern and address it.
- Provide reassurance - He/she may want reassurance that things will be better or need help to speak to employer or want some specific information about COVID-19 or just speak to the vocational instructor.
- Make PwPD feel wanted -Ensure that PwPD feels wanted at times of crisis. Simple interventions like asking for TV channel of his/her choice or cooking his/her favourite dish indicate the importance given to the PwPD.
- Helping PwPD in being gainfully engaged
 - Figure out activities which may interest the PwPD - It may be leisure activities like listening to music, watching TV, reading a newspaper, playing games, drawing, painting, watering plants etc.

- Family may involve PwPD in household work like cleaning home, fetching water, making tea etc.
 - If PwPD is not confident in handling money, families may encourage them to handle money (withdraw money from ATM, pay the neighboring shopkeeper, check for change) under supervision and empower him/her to independently carry out transactions.
 - It is possible that PwPD may not be interested in various responsibilities given. It is ok. Give them space and time. Let him/her pick and choose activities of their choice without constraints of time and productivity
 - **Families MUST appreciate the efforts. Families may even give an incentive or 'salary' to them.** Whatever be the contribution, the PwPD needs to be appreciated for their genuine efforts despite difficulties.
- Education - The PwPD pursuing education can use the opportunity to complete pending work and prepare for exams. A PwPD trying for employment can skill themselves with online courses.
 - Employed -A PwPD who is employed may be apprehensive about salary or job. Family can help discuss with employer.
 - Families to provide the PwPD a series of carefully planned steps in a supportive environment, appropriate to the stage of recovery. The family can discuss and seek support from MHP about challenges faced.

ANNEXURE

Screening for COVID-19

Date:

Name of the patient

Hospital number:

Risk for acute respiratory illness	Score		
A. Exposure Risks (in the past 14 days prior to symptom onset)	Any patient (adult or pediatric)		
1. Had a history of travel to areas with presumed ongoing community transmission of COVID-19 (China, Italy, Iran, South Korea, Japan, France, Spain, Germany, USA, Switzerland) (List will be updated every week) Or A close physical contact in the past 14 days prior to symptom onset with a confirmed case of COVID-19 OR Working in or attended a healthcare facility where patients with confirmed COVID-19 were admitted	5		
2. Exposure to a confirmed COVID-19 case in the last 2 weeks	3		
3. Exposure to suspicious patients in the last 2 weeks	2		
4. Visit to a healthcare facility that had COVID-19 case in the last 2 weeks	1		
B. Clinical signs and symptoms	Patient with Exposure Risk No. 1	Patient with or without exposure risk No. 2, 3, or 4	
		Pediatric	Adult
1. Fever	1	1	2
2. Cough (new or worsening)	1	1	2
3. Shortness of breath (new or worsening)	1	1	2
4. Sore throat and/or runny nose	1	-	1
5. Nausea, vomiting and/or diarrhea	-	-	1
6. Chronic renal failure, CAD/heart failure	-	-	1
Total score			

A score of ≥ 4 , Consider it high risk