

# “COVID Special” Newsletter



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## Director's Message

The COVID-19 case numbers, which had started to drop in India last September, have again seen a rise since March this year. The current peak is more than double the previous one and “The second wave has made the last one look like a ripple.” As our country faces the second wave of COVID, all healthcare workers are once again faced with a tremendous responsibility. Researchers across the country are trying to pinpoint what is behind the unprecedented surge, which could be due to a multitude of factors including the emergence of particularly infectious variants, lack of public awareness about unrestricted social interactions and not adhering to COVID appropriate behavior (CAB). Unraveling these causes and ramping up the vaccination drive would be very helpful in combating this surge.

As Chairperson of the newly formed COVID medical experts' advisory committee, I have been given the important task of devising a strategy for fighting the pandemic by analyzing the current situation and any future challenges. Virtual daily meetings are being held comprising of the panel of 14 experts wherein the COVID situation is discussed and the state government health department is regularly updated about relevant strategies and measures to implement in this regard.

Another important step taken by us in SGPGI is to address the issue of the rising number of COVID infection in the Health Care Workers (HCW) of SGPGI. We at SGPGI, are perhaps the only institution to have taken the proactive decision to establish several Department HCW Surveillance Teams for all Clinical and Non-Clinical areas, and a Central HCW Wellness Team. All the members of Departmental HCWs Surveillance Team have been directed to provide 24x7 assistance to all HCWs at any time, with regard to home isolation or admission to hospital, if needed. The HCW wellness team has been formed to coordinate the admission process of COVID positive HCW's and look after the other logistics of the dedicated HCW beds. A dedicated COVID facility (RCH2) with 72 hospital beds has been earmarked solely for SGPGI HCW's and their dependents. I truly believe that our SGPGI HCW are a precious resource and deserve all possible care, attention and support.

Recognizing the need of continuous and uninterrupted oxygen supply in the COVID facility, we at SGPGI thought ahead and inaugurated the liquid oxygen plant at RCH 1 on April 17, 2021. This is a 20 thousand litre capacity liquid oxygen plant and promises to facilitate and streamline the oxygen needs of admitted patients.

This is not the time for negative talk and energy and effort should be diverted towards joining hands across all health cadres and government machinery to manage the health situation.

Concerns have been raised about the possibility of a third wave even as we are in the grips of the second wave. There is fear of children getting affected in the third wave. We must pre-empt this and vaccinate children. Vaccination should be intensified on the model of Pulse Polio drive. All Covid hospitals must have provision for more Paediatric ICUs and Isolation beds. Apart from medical support, it is vital to improve awareness of general public by publicity campaigns to make them aware of COVID appropriate behavior (CAB) for safety against the disease and boost the psychological strength of the society. It is important to reiterate that “Protection is more important than treatment as far as COVID is concerned”. Continued emphasis on use of masks, gloves, sanitisers, social distancing on one hand and scaling up vaccination on the other would help a great deal in overcoming the fight against the virus.

'Hands, Face, Space' well exemplifies the key elements of the COVID norms we want everybody to remember: WASH your hands regularly, use a FACE mask when in public and try to maintain SPACE and social distancing.

## SGPGIMS कोरोना अस्पताल में Liquid ऑक्सीजन प्लांट की स्थापना

संजय गांधी स्नातकोत्तर आयुर्विज्ञान संस्थान के राजधानी कोरोना अस्पताल में अब बिना बाधा के ऑक्सीजन सप्लाई उपलब्ध रहेगी। इसके लिए राजधानी कोरोना अस्पताल में लिक्विड ऑक्सीजन प्लांट लगाया गया है। इसका उद्घाटन संस्थान के निदेशक प्रोफेसर आर. के. धीमन द्वारा किया गया। अभी तक राजधानी कोरोना अस्पताल में सिलेंडर सिस्टम से ऑक्सीजन सप्लाई दी जा रही थी, जिसमें लगभग 600 सिलेंडर प्रतिदिन की खपत हो रही थी। अब 20000 लीटर क्षमता के इस लिक्विड ऑक्सीजन प्लांट से, जिसे लिंडे इंडिया लिमिटेड द्वारा स्थापित किया गया है, मरीजों को पर्याप्त मात्रा में ऑक्सीजन उपलब्ध हो पाएगी और ऑक्सीजन का पर्याप्त स्टॉक भी बना रहेगा।



## कोरोना पर नियंत्रण हेतु पीजीआई निदेशक की अध्यक्षता में बनी सलाहकार समिति

उत्तर प्रदेश सरकार ने कोरोना संक्रमण की प्रभावी रोकथाम और उसके समुचित उपचार के लिए चिकित्सा विशेषज्ञों की एक सलाहकार समिति 5-5-2021 को गठित की। लखनऊ एसजीपीजीआई के निदेशक प्रोफेसर आर. के. धीमन की अध्यक्षता में गठित इस सलाहकार समिति में अध्यक्ष समेत कुल 14 सदस्य शामिल हैं। चिकित्सा शिक्षा विभाग के प्रमुख सचिव आलोक कुमार की ओर से जारी आदेश के अनुसार इस समिति के संयोजक प्रदेश के चिकित्सा शिक्षा एवं प्रशिक्षण विभाग के महानिदेशक होंगे।

इनके अलावा इस सलाहकार समिति में केजीएमयू लखनऊ के कुलपति डॉ. ले. जनरल विपिन पुरी, अटल बिहारी चिकित्सा वि.वि. लखनऊ के कुलपति डॉ. ए. के. सिंह, लखनऊ के डॉ. राम मनोहर लोहिया आयुर्विज्ञान संस्थान के निदेशक, मेदांता हास्पिटल के निदेशक डॉ. राकेश कपूर, एसजीपीजीआई के इमरजेंसी मेडिसिन विभाग के डॉ. आर. के. सिंह, एसजीपीजीआई पल्मोनरी विभाग के डॉ. आलोक नाथ, केजीएमयू लखनऊ के पल्मोनरी मेडिसिन विभाग के डॉ. वेद प्रकाश शामिल किये गये हैं।

इनके अलावा एसएसपीएच ग्रेटर नोएडा के निदेशक डॉ. राकेश गुप्ता, मिडलैण्ड हास्पिटल लखनऊ के डॉ. वी. पी. सिंह, इण्डियन मेडिकल साइंसेज बीएचयू वाराणसी के निदेशक, इण्डियन मेडिकल एसोसिएशन उ. प्र. के अध्यक्ष, चिकित्सा एवं स्वास्थ्य विभाग लखनऊ के स्टेट सर्विलांस आफिसर इस समिति के अन्य सदस्य होंगे।

## Creation of Departmental HCW Surveillance and HCW Wellness Teams: A Novel Effort by SGPGI to Take Care of its HCWs

In view of the rising number of COVID infection in the Health Care Workers (HCW) of SGPGI, a decision was taken with regard to establishing several **Departmental HCW Surveillance Teams for all Clinical and Non-Clinical areas, and a Central HCW Wellness Team.**

All HODs/ Nodal officers of each department have formed a **Departmental HCW Surveillance team**, from each department comprising of at least 2 faculty members. The non-clinical areas related to administrative sections have also been brought under supervision of Faculty member led HCW Surveillance Teams.

All Health Care Workers of SGPGI are directed to report to concerned team (as mentioned against respective areas) in case of requirement of medical assistance for COVID care.

All the members of Departmental HCWs Surveillance Team are directed to provide all possible help in case of requirement of medical assistance from HCWs at any time and will coordinate with HCWs Wellness Team in case of admission of HCWs in RCH-2.

### Role & Responsibilities of the Department HCW Surveillance team

- HOD along with the Department HCW surveillance team shall play an important role in taking care of the COVID positive HCWs of that department.
- On getting information about COVID positive HCW (or registered dependent) the Departmental Surveillance team will immediately call the COVID positive HCW and assess the severity of his/ her symptoms to decide further plan of management.
- In case the HCW has symptoms s/o moderate/severe disease, the surveillance team has to immediately report to the **HCW wellness team** for urgent admission.
- If the HCW has mild disease and the surveillance team advises the HCW for home isolation, the team members shall also help facilitate prescription and availability of related drugs, and investigations, if deemed required.
- The surveillance team will reassess the HCW on home isolation by maintaining regular contact with him/her telephonically and devise further plan of management based on the dynamicity of the clinical condition.
- The Departmental Surveillance team shall also follow up reports and if any investigative markers are abnormal, and suggest moderate to severe disease, that needs admission, the surveillance team shall immediately liaise with the COVID admission team.
- The Department HCW surveillance team shall also maintain the detailed records of HCWs reports as well as the duration of his /her leaves, to be provided to

CMS/Director office when requested.

- Each Department/HOD is encouraged to make a social media group (e.g. Whats App) to communicate with the HCWs of the department and resolve issues.

**HCW Wellness Team :** This has been proposed by Director to monitor the smooth admission process of COVID positive HCWs and look after the other logistics of the dedicated HCW beds (with the help of the COVID core group). This team will work in close co-ordination with the COVID core group. The roles and responsibilities of the HCW Wellness Team are as under:

- Receive information about HCWs needing admission from the Department HCW surveillance team. All such information should only be conveyed through the Departmental Surveillance Teams.
- Coordinate admission process for admission to the dedicated HCW beds in RCH-2
- Oversee the logistics of the RCH -2 dedicated HCW beds and resolve issues with the help of the COVID core team (if needed) Discharged patients will be handed over to the Department HCW surveillance team for followup.

### New OPD HRF Counter

संस्थान में निदेशक महोदय के आदेश से नवीन ओपीडी में COVID पॉजिटिव कर्मचारी को उनकी दवा उपलब्ध कराने के लिए एक अलग से काउंटर खोला गया है। नवीन ओपीडी के भूतल में जहां पर ओपीडी एचआरएफ है उसी के बगल में काउंटर खुल गया है। जो कर्मचारी या उनके आश्रित पॉजिटिव हैं वे अपने सर्विलांस टीम के डॉक्टर से COVID की दवा लिखवा कर नवीन ओपीडी के काउंटर से दवा प्राप्त कर सकते हैं।



## Creation of a Robust System for Support and Clinical Management of COVID Infected Staff and their Dependents (RCH 2) at SGPGI

A new and revolutionary step by SGPGI administration has been development of a dedicated system for taking care of SGPGI staff affected by COVID. The system comprises of a tiered structure of departmental HCW surveillance committees (HCW-S) and a HCW wellness (HCW-W) team, comprising of doctors to coordinate for providing best possible clinical management of HCWs and their dependents, if they have COVID-19 symptoms. This tiered system is responsible for providing help to the affected individual including clinical management during home isolation, facilitation of admission if required, and follow up after discharge.

A dedicated COVID facility (RCH2) with 72 hospital beds has been earmarked solely for SGPGI HCW's and their dependents.

