

Protocol for Psychosocial Rehabilitation of Covid-19 Patients for BNYS Doctors



सत्यमेव जयते
Ministry of AYUSH



Developed by
**Central Council for Research in
Yoga & Naturopathy (CCRYN)**
Ministry of AYUSH



In Collaboration with
Department of Integrative Medicine and
Department of Psychiatric Social Work
**National Institute of Mental Health
and Neurosciences (NIMHANS), Bengaluru**



and
**Swami Vivekananda
Yoga Anusandhana Samasthana (S-VYASA)**
Bengaluru

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(S-VYASA), Bengaluru

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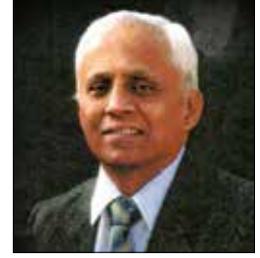
Foreword

The resurgence of Covid 19 has enhanced the burden on the healthcare workforce in our country. The healthcare institutions in parts of our country have been overwhelmed by the sheer burden of cases. It has become impossible under these circumstances to pay attention to every patient. The accompanying psychologic distress and sequel in covid 19 patients are often ignored and not managed. There have been reports of anxiety and acute depression leading to suicides in covid care hospitals. Most of the patients have had to contend with isolation anxiety, distress due to fear of worsening of symptoms, respiratory distress, hypoxia, fatigue and insomnia and other symptoms. Yoga and naturopathy interventions have been shown to reduce respiratory distress, reduce anxiety and stress, improve sleep and help in recovery of covid 19 patients. Simple breathing exercises and pranayama have been shown to enhance SPO2 levels in symptomatic patients and those with respiratory distress. We believe that we need to address these symptoms and psychologic sequele of covid 19 patients. CCRYN in collaboration with psychologists and psychiatrists and Yoga and naturopathy experts have designed a program to educate BNYS doctors on management of patients with Covid-19 in an online mode. This program will help impart knowledge about epidemiology of Covid19, course of disease, screening for distress and psychologic sequele, management of distress and psychologic sequele using Yoga and Naturopathy approaches. CCRYN thanks NIMHANS and S-VYASA for putting together this coursework for benefit of BNYS doctors.

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राष्ट्रीय आयुर्विज्ञान आयोग
National Medical
Commission



Message

Central Council for Research in Yoga & Naturopathy (CCRYN), Ministry of AYUSH, New Delhi has taken the initiative of developing this training module *in collaboration with* Department of Integrative Medicine and Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru and Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA), Bengaluru. This training is for BNYS Doctors to equip them to provide Psychosocial Rehabilitation Services to COVID-19 Patients.

This pandemic has shifted our attention to provide reinforcement and to strengthening of the health care system, as health is central to the overall well-being of a country. Till now we lack definitive bio-medical approach of dealing with this situation comprehensively. We should therefore explore the rich source of traditional knowledge as Integrative Medicine for the benefit of the entire mankind. To achieve the same, it is urgently needed that we train the professionals from these backgrounds such as BNYS. This can help in enhancing the solidarity of our healthcare system by providing significant support in the form of trained professionals who can act as frontline Corona warriors until we find a definite solution to this problem.

Further as Mental Health rehabilitation is considered an important aspect in recovery from COVID 19 pandemic, provision of mental health counselling along with yoga and naturopathy services would help the patient recover and integrate better into the community. I congratulate the team behind the idea that has led to the development of this training module. I earnestly appeal to BNYS doctors across India to benefit from this module to deal with the Second Wave of COVID-19 Pandemic in a holistic way.

Dr. B N Gangadhar

Former Senior Professor of Psychiatry and Director NIMHANS, Bengaluru
President EMRB, National Medical Council, Delhi



S-VYASA

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Message



The initiative taken by Central Council for Research in Yoga & Naturopathy (CCRYN), Ministry of AYUSH, New Delhi *in collaboration with* Department of Integrative Medicine and Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru and Swami Vivekananda Yoga Anusandhana Samasthana (S-VYASA), Bengaluru is commendable. This pandemic has demonstrated that health is central to the overall well-being of a country and we are well versed with the standard guidelines by our health system of how to prevent Covid-19 infection i.e. by testing, tracing & isolating and treating with available methods to break the chain. But still we haven't found a proven method to deal with the same. Evidences show that regular practices of Yoga and Naturopathy based lifestyle can help in reducing severity of symptoms and improve quality of life in infectious conditions. From thousands of years these ancient lifestyle principles have been used to deal with the pandemic situations in India. Thus, it is the need of the hour that we explore the potential of traditional systems of medicine and combine them with modern medicine and psychosocial rehabilitation counselling to provide the best possible healthcare to the patients. We also should also explore innovative ways of delivering such healthcare facilities using cutting edge technology, for e.g., training the BNYS doctors so that the load on the modern medicine doctors is significantly reduced. This training module is aimed at training the BNYS Doctors to provide Psychosocial Rehabilitation Services (especially Yoga, Naturopathy and Mental Health Counselling) to COVID-19 patients. We expect that by the release of this training module more BNYS doctors would be able to join the health care force of India in helping our modern medicine doctors in managing the Second Wave of Covid-19 pandemic efficiently.