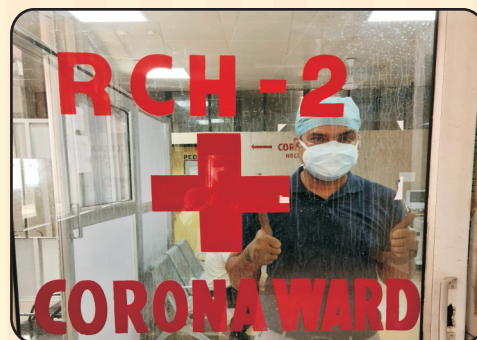
All the COVID positive HCW's and /or their immediate family members are required to inform their respective Departmental HCW surveillance team members for further coordination and management. These members play a pivotal role in providing clinical care and support to the COVID positive HCWs and their dependents. The chain of command shall be as follows:

- Once a suspected / confirmed COVID positive HCW contacts the HCW-S committee, the committee

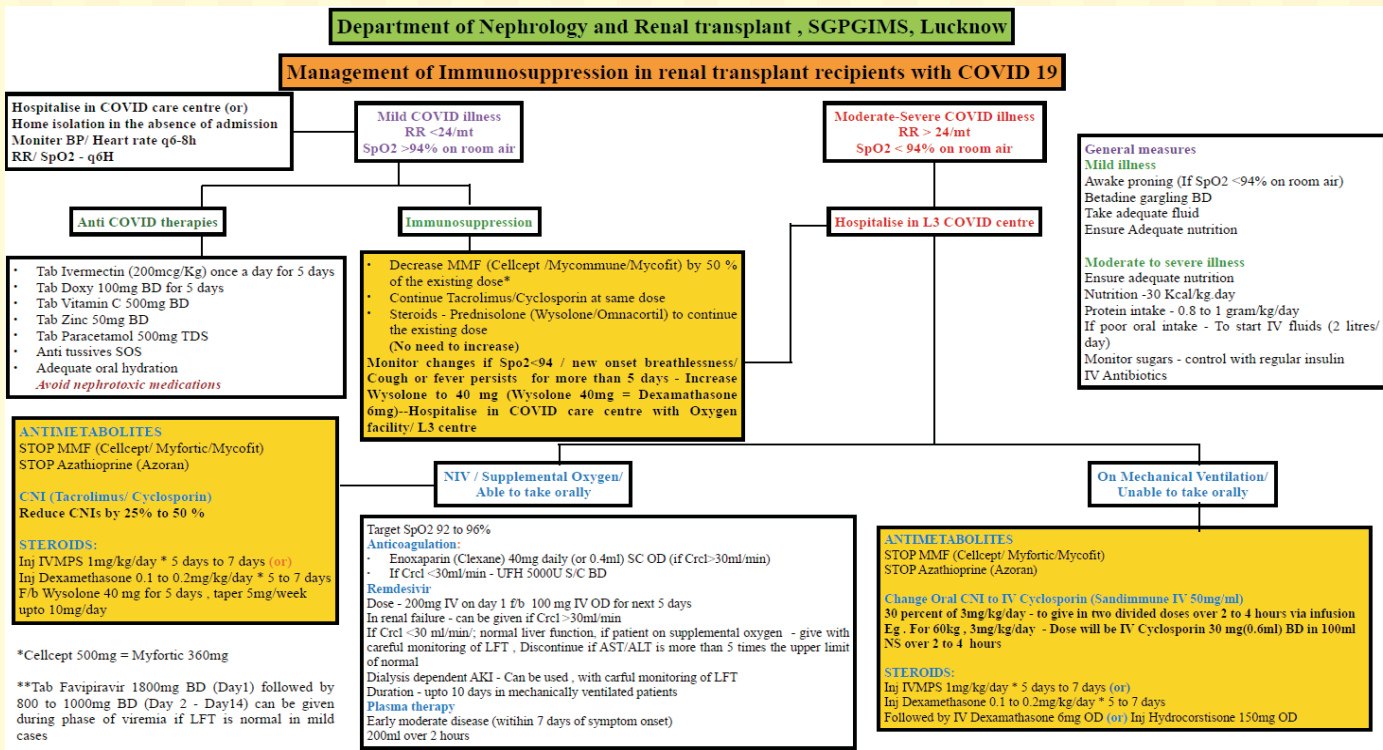
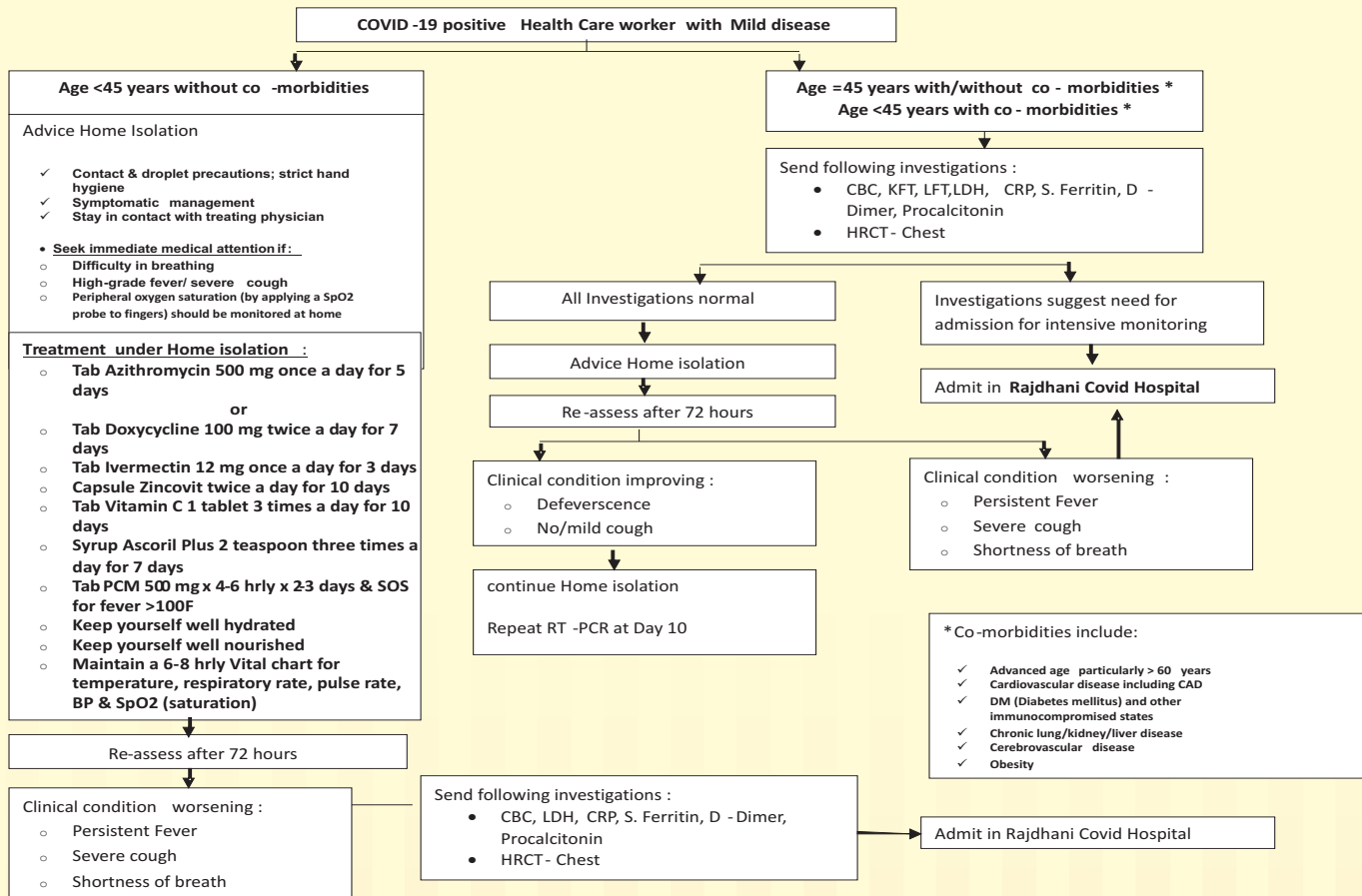
member assesses the severity of his/her symptoms to decide further plan of management. This shall be based on clinical features (fever), saturation (SpO<sub>2</sub>), co-morbidities and investigations available if any.

- Based on clinical assessment, the affected individual may be advised either home isolation (treatment advised accordingly by HCW-S committee team) or hospital admission.
- During home isolation, the HCW is routinely monitored and guided by a member of the Departmental Surveillance committee. Information is gathered regarding symptoms, temperature, other vital signs and SpO<sub>2</sub> of such patients and the HCW-W committee is also updated, in case the condition warrants admission.
- If, after initial clinical assessment or during the course of illness under home isolation, the HCW-S committee feels that admission is required, appropriate information is conveyed to HCW team that facilitates admission to RCH 2.
- The entire SGPGI family, under guidance of Director, Prof Dhiman and Wellness Team Leader, Prof Prabhat Tewari, is pledging its support to this unique venture to take care of its HCWs.

### HCW Wellness Team, SGPGI



# SGPGI Institutional Protocols



Prof. Narayan Prasad, Head,  
Dept. of Nephrology and Renal Transplant  
SGPGIMS COVID Special Newsletter



## पल्स ऑक्सीमीटर द्वारा आक्सीजन के स्तर पर नजर रखना बहुत आवश्यक है। इसके सम्बन्ध में कुछ जरूरी बातें

1. पल्स ऑक्सीमीटर ऐसी उंगली पर लगाए जो ऑक्सीमीटर में भली भांति फिट बैठे आमूमन बायें हाथ की बीच की उंगली में लगाना चाहिये, क्योंकि पतली उंगली में ठीक से फिट न होने के कारण हो सकता है रीडिंग सही नहीं आये।
2. उंगली लगाने के बाद 30 सेकंड तक रुकना चाहिये, क्योंकि रीडिंग फ्लक्चुएट होती है, 30 सेकंड बाद जो रीडिंग आये उसे सही मानना चाहिये।
3. उंगली के नाखूनों में नेल पॉलिश नहीं लगी होनी चाहिये। इससे भी रीडिंग पर फर्क पड़ता है।
4. दो दिन के अंतराल पर जिस तरह चश्मे के शीशे को साफ करते हैं उसी कपड़े से पल्स ऑक्सीमीटर के अंदर जहां उंगली रखी जाती है वहां सफाई करते रहना चाहिये क्योंकि उसमें उंगली की चिकनाई आदि लग जाती है, जिससे उसका सेंसर ठीक से काम नहीं करता है। नतीजा रीडिंग पर असर पड़ेगा।
5. रीडिंग लेते समय हाथ मुड़ा न हो, सीधा हो तथा हार्ट के लेवल पर हो।
6. हमेशा घर में एक्स्ट्रा बैटरी रखें, क्योंकि ऑक्सीमीटर की बैटरी समाप्त होने पर रीडिंग में दिक्कत न हो।



## Role of CT Thorax in the diagnosis and management of COVID 19

Dr. Zia Hashim, Dept of Pulmonary Medicine, Dr Zafar Neyaz, Dept of Radiodiagnosis, and Dr Neeraj Jain, Radiodiagnosis

COVID-19 is an infectious disease caused by a newly detected coronavirus which spreads by droplet infection. The whole country is currently under the second wave of the COVID pandemic. Covid RTPCR is still the gold standard for diagnosis of COVID-19 infection, though the test has many limitations. The sensitivity of the test is between 60-70 % and the test positivity do not correlate with the disease severity. The delay in reporting due to overburdened laboratories and non-availability of this test in periphery also add to this.

CT thorax is now being widely used in management of COVID-19; however, it is also being used excessively and in non-indicated cases. CT scan is indicated in symptomatic cases or those with symptom worsening where CT scan findings will make change in treatment plan. Other indications are to look for co-existing disease like tuberculosis, interstitial lung disease, malignancy, and to rule out complications and secondary infections in hospitalized patients. CT scan can also point to alternate diagnosis if prominent findings are pleural effusion, nodules, cavitation, tree in bud opacities and lymphadenopathy. It can also be used in those with a negative RTPCR report but with classical symptoms of COVID disease if clinically indicated. However, it should not be used as a first line diagnostic test for COVID-19 or as a substitute of RTPCR. It should be avoided in asymptomatic patients, those with mild symptoms and in those who are responding to treatment.

**Timing of the CT thorax is also an important aspect.** Early CT scan, within 5 days of symptom onset, may not show the true extent of disease with suboptimal reporting of disease severity. CT scan gives a complete picture of disease when performed around the 10<sup>th</sup> day. The timeline of CT findings may be divided into early-stage (0-4 days), progressive stage (5-8 days), peak stage (9-13 days) and absorption stage (> 14 days). CT scans will show bilateral ground glass opacities (GGO) in the posterior and peripheral lung fields in the early stage. By day 7 the size of GGOs will increase and will become denser with a crazy-paving pattern. CT severity is usually seen maximum

around day 10 of symptom onset characterized by dense consolidation and maximum lung involvement. Thereafter the disease starts to resolve, and it may lead to fibrotic changes and tractional bronchiectasis.

**CT scan is used to assess the severity of disease using various scoring systems.** The 25-point scoring system (Pan et al) is the one that is widely used. In this scoring system, the severity is scored from 1 to 5 depending of percentage of lung affected in 5 lobes (right upper lobe, right middle lobe, right lower lobe, left upper lobe including lingula and left lower lobe) and then added up to a maximum of 25. Individual lobe involvement is scored as score 1, 5% or less; score 2, 5-25%; score 3, 26-49%; score 4, 50-75%; and score 5, more than 75% involvement. A score less than 7 is categorized as mild disease, 7 to 18 as moderate disease and a score more than 18 is considered as severe disease. This has shown a correlation with disease severity and serum markers of disease activity. There is a more complicated 40-point scoring system described as well, in which 18 segments of the lungs are divided into 20 regions.

**One should also not be tempted to perform early follow up CT scan to see lesions resolution, as these lesions only start regressing after 2-3 week and CT severity score might stay the same.** In fact if the first CT has been performed very early, then a follow up CT might show some increase in lesions on follow up. The patient's clinical condition, Spo2 level and inflammatory markers better represent the treatment response. A chest X-ray although much less sensitive than CT scan may be used as rough guide in follow up to see disease status.

**To conclude, CT scan is a useful tool for the clinician if used judiciously. However, we should not forget the fact that a normal CT does not rule out COVID-19 infection and CT should not be the only criteria to assess the severity, but it should be used in conjunction with various other clinical and serological markers.** Judicious use of resources is also an important step to combat this pandemic and to provide health services to those who need it the most.

## Guidelines For Rational Use of Oxygen For Management Of COVID -19

In the wake of rising cases of COVID-19 and an escalated need to ensure rational use of oxygen, The Ministry of Health and Family Welfare recognized the need to issue updated comprehensive guidelines regarding this. Following is a synopsis of the guidelines based on the recommendations of the leading clinical teams of the country, chaired by Dr. VK Paul, Member, NITI Aayog.

**These guidelines aim to promote judicious use of oxygen therapy in individual cases, and to enhance accountability for oxygen conservation through monitoring and audit without compromising quality of care.**

Remember that the majority of patients of COVID- 19 have mild illness. Out of 100 patients , 80 can be treated at home or COVID care centres. Out of the remaining 20, about 17 have moderate disease needing oxygen beds. Only 3 are in ICUs and are treated with oxygen therapy by Non Rebreathing mask (NRBM), Non Invasive ventilation (NIV), High Flow Nasal Cannula (HFNC) , and Invasive ventilation. **Oxygen is a precious drug that should be used judiciously and the following action points are necessary to achieve this objective. These guidelines should be implemented by all the states and UTs.**

### RESPONSIBILITY OF THE HEALTH TEAM: Judicious use

1. The flow of oxygen should be adjusted to the lowest permissible level to target an oxygen saturation of 92%-94% for the hospitalized COVID 19 patients.
2. Indiscriminate use of BIPAP/HFNC should be avoided.
3. When required, BIPAP should be preferred over HFNC; the latter consumes enormous amount of oxygen. HFNC device should be used only in the ICU setting under supervision of a respiratory physician. Patient should be put on HFNC only after approval of the senior most respiratory physician.
4. Prone positioning should be intermittently done in patients of COVID -19, along with adjunctive physiotherapy. This optimizes the respiratory status.
5. Individualization of oxygen therapy should be done taking into account the clinical signs like respiratory rate etc. and not just the saturation level. Once the desired saturation is achieved, flow of oxygen should not be increased as it may not provide any additional benefit to the patient. Up-titration instead of down titration of oxygen flow levels should be the norm.
6. Triaging of patients as per their oxygen status should be done at regular intervals.



7. An audit of the oxygen use by the ICU / ward should be done by the clinical team leader on a daily basis.

Regular training of OT technicians and nurses should be undertaken on proper oxygen administration and monitoring, and on conserving oxygen.

### कोविड के बाद : 'द्वन्द'

दुख बढ़ा, बड़ा, उल्लास यहाँ ? रोना या हास – विलास यहाँ ?  
अंबर ऊँचा या आशाएँ ! दुर्दिन या फिर अभिलाषाएँ !!  
क्यों मन में इतनी दुविधा-संशय ? है कठिन बड़ा करना निर्णय !  
मैं या कि मेरी सांस बड़ी ! तम या जीवन की प्यास बड़ी !!  
है फूल बड़ा या काँटों में बल ! है स्नेह बड़ा या कलुषित छल !!  
है तृषा बड़ी या तृप्ति बड़ी है ? द्विधा बनी ये द्विधा खडी है !!  
सबके अपन-अपने छप्पय, दुष्कर है करना ये निर्णय !  
मैं या कि मेरी सांस बड़ी ! तम या जीवन की प्यास बड़ी !!  
जीवन में कुछ ऐसे आये, जो फिर वापस जा न सके !  
सब कुछ पाया, इस धरती पर, पाकर, फिर भी, कुछ पा न सके !!  
ये द्वन्द बड़ा देता विस्मय ! अब कौन करे इसका निर्णय ?  
मैं या कि मेरी सांस बड़ी ! तम या जीवन की प्यास बड़ी !!  
जीवन कविता का छंद नहीं ! है तृप्ति में आनंद नहीं !!  
है श्रेष्ठ प्राप्ति से प्रेय की आस, मंजिल से सुखतर है तलाश !  
संसार करे जो भी निश्चय, या प्रभु तुम्हीं दे दो निर्णय !  
मैं या कि मेरी सांस बड़ी ! तम या जीवन की प्यास बड़ी !!

डॉ. आर. हर्षवर्धन, विभागाध्यक्ष, अस्पताल प्रशासन



## From The Editor's Desk ...



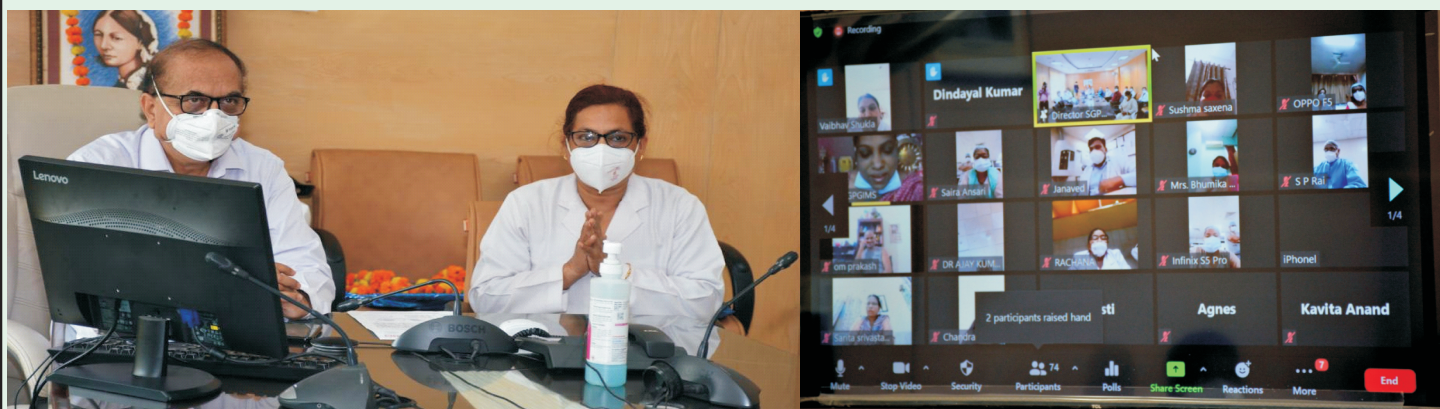
### Ten Commandments for helping break the transmission chain

- COVID positive person in home isolation to be in a separate area preferably with a bathroom.
- If there is a COVID positive person in home isolation, other family members should wear a mask while in the house.
- If there is a COVID positive person in home isolation, family members can keep the meals outside the room on a designated stool or table which the person should pick up after wearing a mask and opening door. The person should do their own dishes, laundry and cleaning of the room and bathroom.
- For COVID positive persons in home isolation, a minimum 10 days Isolation and repeat testing as per institutional protocol at 10 days. No need of repeated testing at earlier intervals.
- For COVID positive persons in home isolation, all household contacts are deemed high risk.
- Hence household contacts of such persons should also isolate themselves as per institutional guidelines (for at least 7 days even if asymptomatic, test twice on Day 1 and 7 and act subsequently according to instructions from HCW Infection Control Committee)
- While in home isolation, encourage everyone to do light indoor exercises, yoga, take steam, listen to music and to video chat with friends and family to avoid boredom and loneliness.
- Even if you are asymptomatic, all SGPGI campus dwellers should observe the following while stepping out In the community:
  - Step out only if absolutely necessary
  - Always wear mask while outside your house.
  - Do not loiter, congregate in gatherings or unnecessarily talk to people on the road, do not have any social gatherings at home, and avoid overcrowded areas completely.
  - Shops at community centre should strictly enforce social distancing and only take-away meals. Security committee can help supervise this.
- For all SGPGI HCW's while in the Hospital
  - Everyone to wear N95 masks provided to them at all times
  - No sharing meals or tea or snacks, maintain social distance at all times. Hospital canteens can be asked to organize only take-away, after consultation with the RDA/employees union. This shall discourage open, non-masked public eating.
- Remember, the SGPGI administration needs the complete support of the SGPGI family to tackle the situation effectively