Dr. H R Nagendra

Chancellor, S-VYASA Deemed to be University
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Contents

Session I:	
Covid-19 Pandemic: Epidemiology, Diagnosis and Preventive Care	15
Session II:	
Mental Health Sequelae of Covid-19	20
Session III:	
Assessment of Psychosocial Issues in Covid 19 Patients	25
Session IV:	
Naturopathy Intervention for Management of Covid-19	31
Session V:	
Yoga Intervention for Management of Covid-19	36
Session VI:	
Psychosocial Rehabilitation Intervention for Management of Covid-19	40
References	46

Session I

Covid-19 Pandemic: Epidemiology, Diagnosis and Preventive Care

Duration of training for Session I: 90 minutes

Introduction

Coronavirus disease (COVID-19) pandemic is a new challenging issue to the health care system worldwide. It is caused by the “novel corona virus” which leads to mild symptoms similar to a common cold. Signs and symptoms include fever, cough and respiratory symptoms like shortness of breath. Infection can cause pneumonia, severe acute respiratory syndrome and sometimes death in more severe cases.

More vulnerable population who are more likely to develop serious illness are people older than 60 years, and those with underlying health conditions like high blood pressure, cardiovascular disease, diabetes, chronic respiratory disease, and cancer. COVID-19 not only affects the respiratory system but also has its impact on mental health and immune system. The prevailing treatment for COVID-19 in India is only a symptomatic treatment, prevention of any further complications and supportive care.

Epidemiology of COVID-19

The virus is primarily transmitted through large droplets. Air borne particulate nuclei is a potential mode of transmission and a viral load of a minimum of 1000 viral particles are necessary to infect. COVID-19 infection can happen either by direct close contact with the patients (within 1-mt of the infected person), especially if infected person do not cover their mouth when coughing or sneezing or by indirect contact upon touching those droplets on the surfaces or clothing and then touching one’s mouth, nose or eyes. The incubation period of COVID-19 ranges from 1 to 14 days with a median of 5 to 6 days. Infected asymptomatic person can also spread the disease.³

A new strain of coronavirus that previously that was not identified in humans earlier, emerged in Wuhan, China in December 2019 where a number of patients with pneumonia symptoms were reported.⁴ Globally in the beginning of September 2020, there are almost 26-million confirmed cases, recording over 18.2 million recoveries and 0.8 million deaths as per the report of World Health Organization (WHO).⁵ Latest updates can be availed from WHO Coronavirus Disease website.

In India, first COVID-19 case was recorded on 30th January 2020. India currently has the largest number of confirmed cases in Asia and has third highest number of confirmed COVID-19 cases

globally after the United States and Brazil. In the beginning of September 2020, there are a total of 3.8 million confirmed COVID-19 cases reported in India. According to the Union Health Ministry data, India has been reporting one of the lowest COVID-19 fatality rates globally with the figure of 1.76% against a global average of 3.3% as on the date. Average COVID-19 deaths globally are 110 deaths per million population, while India reporting only 48 deaths per million population. India has the recovery rate of 76.98% with 2.9 million recovered cases till date and is reported as the second-best country with recovery rate among the top five countries by confirmed cases.

Diagnosis of COVID-19

Early testing and accurate diagnosis of COVID-19 is crucial to control outbreaks and improving health in the community and in hospitals. The WHO has published several testing protocols for the disease. The WHO guidelines states that the decision to test should be based on clinical and epidemiological factors and linked to an assessment of the likelihood of infection. According to the WHO, screening protocols should be adapted to the local situation.

Clinical diagnosis of COVID-19 is mainly based on:

- Epidemiological history,
- Clinical manifestations
- Some auxiliary examinations, such as Nucleic Acid Detection, CT scan, Immune identification technology (Point-of-care Testing: POCT) of IgM/IgG and ELISA.

Screening and Testing

Reverse Transcriptase - Polymerase Chain Reaction (RT-PCR) testing of symptomatic, asymptomatic or mildly symptomatic cases can be considered for the assessment, including the individuals who have had contact with a COVID-19 case. The swab specimen (nasopharyngeal and an oral swab) and/or a lower respiratory tract sample such as expectorated sputum, tracheal aspirate, or broncho-alveolar lavage is submitted for RT-PCR testing. Serum or viral cultures are not recommended.