Dr Prerna Kapoor

## International Nurses Day

हर वर्ष की तरह, इस बार भी 12 मई, नर्सिंग दिवस के रूप में मनाया गया। यह दिवस फ्लोरेंस नाइटिंगेल के जन्मदिन के उपलक्ष में मनाया जाता है। इस सम्बन्ध में निदेशक प्रोफेसर धीमन सर ने अपने सन्देश में कहा की यह दिन सभी नर्सों को उनके समर्पण और काम को धन्यवाद देने के लिए है। विशेष रूप से वर्तमान में चल रहे कोरोना वायरस महामारी के दौरान नर्स और स्वास्थ्य कर्मचारी रात दिन लोगो की सेवा में लगे हुए हैं। निदेशक महोदय ने कहा की नर्स हमारे चिकित्सा संस्थानों में एक अहम भूमिका निभाती है। इसमें कोई संदेह नहीं कि जब रोगी को देखभाल की आवश्यकता होती है तो नर्स उनकी जरूरतों की पहचान करने और उनकी स्वास्थ्य रक्षा करने के लिये अथक प्रयास करती है।



उन्होंने यह भी कहा की क्रीमियन वॉर के समय तो केवल एक फ्लोरेंस नाइटिंगेल थी, किन्तु आज कोविड 19 की वैश्विक महामारी में संस्थान का सम्पूर्ण नर्सिंग स्टाफ एक एक फ्लोरेंस नाइटिंगेल के बराबर है और अविस्मरणीय सेवा भाव, लगन एवं परिश्रम से मरीजों की सेवा में कार्यरत है। इस अवसर पर उन्होने सभी को हार्दिक बधाई दी और सभी नर्सों और उनके परिवारजनों के स्वस्थ एवं सुखमय जीवन की कामना की।

# Health Care Worker Experiences in COVID times: Don't Ever Underestimate the Impact You Can Have, because Courage can be Contagious, and Hope Can Take on a Life of its Own

**Dr Amit Rastogi, Assoc Prof, Anaesthesiology, Nodal Officer RCH 2**

With the inception of the second wave of the pandemic COVID 19, I was asked by Director Prof RK Dhiman Sir and nodal officer Dr. R K Singh to start and expand the Rajdhani COVID Hospital phase-2 (RCH-2). Only a part of RCH-2 was functional in the first wave of COVID 19 and which was later on converted to COVID 19 vaccination bay. We had the challenge to reinstate the RCH-2 as soon as possible to procure the bed requirements for the COVID 19 patients, as the second wave was heading like a Tsunami.

Initially, I was full of consternation at doing such an intensive task in a very short time. All thanks to Dr. Afzal Azim and Sister Neelam Khokher as they have developed such a strong system during the first wave of COVID 19 itself that conversion of COVID 19 Vaccination bay back to RCH-2 was very swift. The whole nursing staff, hospital administration department, sanitary department, civil department, electricity department and other departments worked tremendously hard to reshape the RCH-2 back to its original functioning and within no time RCH-2 ICU was started.

With a rampant increase in hospital care needs, we have gradually started three high-dependency units (HDU) HDU 1, HDU 2, and HDU 3. The 72 bed facility at RCH-2 was further dedicated to health care workers by our respected Director Sir. Health Care Workers Wellness and Surveillance Teams (HCWWST) were formed and the coordinated and transparent working policy made the whole process of admission very expeditious. In our efforts of smooth functioning of RCH-2 faculty, residents, nursing staff, patient helpers, and the attendants helped us in all possible ways. Presently we are serving our own SGPGI staff with full dedication and spirits.

**Dr Preeti Dabadghao, Prof., Dept of Endocrinology, Member, HCW Surveillance and Wellness Teams**

Second wave of COVID 19 has hit us very close at home infecting so many loved and dear ones. HCWs who are the pillars in this fight against corona are fighting this war on 2 fronts, professionally with patients and emotional and mental with family and friends. This time the patients are not registration numbers, names or unknown faces, they are ones whom you have known or worked with for years or even decades.

It was a brilliant idea to have departmental HCW surveillance teams to help and look after the workforce and their families. No cadre or person was left behind..... someone was appointed to look after each staff ..... It was an interesting experience to be a member of such a team with two

enthusiastic faculty to help me in this work. We got to know the names and families of all those with who I have been working for past 3 decades. Trying to figure out how to advise home isolation in 1 BHK house, always wondering will the sanitary staff understand what we mean by home isolation. How do we make them understand that you need to wash your utensils, cannot eat with the family..... Something unheard of ! Every morning I would check my WA messages with trepidation not knowing who would inform about a positive report, or having some symptom if so is he/she serious will need admission or can be managed at home. Never ever have we detested a positive report like today nor have I seen so many saturation reports in my entire career as a doctor as I have in these few months. All these stresses seem nothing when I was able to contribute my little bit in helping to take care of our department staff.

**Dr. Kirti Naranje , Head, Dept of Neonatology, Healthcare Wellness Team Member**

The unprecedented COVID pandemic has affected several people; healthcare workers (HCWs) being frontline workers are at major risk of getting pretentious. The second wave has brought with itself more chaos and this time several HCWs and their families were tangled. The institute, in order to abridge medical care for HCWs, set up the Healthcare wellness team in late April 2021. Faculty from different disciplines of medicine and surgical fields of the institute came together primarily to facilitate admissions for HCWs in dedicated setup at RCH2 in SGPGIMS. Being an integral part of the team, it was indeed a great opportunity for me to work for a noble cause. Personally, I prefer teamwork. Different team members contribute different perspectives, and the synergy between team members produced valuable results. The team worked on various aspects of strengthening the RCH2 and expedited over 100 admissions of HCWs and their family members affected with SARS COV2. We had lot of brainstorming and it was a good opportunity for the team to exchange ideas and come up with creative ways of doing things. Every member had opportunity to express their views thereby creating a climate of trust and open, honest communication. At times, when there was difference of opinions, it was constructively solved. It gave me an insight into team dynamics and understand that effective communication and cooperation within team is critical to perform well. The Healthcare wellness team had an environment in which all team members felt equally responsible for team performance. The team had alignment of purpose and focused on task with regular meetings and interactions focused on results. There was rapid response from all the team members with regards to admission of



HCWs in need and any other problem encountered in functioning. Thus, it was very motivating to become part of such a dynamic and excellent team that worked towards benefits of HCWs of the institute and strengthens the system.

### **Musings of a Healthcare Worker Surveillance Committee member...**

#### **Dr Supriya Sharma, Addl. Prof., Dept. of Gastrointestinal Surgery**

As soon as it was announced that departmental healthcare worker surveillance committee (HCWSC) would be created for COVID related care and guidance to the healthcare workers (HCWs), I assumed I would be one from our department, being one of the few non inflicted ones then! I soon realized that it is not just an extension of the work I was already involved in for family and friends. For one, records had to be maintained and I had to navigate through everybody's sense of entitlement

I was struck by the sheer number of HCW in our SGE department – faculty, residents, staff nurses, OT nurses, technicians, office staff and other karamcharis AND their dependants!!! The volume would easily fill up the multistorey office space of an MNC in Gurgaon or Bangalore. Although overwhelmed initially, I quickly understood the merit in segregating personnel into groups and appointing a primary contact for each group. It was insightful how any level worker can fulfil role of surveillance keeper for his group if given explicit instructions. The Institutes' "monitoring proformas" and "drug prescriptions" and ease of procuring them were a boon. I must admit that a visual image of stable daily parameters alleviated anxiety and decreased demands for scarce hospital beds and investigations. Forwarding only scrutinized, genuine requests for admissions made liaisoning with ICU and HDU incharges more fruitful. The role certainly demanded tremendous patience and time investment at all hours and was also peppered by few unpleasant exchanges. Adversity always brings to the fore all elements of human nature.

But this experience has certainly taught me, No task is too big if broken down into bits, Everyone can and will help; just make the task convenient and emotionally tugging, In any organization a sense of being cared for by all employees tremendously boosts the overall morale and consequently the output.

To conclude, I am aware of the successful salvages of this system but I am also painfully aware of our losses. I just sincerely hope the bereaved too know that we tried our best.

#### **Days that go on..... Dr Dheeraj Khetan, Addl. Prof., Dept of Transfusion Medicine**

##### **Member, HCW Wellness Team, SGPGIMS**

Today is 16<sup>th</sup> Apr 2021, the last day of my posting in the private ward (3A) of Rajdhani Corona hospital. Sitting in my

quarantine room, I am feeling satisfied and contented that during my posting I have been able to fulfil this responsibility with my limited clinical knowledge and skills. I am hopeful that now I can now relax and go back to my old lazy days with long sleeping hours and get rid of the "Shwannindra" that I have adopted during my COVID duty as a survival tool.

Today, on 19<sup>th</sup> April 2021, in the afternoon, I have received an office order nominating me as one of the five members of the HCW Wellness team constituted for coordinating the admission of COVID positive HCWs. I am happy that a much-needed initiative required for clinical management of institute staff and their dependents has been taken. After detailed deliberations among all the members, we were now ready with a plan including proposal for including more members to the wellness team and nomination of Faculty members in the surveillance committee for non-clinical areas of the institute.

Next day, 20<sup>th</sup> April 2021, we present the plan and get approval of the Director. We are now a team of 14 members and have a process flow at hand to be implemented. The erstwhile isolation facility for asymptomatic health care workers is converted to Hospital beds and included as HDU 3 on HIS. Availability of requisite equipment, paraphernalia, instrument, and all other arrangements are done within a day. Various roster committees prepare and circulate the roster of respective staff members and hurray!! the ward is ready within a day. An achievement made possible only because of teamwork and the support of institute administration.

We started coordinating for the admission of HCWs on 21<sup>st</sup> Apr 2021 and admitted seven patients on day one. The days flew, receiving calls, explaining the procedure, updating the information on google sheets for all members to see, discussion for triage, ensuring availability of beds, ensuring optimal utilization of the facility and planning for further improvement. Till 8<sup>th</sup> May 2021, we coordinated admission of 94 HCWs and their family members in RCH II.

While all this was happening on the professional front, I was also involved, like all my colleagues, in teleconsultation for friends, family, newfound relatives, just known acquaintances and others infected with COVID, many of whom have also succumbed to the disease.

Today on 8<sup>th</sup> May 2021, I am happier and more satisfied, all thanks to the excellent teamwork, able leadership, and clarity of thoughts. These days have strengthened my belief that this institute offers us best of opportunities and the best atmosphere we can have in our professional carrier.

These are the days, when we, the Doctors, are required to remain motivated and dedicated to patient care. Days when we are being tested for our resilience and patience. Days when the medical fraternity is at war, days when we are the knights, days that go on ... never end, and so, the hope continues....

## बिना PPE किट COVID Ward तक का अनुभव

मैं सिस्टर लिजम्मा कालिब SGPGI में CNO (Chief Nursing Superintendent) हूँ। जब मेरा COVID RTPCR पॉजिटिव आया तो मेरे परिवारजन और सभी सहकर्मी बहुत चिंतित थे पर मैं निश्चित थी, मुझे SGPGI के सभी चिकित्सकों और स्टाफ पर और अपने मानसिक बल पर पूरा भरोसा था नये वार्ड RCH2 में मुझे भर्ती किया गया। मुझे बिना PPE पहने पूरी कोविड वार्ड की कार्यशैली देखने को मिली, शायद प्रभु की ये इच्छा थी

सभी लोग उत्कृष्ट स्तर पर अपना फर्ज निभाते पाये गए। जब मैं ठीक महसूस करती तो खुद भी उठ कर काम में हाथ बैटाती। बहुत से मरीजों को मैंने अपने फोन द्वारा उनके परिवार से विडीओ कॉल से बात करवायी। मेरा अनुभव ऐम्बुलन्स, CT scan services, diet आदि को ले कर भी बहुत अच्छा रहा। फिजीओथेरेपिस्ट भी आते और spirometry सिखाते 18 दिन तक मैं admit रही। Dr. Amita Agarwal and team, Dr. Ashok, Dr. Sujeet Gautam, Dr. Sandeep Sahu, मैं तहेदिल से सब की आभारी हूँ। Endomedicine SR जिन्होंने मेरी diabetes को नियंत्रित किया, उनके लिए मेरे पास शब्द नहीं हैं। मुझे ऐसा लगा कि इस महामारी का सामना करने में हर छोटा बड़ा योगदान अमूल्य है। बहुत दुखद अनुभव हुआ जब अपनी एक मित्र को अपने सामने खो दिया। कई और सहकर्मियों के परिवारजन का निधन होने का बहुत दुःख हुआ।

मेरी सभी से ये विनती है कि यथासंभव हर प्रयत्न करें रोकथाम का, पर यदि हो जाए तो हिम्मत रखें, अपने डॉक्टर की पूरी सलाह का पालन करें अफवाहों आदि से बचें और अपने विचार सकारात्मक रखें। अब मैं घर पर आराम कर रही हूँ और पूरी तरह स्वस्थ होने की राह में हूँ।

Director Sir, Dr. Alok, Dr. R K Singh और समस्त SGPGI टीम का शुक्रिया जिन्होंने हर क्षण मेरा मनोबल बढ़ाया और पूर्णतया स्वस्थ होने के लिए प्रेरित किया।

### Neelam Khokher, Deputy Nursing Superintendent, SGPGIMS

**“The Doctors may be mapping out the war games, but it's the Nurses who make the conflict bearable”**

Things were working perfectly, the humanhood was happy and carefree, but suddenly we all were challenged by the Novel Corona Virus commonly known as COVID-19, it challenged us all in a way that we never predicted or imagined about. There were people dying and getting severely infected by this virus and we frontline workers were allocated with different duties to save the people any how. The journey was never easy and is still not ended so I decided to share my experience to help process and encourage you what I am seeing and doing as a sister incharge working in RCH II at SGPGIMS, Lucknow.

Starting to jot down my experience, I would start by when I was posted in RCH II for the administration of the proper ward functioning and maintaining the duty roster for the Covid warrior nurses. When I was assigned the duty it was a nightmare to me, I was afraid, how will I manage such a huge work under so much pressure. But I decided to work effortlessly and fearlessly and started to run holding area in April 2020, where the patients were kept until their RTPCR report came. 6 hours duty was not easy. From keeping the personal protective equipment ready for the doctors and nurses, sanitizing the area, checking whether all the machines are working to keeping all the drugs and medicines ready for the patients. After the holding area, I opened the Asymptomatic Isolation ward which was given for the COVID positive staff who were working tirelessly and selflessly. And later when we thought things are calming and getting better, the second wave of COVID-19 virus came, we decided to open RCH II with 72 beds where ICU had 18 beds, HDU I, II, & III had 18-18 beds respectively. My job was to keep all the equipments, machines and drugs ready for the doctors and nurses to take and heal the patients and protect themselves from getting infected. It was also a task to encourage the nurses to come and do their shifts as they were finding difficulty in leaving their families in this pandemic. With this on 16<sup>th</sup> January, I was also given the duty in vaccination department. The fight is still not over. The work has yet not stopped. The body might be tired but the heart and mind is still in action and I will keep on working till my duty calls. I would also like to mention the doctors, engineers and the entire frontline workers who contributed and worked effortlessly in collaboration with me to save the people and recover them.

मैं सिस्टर मीरा प्रकाश जेनरल हॉस्पिटल, SGPGI में कार्यरत हूँ। अपना अनुभव साँझा करना चाहती हूँ। थोड़ा नाक बंद होना, गले में खराश जैसी समस्या होने पर मैंने Covid-RTPCR टेस्ट करवाया 11-04-2021 को मेरी रिपोर्ट पॉजिटिव आयी। मेरा दिल मानने को तैयार नहीं था पर मुझे लक्षण तो थे ही। मेरे पति और बेटे की रिपोर्ट भी पॉजिटिव आयी। काफी घबराहट हुई क्योंकि मेरा बेटा सिर्फ 10 वर्ष का है। हम सब ने घर में ही रह कर पूरा इलाज लिया।

मैं कहना चाहूँगी, घबराइए मत, धैर्य रखिए और अपने परिवार को भी हौसला और मानसिक तसल्ली दीजिए, COVID प्रोटोकॉल का पालन करिए, समय से दवा लीजिए, योग और श्वास के व्यायाम नियमपूर्वक करें। सूप, काढ़ा, भाप, तरल पदार्थ, आराम, फल, पौष्टिक आहार, प्रोटीनयुक्त भोजन जैसे की पनीर, नारियल पानी आदि का यथासंभव सेवन करें। SpO2, बुखार और सभी पैरामीटर मापें और चार्ट बनायें, पड़ोसी जब कहते हैं कोई भी जरूरत हो तो जरूर बताना तो बहुत अच्छा लगता है, मेरा तहेदिल से शुक्रिया। अपने डॉक्टर से फोन द्वारा लगातार सम्पर्क में रहने से मेरा आत्मविश्वास बढ़ा कि मैं और मेरा परिवार इस कठिन समय से निकल आएँगे। अब हम सब स्वस्थ हैं, ईश्वर का आभार और SGPGI को कोटि कोटि नमन।



## Home Isolation Guidelines

All patients who are clinically assigned to be **mild/asymptomatic** are recommended for home isolation.

**The asymptomatic cases** are laboratory confirmed cases not experiencing any symptoms and having oxygen saturation at room air of more than 94%.

**Clinically assigned mild cases** are patients with upper respiratory tract symptoms (&/or fever) without shortness of breath and having oxygen saturation at room air of more than 94%.

- Such cases should have the requisite facility at their residence for self-isolation and for quarantining the family contacts. A care giver should be available to provide care on 24 x7 basis. A communication link between the caregiver and hospital is a prerequisite for the entire duration of home isolation.
- Elderly patients aged more than 60 years and those with co-morbid conditions such as Hypertension, Diabetes, Heart disease, Chronic lung/liver/ kidney disease, Cerebro-vascular disease etc shall only be allowed home isolation after proper evaluation by the treating medical officer.
- Patients suffering from immune compromised status (HIV, Transplant recipients, Cancer therapy etc.) are not recommended for home isolation and shall only be allowed home isolation after proper evaluation by the treating medical officer.

### Instructions for the patient

- Patient must isolate himself from other household members, stay in the identified room and away from other people in home.

- The patient should be kept in a well-ventilated room with cross ventilation and windows should be kept open to allow fresh air to come in.
- Patient should at all times use triple layer medical mask. Discard mask after 8 hours of use or earlier if they become wet or visibly soiled. In the event of care giver entering the room, both care giver and patient may consider using N 95 mask.
- Mask should be discarded only after disinfecting it with 1% Sodium Hypochlorite.
- Patient must take rest and drink lot of fluids to maintain adequate hydration.
- Follow respiratory etiquettes at all times. Frequent hand washing with soap and water for at least 40 seconds or clean with alcohol-based sanitizer.
- Don't share personal items with other people in the household.
- Ensure cleaning of surfaces in the room that are touched often (tabletops, doorknobs, handles, etc.) with 1% hypochlorite solution.
- Self-monitoring of blood oxygen saturation with a pulse oximeter is strongly advised.
- The patient will self-monitor his/her health with daily temperature monitoring and report promptly if any deterioration of symptom as given below is noticed.
- All patients in Home isolation can follow this simple monitoring chart

### Monitoring Chart

Day of symptoms and time (every 4 Temperature hourly)	Heart rate (from pulse oximeter)	SpO2 % (From Pulse Oximeter)	Feeling: (better/same /worse)	Breathing: (Better/ same/worse)

### Instructions for caregivers

#### Mask:

- The caregiver should wear a triple layer medical mask. N95 mask may be considered when in the same room with the ill person.
- Front portion of the mask should not be touched or handled during use.
- If the mask gets wet or dirty with secretions, it must be changed immediately.
- Discard the mask after use and perform hand hygiene after disposal of the mask.
- He/she should avoid touching own face, nose or mouth.

### Hand hygiene:

- Hand hygiene must be ensured following contact with ill person or his immediate environment.
- Hand hygiene should also be practiced before and after preparing food, before eating, after using the toilet, and whenever hands look dirty.
- Use soap and water for hand washing at least for 40 seconds. Alcohol-based hand rub can be used, if hands are not visibly soiled.
- After using soap and water, use of disposable paper towels to dry hands is desirable. If not available, use dedicated clean cloth towels and replace them when they become wet.
- Perform hand hygiene before and after removing gloves.

### Exposure to patient/patient's environment

- Avoid direct contact with body fluids of the patient, particularly oral or respiratory secretions. Use disposable gloves while handling the patient.
- Avoid exposure to potentially contaminated items in his/her immediate environment (e.g. avoid sharing cigarettes, eating utensils, dishes, drinks, used towels or bed linen).
- Food must be provided to the patient in his/her room. Utensils and dishes used by the patient should be cleaned with soap/detergent and water wearing gloves. The utensils and dishes may be re-used.
- Clean hands after taking off gloves or handling used items. Use triple layer medical mask and disposable gloves while cleaning or handling surfaces, clothing or linen used by the patient.
- Perform hand hygiene before and after removing gloves.

### Biomedical Waste disposal

- Effective waste disposal shall be ensured so as to prevent further spread of infection within household.

### When to seek medical attention:

Patient / Care giver will keep monitoring their health. Immediate medical attention must be sought if serious signs or symptoms develop. These could include-

- Difficulty in breathing
- Dip in oxygen saturation ( $SpO_2 < 94\%$  on room air)
- Persistent pain/pressure in the chest,
- Mental confusion or inability to arouse,

### When to discontinue home isolation

Patient under home isolation will stand discharged and end isolation after at least 10 days have passed from onset of symptoms (or from date of sampling for asymptomatic cases) and no fever for 3 days. There is no need for testing after the home isolation period is over.

MoHFW guidelines dated 28/4/2021

## Diet Plan and Food : Dos and Don'ts for COVID-19 Patients

### General Nutritional guidelines for COVID patients

1. Leftover food to be treated as medical waste.
2. Regular physical activity and breathing exercise to be advised, as per tolerance.
3. Having a balanced diet with moderate carbs and fats, and High Biological Value proteins.
4. Provide Oral Nutrition Supplements and Antioxidants to meet the demands of the patients.
5. Consumption of Antioxidant Vitamins and Minerals should be encouraged especially Vitamin C and Vitamin D.