- **Tests for Viral RNA:** Reverse Transcription-PCR is the Standard test and highly sensitive. It directly detects COVID-19 by identifying viral RNA through nucleic acid amplification, usually using PCR. Viral RNA is extracted from that solution and subsequently amplified by reverse transcription-PCR.
- **Tests for Serology:** Rapid Antigen Test (RAT) has shown high specificity but false negativity of more than 60% and not yet reliable. Thus, this test should be used for screening. If the person is positive by this test, then he is definitely positive but if the result is negative, then he may or may not be negative. The other broad category of tests is those that detect IgM,

IgA, IgG, or total antibodies-typically in blood. Development of an antibody response to infection can be host dependent and takes time.

- **The High-Resolution Computerized Tomography (HRCT) scan:** CT scan is a necessary auxiliary diagnostic method as it is more sensitive and have a great clinical diagnostic value for COVID-19. The typical CT images show bilateral pulmonary parenchymal ground-glass and consolidative pulmonary opacities, sometimes with a rounded morphology and a peripheral lung distribution. These findings on HRCT scan have been noticed even before the presentation of symptoms.
- **CT imaging of asymptomatic cases with COVID-19:** All asymptomatic cases show an abnormal CT finding. Ground-glass and consolidative pulmonary opacities are the main CT manifestation in this cluster of patients. The lesions of CT imaging in asymptomatic patients were predominantly located in the peripheral and subpleural area of the lung (75.9%), mostly involving one or two lung lobes (65.5%).

Clinical Characteristics

In general, the clinical presentation has involved fever in 83-98% of patients, dry cough in 76-82%, fatigue or myalgias in 11-44%, anorexia in 40-84%, shortness of breath in 31-40%, sputum production in 28-33% and myalgias in 11-35%. Approximately 20% of patients require oxygen supplementation and intensive care and 10% of patients require mechanical ventilation. Presentations of COVID-19 have ranged from asymptomatic/mild symptoms to severe illness and mortality. Patients can be grouped into the following illness categories:

- Asymptomatic in 50 to 60% population.
- Mild to moderate illness- signs and symptoms of fever, cough, sore throat, malaise, headache, muscle pain without shortness of breath, dyspnea, or abnormal imaging in mild and evidence of lower respiratory disease by clinical assessment or imaging with an oxygen saturation (SaO₂) over 93% on room air at sea level in moderate are seen in 80% population.
- Severe illness- dyspnea, hypoxia, or >50% lung involvement on imaging in 15% population.
- Critical disease- 5% of cases has respiratory failure, septic shock, and/or multiple organ dysfunction or failure.

Extra-pulmonary Manifestations and Systemic Complications¹⁷

- Gastro intestinal-cramps
- Colorectal-diarrhoea
- Olfactory loss of taste
- Loss of speech

- Kidney damage and acute kidney injury is emerging in the context of critical forms of COVID-19,
- Sepsis and septic shock etc.

Preventive measures and preventive care

Lately, India has developed its own vaccination against COVID-19 and nationwide inoculation for the public is in progress. Even though the cure has been found, it is always better and safe to follow preventive measures to limit the spread of COVID-19 cases.

»» *General recommendations issued by The WHO and other authorities:*

- Hands should be cleaned regularly and thoroughly with an alcohol-based hand rub or should be washed with soap and water.
- Use of face covers/masks should be done mandatorily when in public places and when around the people who don't live in one's household. The use of a medical mask is advised if there are any respiratory symptoms (coughing or sneezing) to protect others.
- Social distancing of at least 1 meter (3 feet) is to be maintained in public places.
- Avoid mass gatherings and going to crowded places where it is more difficult to maintain social distancing.
- Touching eyes, nose and mouth should be avoided.
- Good respiratory hygiene like covering mouth and nose while sneezing or coughing with a tissue/ handkerchief/flexed elbow and disposing the used tissues immediately followed by hand washing should be followed.
- If there are minor symptoms such as cough, headache, mild fever, staying at home is advised until the recovery. Any required supplies should be brought by someone else and staying at home with self-isolation is strictly advised.
- If there are symptoms of fever, cough and breathing difficulty, immediate medical attention should be sought by calling and reporting it the local health authorities.
- One should be updated with the latest information about advisories from trusted sources, such as the WHO or the local and national health authorities.
- Cleaning and disinfection of the frequently touched surfaces like tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks should be done daily.
- Unnecessary travelling or eating in public places has to be avoided.