### COVID – Diet (Dos and Don'ts)

- The main diet focus for COVID patients should be to consume foods that would help rebuild muscle,

### TIPS TO STAY HEALTHY



immunity and energy levels.

- Whole grains like ragi, oats or amaranth are rich sources of complex carbohydrates.
- Chicken, fish, eggs, paneer, soya, nuts and seeds are some good sources of protein.
- Healthy fats like walnuts, almonds, olive oil, mustard oil are recommended during these days.
- To boost one's immunity, one can take turmeric milk once a day.
- Five servings of all coloured fruits and vegetables are a must to get adequate vitamins and minerals when you are COVID positive.
- Consider adding small amounts of dark chocolate with at least 70% cocoa which can help improve mood, get rid of anxiety and will also boost immunity.

## FAQs

### What to do for Post COVID fatigue?

Consume energy-boosting foods like banana, apples, oranges or sweet lime juice to deal with post-COVID fatigue. Add sweet potato in the salad or as a part of your meal. Take warm water with organic honey and lime. If it persists for long, consult your Doctor



### How to manage dry cough?

Drink plenty of fluids, like warm water with tulsi leaves to manage COVID symptoms, like cough and itchy throat. Avoid sugary drinks, alcohol, coffee as it leads to dehydration. Can carefully inhale steam 2-3 times a day. Can consider adding one tablespoon of honey, ginger, mulethi to warm water and should drink twice a day.





## Do fruits and vegetables transmit the virus?

Fruits and vegetables do not transmit the virus directly, but they should be thoroughly washed before cooking or consumption. They should be ideally washed in warm water or you can add soda-bicarb to the water. Soak the vegetables and fruits in this water for some time before using it.

## कोविड रोगी के लिए होम आईसोलेशन



### होम आइसोलेशन

#### किन परिस्थितियों में किया जा सकता है?



घर में कोविड-19 संक्रमित व्यक्ति के लिए अलग हवादार कमरा और अलग शौचालय हो।



घर में कोविड-19 संक्रमित व्यक्ति की 24 घण्टे देखभाल करने के लिए देखभालकर्ता हो।



कोविड-19 संक्रमित व्यक्ति में कोई गंभीर लक्षण न हों।

अगर आप होम आइसोलेशन के योग्य नहीं पाये जाते हैं आपको अस्पताल में भर्ती होने की सलाह दी जाती है।

### होम आइसोलेशन में

#### रोगी क्या करें

- ✓ घर के अन्य सदस्यों से दूरी रखें और अलग हवादार कमरे में रहें, जहां तक संभव हो खिड़कियां खुली रखें।
- ✓ अपने घरवालों से अलग शौचालय व बाथरूम काम में लें।
- ✓ हमेशा ट्रिपल लेयर मेडिकल मास्क पहन कर रहें और मास्क को 6 से 8 घण्टे के बाद बदलें। इसे पेपर बैग में लपेटकर 72 घण्टे (3 दिन) के बाद ही सामान्य कचरा पात्र में डालें।
- ✓ साबुन व पानी से हाथों को 40 सैकण्ड तक अच्छी तरह धोयें या 70 प्रतिशत एल्कोहल युक्त सैनेटाइजर का उपयोग करें।
- ✓ हमेशा मास्क, रुमाल या कोहनी में ही खांसें या छींकें।

- ♥ ज्यादा छुई जाने वाली सतहों को छूने व उपकरणों का इस्तेमाल करने से बचें। मोबाइल व दैनिक उपयोग की अन्य चीजों को 1 प्रतिशत सोडियम हाइपोक्लोराइट घोल से सैनेटाइज करें।
- ♥ अपने बर्तन, तौलिया, चादर आदि को अलग रखें और दूसरों को काम न लेने दें।
- ♥ यदि आपके शौचालय में ढक्कनदार पॉट है तो हमेशा प्लश करने से पहले ढक्कन को बन्द करें।
- ♥ दिन में दो बार बुखार (Body Temperature) व ऑक्सीजन के स्तर (Oxygen Saturation) की जांच करें।
- ♥ पर्याप्त मात्रा में पानी, ताजा जूस, सूप जैसे तरल पदार्थ पियें।

→ अन्य रोग (शुगर, ब्लडप्रेसर आदि) का इलाज जारी रखें

→ खाने में ताजा फल-सब्जी व प्रोटीन युक्त आहार ज्यादा लें, कार्बोहाइड्रेट कम लें।

→ आइसोलेशन के दौरान शराब, धूम्रपान व अन्य किसी नशीली चीज का सेवन बिल्कुल न करें।

→ पालतू जानवरों से दूर रहें।

→ डॉक्टर द्वारा दी गई सलाह का पालन करें व नियमित दवाइयां लें।

→ अपने मोबाइल फोन पर आरोग्य सेतु ऐप डाउनलोड करें और ऐप पर 24 घण्टे नोटिफिकेशन और लोकेशन ट्रैकिंग, जीपीएस ट्रैकिंग को ऑन रखें।

→ घर पर अतिथियों को न बुलाएं और किसी से न मिलें। स्कूल, बाजार, सार्वजनिक स्थान या सामाजिक व धार्मिक कार्यक्रम में न जाएं।

### कोविड रोगी के लिए

जरूरी है कि तन के साथ ही मन से भी स्वस्थ रहें। इसलिए फोन व वीडियो कॉल पर परिवार के सदस्यों एवं रिश्तेदारों के सम्पर्क में रहें। अपनी पसंदीदा किताबें पढ़ें, टेलीविजन शो एवं फिल्में देखें या अपने मोबाइल पर गेम खेलें।



### स्वास्थ्य की जांच कैसे करें

दिन में दो बार (सुबह और रात) अपने स्वास्थ्य की जांच करें। इसके अलावा जब भी बुखार महसूस हो तो भी ये सब जांच जरूर करें —



थर्मामीटर से अपना तापमान लें।  
(तापमान 100 फेरेनहाइट से ज्यादा न हो)



अपनी पल्स/नब्ज को एक मिनट के लिए जांचें।  
पल्स की जांच के लिए अपनी तर्जनी और मध्यम (अंगूठे के बाद वाली और बीच की उंगली) उंगलियों को कलाई (अंगूठे के आधार) पर रखें। ध्यान से गिनें कि आप एक मिनट (60 सेकेंड) में कितने बीट्स/धड़कनें महसूस कर रहे हैं।  
(पल्स 100 बीट्स प्रति मिनट से अधिक न हो)

### परिवार के सदस्य और देखभालकर्ता क्या करें

अगर घर में कोई कोरोना मरीज़ है तो 24 से 50 वर्ष का कोई भी व्यक्ति उसकी देखभाल कर सकता है। देखभालकर्ता शारीरिक रूप से स्वस्थ होना चाहिए। उसे किसी गंभीर बीमारी जैसे कैंसर, अस्थिमा, सांस की बीमारी, डायबिटीज, उच्च एवं निम्न रक्त चाप (लो ब्लड प्रेशर), हृदय रोग, किडनी की बीमारी आदि न हो।

➤ मरीज़ की देखभाल करते समय हमेशा मास्क (ट्रिपल लेयर मेडिकल मास्क) व डिस्पोजेबल ग्लव्स और एक प्लास्टिक एप्रन का उपयोग करें। एप्रन को हमेशा साफ रखें और सोडियम हाइपोक्लोराइट से साफ करें।

➤ मास्क को 6 से 8 घण्टे के बाद बदलकर पेपर बैग में लपेटकर 72 घण्टे के बाद ही सामान्य कचरे में डालें।

➤ साबुन व पानी से हाथ 40 सैकण्ड तक अच्छी तरह धोयें या फिर 70 प्रतिशत एल्कोहल वाले सैनेटाइजर का उपयोग करें।

➤ बिना हाथ धोये अपने नाक, मुंह व चेहरे को नहीं छुएं।

➤ शौचालय जाने से पहले और बाद में, खाना बनाने से पहले व बाद में अपने हाथों को अच्छी तरह से धोयें।

➤ हाथ धोने के बाद-पेपर टावल या टिशू से हाथों को पोछें। यदि पेपर-टावल उपलब्ध नहीं हो तो अपना एक साफ तौलिया अलग रखें और जब तौलिया गीला हो जाये तो उसे बदल दें।

➤ यदि मरीज़ को उल्टी हो जाती है या कोई भी तरल पदार्थ फैलता है तो बिस्तर से तुरन्त साफ करें। बिस्तर या चादर को गर्म पानी में धोकर, धूप में सुखाएं या अन्य तरीके से सैनेटाइज करें।

- ▶ रोगी के थूक, लार एवं छींक के सीधे सम्पर्क में आने से बचें।  
कोविड संक्रमित रोगी द्वारा उपयोग की गई चीजों के सीधे सम्पर्क में आने से भी बचें।
- ▶ मरीज को उनके कमरे के बाहर ही भोजन पहुंचाएँ। खाना एक स्टूल या टेबिल पर रख दें। ये सुनिश्चित करें कि भोजन देते समय मरीज के सीधे सम्पर्क में नहीं आये और उनकी चम्मच, प्लेट एवं अन्य बर्तन को सम्भालते समय डिस्पोजेबल ग्लव्स का उपयोग करें।
- ▶ मरीज के द्वारा उपयोग किये जाने वाले बर्तनों को साबुन या डिटरजेंट से साफ करें एवं साफ करते समय डिस्पोजेबल ग्लव्स का उपयोग करें। साफ किये गये बर्तनों को वापस काम में लिया जा सकता है।

- ▶ मरीज के कमरे, बाथरूम और शौचालय की सतहों को प्रतिदिन कम से कम एक बार जरूर सैनेटाइज करें।
- ▶ डॉक्टर द्वारा दी गई सलाह एवं उपचार की पालना करें।
- ▶ आप स्वयं भी रोजाना शरीर का तापमान जांचें व स्वास्थ्य की निगरानी करें। अगर बुखार, जुकाम, खांसी या सांस लेने में तकलीफ हो तो तुरन्त डॉक्टर की सलाह लें।
- ▶ अपने मोबाइल फोन पर आरोग्य सेतु ऐप डाउनलोड करें और ऐप पर 24 घण्टे नोटिफिकेशन और लोकेशन ट्रैकिंग, जीपीएस ट्रैकिंग को ऑन रखें।  
यदि आपके परिवार में 60 साल से अधिक उम्र का कोई बुजुर्ग व्यक्ति है या घर में कोई गर्भवती महिला है या छोटे बच्चे हैं या फिर किसी गंभीर बीमारी जैसे कैंसर, अस्थमा, सांस की बीमारी, डायबिटीज, उच्च एवं निम्न रक्त चाप (लो या हाइ ब्लड प्रेशर), हृदय रोग, किडनी की बीमारी आदि से ग्रसित कोई सदस्य हो तो उन्हें कोविड-19 रोगी से दूर रखें।

#### होम आइसोलेशन रोगी के

#### पड़ोसी ये करें

अगर आपकी बिल्डिंग या पड़ोस में कोई कोविड मरीज होम आइसोलेशन में है तो धबरायें नहीं। आपको सिर्फ कुछ सावधानियां बरतनी हैं जिससे आप अपने और अपने परिवार को कोविड से सुरक्षित रख सकते हैं।

बिल्डिंग के कॉमन एरिया जैसे लिफ्ट, सीढ़ियां, रोजाना दो बार 1 प्रतिशत सोडियम हाइपोक्लोराइट के घोल से सैनेटाइज करें।

अक्सर छूने वाली सतहें - जैसे सीढ़ियों की रेलिंग या लिफ्ट के बटन आदि - को छूने से बचें।

जब तक मरीज ठीक नहीं हो तब तक उनकी मदद करें। उनकी जरूरत का सामान जैसे दवाईयां, राशन व सब्जी पहुंचाएं। सामान

उनके घर के दरवाजे पर ही रख दें। पैसे का लेनदेन डिजिटल तरीके से या मरीज के ठीक होने के बाद ही करें।

समय-समय पर उनसे फोन पर बात करते रहें और उनका मनोबल बढ़ाएँ। मरीज के परिवार की हर संभव मदद करें।

जो व्यक्ति कोविड-19 से स्वस्थ हो गए हैं उनसे जुड़ी सकारात्मक बातें साझा करें।

जिनका उपचार चल रहा है, उन्हें संदिग्ध या अछूत के रूप में ना देखें बल्कि उन्हें कोविड-19 को हराने वाले के रूप में देखें।

मरीज या उसके परिवार को किसी भी तरह की परेशानी न पहुंचाएँ। याद रहे लड़ाई बीमारी से है बीमार से नहीं।



#### हाथ धोने का उचित तरीका



सीधा : दोनों हाथों की हथेलियों को सीधा एक साथ रगड़ें



उल्टा : अपनी अंगुलियों को दूर करते हुये अंगुलियों बीच दोनों हाथों को उल्टा पीछे रगड़ें



मुट्टी : अपनी अंगुलियों के पीछे अच्छी तरह साफ करें



अंगूठा : अपने अंगूठे को रगड़ें



नाखून : अपने नाखूनों को अच्छी तरह साफ करें।



कलाई : अपनी कलाई को रगड़ें।

#### आइये मिलकर कोरोना को हराएं



बिना मास्क बाहर न जाएँ



औरों से दो गज की दूरी रखें



बार-बार हाथ धोएँ



सार्वजनिक स्थानों पर न थूकें



भीड़ वाली जगह जाने से बचें

## Tips for Management of your child at home with COVID 19 Infection

### To Monitor Following (4-6 Hourly)

- 1) Pulse
  - 2) Oxygen level (SpO2)
- (To prepare chart with date and time, mentioning above parameters every 4 hours)

Note: A sample Chart is attached in the end

### Ensure Following

- 1) Adequate Food Intake, especially high protein diet
- 2) Adequate Hydration (Give Plenty of water, fresh juices, butter milk etc.)
- 3) Continue Breast Feeding (In case of breast-fed child)
- 4) Paracetamol (Medicine for fever) whenever temperature > 100 F. Dose as recommended by doctor. Can be repeated in 4-6 hours if required, but not more than 4 times in 24 hours (Do sponging with tap water or lukewarm water in such case)
- 5) Total rest
- 6) Take care of good Hygiene

### Get Alerted and act If

- 1) High Fever persisting for more than 4 days or reappearance of fever after a being without fever for more than 1 day.
- 2) SpO2 < 95
- 3) Difficulty in Breathing, fast Breathing
- 4) Bluish discoloration of hand, feet or lips (Cyanosis)
- 5) Severe Diarrhea, vomiting and Abdominal Pain.
- 6) Poor Food and water intake
- 7) Sick look, Lethargy/Excessive sleeping while no fever, Seizures, cold extremities
- 8) Mother feels that the child is deteriorating (even without explanation)

### Please Note:

Everyone in the house needs to follow best possible sanitization, proper mask, and social distancing practices

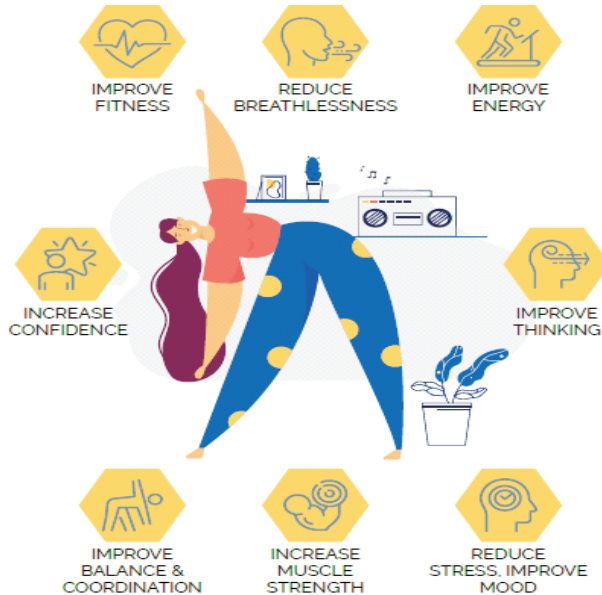
Prof. LK Bharti, Dept of Pediatric Gastromedicine



# Exercise tips for Post COVID 19 recovery

## EXERCISE: WHY IS IT IMPORTANT?

Exercise is an important part of recovery after a severe COVID-19 illness as it can help to:



## EXERCISE: RULES TO FOLLOW

- Always warm-up before exercising, and cool down after exercising
- Wear loose, comfortable clothing, supportive shoes
- Wait at least an hour after a meal before exercising
- Drink plenty of water
- Avoid exercising in very hot weather
- Exercise indoors in very cold weather

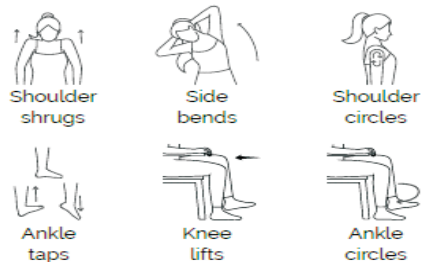


Don't exercise, or stop when you feel...

- Nausea or feeling sick
- Dizziness or light headedness
- Severe shortness of breath
- Increased pain
- Clamminess or sweating
- Chest tightness

## TYPE OF EXERCISES

### WARM-UP EXERCISES



### FITNESS EXERCISES

- Marching on the spot
- Step-ups
- Walking
- Jogging or cycling

### STRENGTHENING EXERCISES

- Bicep curl
- Wall push-off
- Arm raises to the side
- Sit-to-Stand
- Knee straightening
- Squats

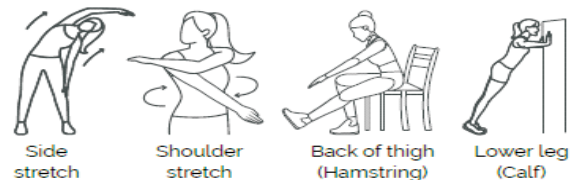
### COOL-DOWN EXERCISES

Cool down exercises should last approximately 5 minutes, breathing should be back to normal by the end. Walking at a slower pace or gently marching on the spot, for approximately 2 minutes. Repeat the warm-up exercises in sitting or standing positions



## TYPE OF EXERCISES

### MUSCLE STRETCHES



### BREATHING EXERCISES

- Diaphragmatic Breathing (Belly Breathing)
- Pranayama- Alternate Nostril Breathing
- Humming
- Self-Awake Prone



### CHEST EXERCISES

#### Incentive Spirometry

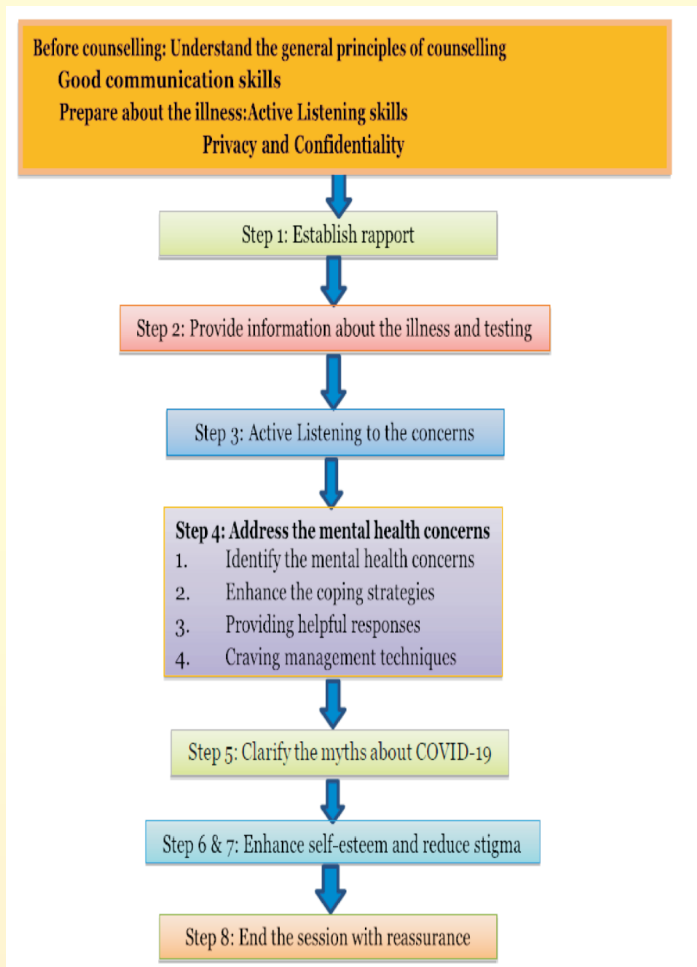


- Put the mouthpiece in your mouth and close your lips tightly around it
- Inhale slowly and deeply through the mouthpiece to raise the indicator
- Remove the mouthpiece and hold your breath for at least 3 seconds
- Exhale normally

#### Balloon Exercise

Blowing balloons works out the intercostal muscles responsible for spreading & elevating the diaphragm and ribcage

# Guidance Document for Psychosocial Counselling for COVID-19 Positive Patients and their Family Members



Try and support the recovery of the patient in such a way that their immediate distress is normalized and managed, their specific concerns are addressed, coping skills are enhanced, and hope perspective is instilled.

**To help counsellors remember the core techniques easily and quickly, the following acronym can be used: SPARC, which stands for Stabilisation, Psychoeducation, addressing Adjustment issues, Coping skill enhancement, and recovery.**

It is important to emphasize that the techniques mentioned need not follow a rigid sequential approach. A counsellor/volunteer may often find cross-over between techniques such that few techniques are more frequently used than others, few are simultaneously clubbed, or few may be reversed in order.

Thus, health care professionals are encouraged to modify, adapt and tailor their preset intervention approach based on guidelines described below to fit the ecology of the culture, place, type and severity of distress of the patients with COVID-19.

## Psychosocial counselling for Family members/primary contact of COVID Positive patients (COVID+ family member CFM or primary contact CPC)

1. Person-to-person transmission most commonly happens during close exposure to a person infected with the virus that causes COVID-19, primarily via respiratory droplets produced.
2. Older adults or those with underlying chronic medical conditions may be most at risk for severe outcomes, and therefore anxiety for and among the elderly members of the family surfaces. Also, not having the opportunity to grieve also adds to the stress.
3. The purpose of good counseling is to make a family member/ close contact of COVID Positive patient feel prepared and informed in facilitating their response role. It would be crucial that they know of local resources and services available for the sick person.
4. Address Perceived self-risk and anxieties: Regardless of their health status, CFM/ CPC are likely to report distress due to fear and risk perceptions and fears about COVID 19
5. Social distancing related issues: Physical distancing, self-isolation and quarantine and many times working from home are triggering reactions of isolation, loneliness, and loss of social contacts among the large number of people worldwide. A need to provide support, reassurance, providing valuable and adequate information, and solving practical issues will be required.
6. Issues related to Family Care Giving: From care provision to the patient at home, there can be loss in empathy or what may be termed as compassion fatigues.
7. Stigma & Discrimination: There are mental health and psychosocial consequences of discrimination towards persons who have been infected and their family members, and there is a social stigma towards them. Dispel myths and misconceptions and give advice on how to seek correct information.

ICMR 2021

## ‘कोरोना और प्यार’

बंद कमरे में बेचैन मन, तपता तन, उष्ण नयन –  
दिन गिनना और इंतजार, पल-पल हों बस एक पुकार  
रात में जगना, दिन में सोना, कभी-कभी उम्मीदें खोना,  
चंचल चित और मन उदास कोई भी नहीं आस-पास,  
उस एक दिवस की चिर प्रतीक्षा और नहीं कोई भी इच्छा!  
प्यार और कोरोना में बड़ी समानता है।  
जिसे हुआ बस वही जानता है !

डॉ. आर. हर्षवर्धन, विभागाध्यक्ष, अस्पताल प्रशासन



## SGPGI COVID Vaccination Drive

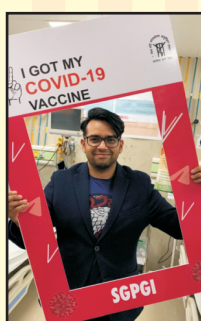
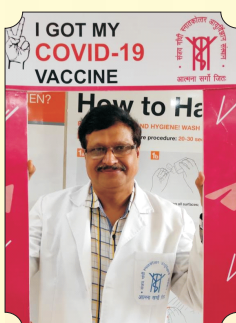
The world is in the midst of a COVID-19 pandemic. While all countries, including India, are taking measures to contain the spread of COVID-19 through better diagnostics and treatment, vaccines are the most cost-effective means to provide a lasting solution by enhancing immunity and containing the disease spread. Vaccines have shown a high level of efficacy across all populations.

As per guidelines, COVID-19 vaccine was initially offered first to healthcare workers, frontline workers and population above 50 years of age, followed by population below 50 years of age with/without associated comorbidities based on the evolving pandemic situation. SGPGI started its COVID-19 vaccination programme on 16<sup>th</sup> January, 2021 as per directive

of U.P government. It was inaugurated by our director, Prof R Dhiman who himself took the first vaccine dose at SGPGI. Under his able guidance and hard work of our staff, SGPGI vaccination drive has vaccinated more than 30,000 people so far, including more than 95% SGPGI health care workers.

Since 1<sup>st</sup> May, 2021, vaccination coverage has been additionally expanded to cover all adults more than 18 years. We are ready to be in forefront of vaccination drive so as to help as many people as possible and contribute in combating the COVID-19 pandemic.

**Dr Samir Mohindra,**  
Prof., Dept. of Gastroenterology



## Useful Tips to Remember Regarding COVID Vaccination

- Get a COVID-19 vaccine as soon as you can.
- Most people with underlying medical conditions can safely receive the COVID-19 vaccine. Continue taking medications for your underlying medical conditions around the time of your COVID-19 vaccination. If in doubt, talk to your doctor for vaccination advice.
- Until more is known, fully vaccinated people should also continue to wear masks and stay 6 feet apart from other people when they are in public or visiting with unvaccinated people from multiple households.

As per new recommendations of National Expert Group on Vaccine Administration for COVID-19 (NEGVAC) issued on 19.5.2021:

1. COVID19 vaccination to be deferred by 3 months after recovery from the illness. If infected with COVID after 1st dose, 2nd dose to be deferred by 3 months after clinical recovery from COVID-19 illness
  2. An individual can donate blood after 14 days of either receipt of COVID-19 vaccine or testing RT-PCR negative, if suffering from COVID-19 disease.
  3. SARS-2 COVID-19 patients who have been given anti-SARS-2 monoclonal antibodies or convalescent plasma: COVID-19 vaccination to be deferred by 3 months from the date of discharge from the hospital.
  4. COVID-19 vaccination recommended for all Lactating Women
  5. No Screening of vaccine recipients by Rapid Antigen Test (RAT) prior to COVID19 vaccination
- Based on current evidence, it must be ensured that the entire schedule of vaccination is completed by only one type of vaccine as different COVID-19 vaccines are not interchangeable.
  - Recent Government of India guidelines have revised the dosing guidelines for administering COVISHIELD vaccine, with the second dose now being recommended, to be taken 12-16 weeks after the first one. The 12-week interval isn't the first to be adopted in India. Spain is also a country where the recommendations are being followed after clinical studies showed good response. 12-16 week window may showcase a higher antibody and immune response than before, and serve a larger purpose of driving up community-wide immunisation at a critical juncture like right now.

## The SGPGI Antibody Project: Any New Turnaround in the Immune BOOSTERS Developing in You

A safe and effective vaccine against SARS-CoV-2 has recently emerged as an important tool for the control of this pandemic. An ideal vaccine against SARS-CoV-2 should be effective after one or two vaccinations; should protect target populations such as older adults and those with comorbidities, including immunocompromised individuals; should confer protection for a minimum of 6 months; and should reduce onward transmission of the virus to contacts.

**Dr Alka Verma**, Dept of Emergency medicine, along with **Prof. Amita Agarwal**, Head, Dept of Immunology, **Prof. RK Singh**, Head, Dept. of Emergency Medicine, **Dr Amit Goel**, Dept of Gastromedicine and **Dr Dheeraj Khetan**, Dept of Transfusion Medicine are carrying out a study to assess the immunological response to the recommended two-dose schedule of Covishield® in a real-life setting among asymptomatic health care workers employed in our institute.

The planned study will help us know the seroconversion rate as well as the persistence of antibody response up-to 1 year after COVISHIELD vaccine. In addition, as a secondary outcome, it will also help us to know the impact of pre-existing antibodies on vaccine response as HCW are at the highest risk of having pre-existing antibodies due to high exposure. Insight into the antibody response among health-care workers may act as a reference point for community vaccination. Documentation of adverse reactions and side effects will further add to the understanding of safety profile of the vaccine.

## When the going gets tough, the tough get going...

Microbiology services are the backbone of war against Covid. **SGPGI Microbiology** department has worked tirelessly 24X7 for more than a year and have been diligently doing Truenat and COVID RTPCR tests and providing reports to clinicians to decide further course of management. Despite a lot of their staff, doctors and their families falling sick during the Second wave, the work has continued unabated. Till date nearly 12,60,000 RT-PCR and more than 7000 truenat test have been done by the department. The initial testing capacity that was around 5100 RTPCR tests was increased to approx 12000 RTPCR tests per day. While working round the clock, the Microbiology department has also published nearly 10 papers on various aspects of Covid-19 in various good impact journals. The department is committed and determined to carry on its hard work and contribute in the fight against this deadly epidemic.

**Dr. Ujjala Ghoshal, Head, Dept. of Microbiology**



## Program on Management and Treatment of Mucormycosis in COVID-19

Mucormycosis is an uncommon opportunistic invasive fungal infection which occurs in immunosuppressed patients. These fungal spores are prevalent in the air and on decomposed debris and gain entry into sinuses and lung by breathing contaminated air. Patients of COVID-19 with uncontrolled Diabetes, undergoing treatment with steroids are at heightened risk of Mucormycosis.

A virtual program in this context was organized on 15th May 2021 which was shared with 52 medical colleges of Uttar Pradesh. **Prof. R K Dhiman, Director, SGPGI** welcomed the participants and speakers. Addressing the participants, he emphasized on a multidisciplinary approach for managing these patients that includes a Microbiologist, ENT specialist, Ophthalmologist and Diabetologist.

**Dr R K Singh, Professor and Head, Emergency Medicine, SGPGI** elaborated on the types of Mucormycosis, its prevention and early diagnosis. He informed that Rhino-Orbital-Cerebral (ROC) Mucormycosis is the most common and aggressive form common in diabetics. A high index of suspicion is essential for effective management and optimal outcome. While prevention is the key, often-prolonged antifungal therapy and early and aggressive surgical intervention by trained ENT specialists is urgently needed.

**Dr Amit Keshri, Professor, Neurootology, SGPGI**, said that Patients with uncontrolled diabetics with high ferritin levels due to Covid are at high risk. Detailed radiological evaluation, ENT examination and inputs from Microbiology help

establish an early diagnosis. An MRI can delineate the areas involved by Mucor in sinus, orbit and brain as blood supply to involved areas is cut off. Early surgery in the first or second stage can be planned by the ENT surgeon with good results.

**Dr Rachna Agarwal, Dept of Ophthalmology, SGPGI** elaborated on the involvement of eyes in mucormycosis. She said that vision loss should be documented and examination of pupils and ocular movements should be done. Early surgery should be done to prevent vision loss and it can be done in all the medical colleges by trained Ophthalmologists. **Dr Rumi S Marak, Professor, Microbiology, SGPGI**, explained the need and techniques of sampling and tissue biopsy for diagnosing Mucormycosis.

This was followed by an educative talk by **Dr Subhash Yadav, Professor, Endocrinology**, who elaborated on treatment modalities to manage blood sugars in managing this deadly fungal infection.

To summarize, the key points were : Screen for mucormycosis at time of admission and during hospital stay as well as during follow up, identification of high-risk patients, stricter glycemic control, judicious use of steroids in COVID, wearing of mask at all times by patients and improved air quality index within hospital.

The session was attended by 546 participants and more than 170 questions were asked by them, with many of them asking for a revision session.

In view of the rising number of COVID-19 cases Associated Mucormycosis (CAM) being reported in SGPGI, a **CAM Management Team has been constituted for its comprehensive management**. This group shall will be responsible for creating raid response teams (RRT's), making treatment protocols, ensuring availability of medicines and database of cases, creation of state-level teams, sensitization of HCW's for early diagnosis and management of CAM and recommendations to reduce panic among public and HCW's.



## स्मृति शेष



श्री बसंत लाल शर्मा



श्री बशीर मसीह



श्री कमान सिंह बिष्ट



श्रीमती माधुरी डेनियल



श्री नवीन कुमार शुक्ला



श्री सतीश बाबू



श्री सावन खोखर



श्रीमती विनीता वेसली



श्री विनोद कुमार पांडेय



श्री डेविड जे वर्धे

काल के क्रूर हाथों ने एक बार फिर संस्थान परिवार के कुछ सदस्यों को हमसे छीन लिया। हम सभी शोकाकुल हैं, व्यथित हैं और ईश्वर से प्रार्थना करते हैं कि उनकी आत्मा को शांति प्रदान करें तथा शोकाकुल आत्मीय जनों को इस अपार पीड़ा को सहने की शक्ति प्रदान करें।

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