►► ***Measures and care to be taken by BNYS students while dealing with COVID-19 patients:***

- Wear personal protective equipment (PPE) if you are in the same room as the COVID patients during the yoga sessions or while administering the naturopathic interventions.
- Sanitize your hand with alcohol-based hand sanitizers (for at least 20 seconds) before and after administering the naturopathy or yogic intervention.
- Be empathetic, respectful, compassionate, show dignity and always show a positive attitude towards the patient while talking or administering the intervention.
- Maintain professional boundaries with the patients and always maintain patient confidentiality.
- Keep monitoring your health condition every day and any signs and symptoms of cough, fever, respiratory distress etc., should be addressed at the earliest and report it to state and district helpline.
- Students are encouraged to practice stress management techniques for maintaining their good mental health.
- Eat nutritious, healthy, balanced home cooked food.
- Maintain good sleep hygiene and at least 6-7hrs of sleep every day is required to maintain good personal health.

Session II

Mental Health Sequelae of Covid-19

Duration of training for Session II: 90 Minutes

Session Objectives:

- To educate the participants about psychosocial issues during COVID pandemic

Introduction

The coronavirus disease 2019 (COVID-19) pandemic is a major health crisis that affected the people around the world and presents substantial challenges to global health and social care systems (Heymann and Shindo, 2020). It is documented that in any epidemic, it is common for individuals to feel stressed and worried. Common responses of people affected (both directly and indirectly) might include:

- *Fear of falling ill and dying due to the pandemic*
- *Avoiding approaching health facilities due to fear of becoming infected while in care*
- *Fear of losing livelihoods, not being able to work during isolation, and of being dismissed from work*
- *Fear of being socially excluded/placed in quarantine because of being associated with the disease (e.g. racism against persons who are from, or perceived to be from, affected areas)*
- *Feeling powerless in protecting loved ones and fear of losing loved ones because of the virus*
- *Fear of being separated from loved ones and caregivers due to quarantine regime*
- *Refusal to care for unaccompanied or separated minors, people with disabilities or the elderly due to fear of infection, because parents or caregivers have been taken into quarantine*
- *Feelings of helplessness, boredom, loneliness and depression due to being isolated*
- *Fear of reliving the experience of a previous epidemic(WHO)*

Types of common mental illnesses during COVID 19

The COVID 19 pandemic and infection resulted in issues such as social and economic challenges for daily workers. Most have to take care of their families and responsibilities. Individuals might feel overwhelmed due to the poor support system and poor coping skills and may struggle to manage problems. Alongside this, many feel anxious sometimes excessively about getting infected. Most people with a common mental disorder have a mixture of symptoms of depression and anxiety. Most never complain of feeling or thinking symptoms as their main problem but instead experience physical and behavioural symptoms. Most may show more than one psychological presentation. For example, anxious people may also have features of depression and drink alcohol to reduce symptoms

Let us discuss some of the common mental health issues during the pandemics, let us start with discussing a case.

1) Depression and Suicidality

Case Vignette

Mr K is a married tailor with three young kids and family. His elder parents with medical conditions also staying with Mr K. He lost his job due to pandemic as a part of lockdown. Mr K's financial commitment has increased due to unemployment and he often worries about his family's life. Mr K has poor primary and secondary support. After a few days of pandemic he observed to have difficulty in falling into sleep, he is become very dull not doing anything at home nor playing with his younger kids. The wife also observed him crying at night by thinking about his future. Further, Mr K started complaining about low appetite, reduced interest in activities which he was doing earlier. He often reports to the wife that "the world is going got end and it is better to die before that". The family has no clue about Mr K's condition.

What is depression

During the pandemic situation, while seeing the impact of it in human life and while having the symptoms of the infection by ourselves and for the family members, the person can feel the low mood. Depression means feeling low, sad, fed up or miserable. It is an emotion that almost everyone suffers from at some time in their life. To some extent, it can be thought of as 'normal'. But there are times when depression starts to interfere with life and then it becomes a problem.

For example, everyone gets spells of feeling sad but most people manage to carry on with life and the spell goes away. Sometimes, however, the depression lasts for long periods, even more than a month especially in the pandemic situation where strict policies were accepted to control the infection. It is associated with disabling symptoms such as tiredness and difficulty concentrating. The feeling starts to affect daily life and makes it difficult to work or to look after small children at home. If depression starts to get in the way of life and lasts for a long period, then we can assume that the person is suffering from an illness.

Symptoms of Depression

- Negative thoughts about oneself
- Pessimistic views about one's future
- Thought about self-harm/wanting to live no more or suicidal thoughts
- Difficulties in concentration

Behaviour related

- Isolating oneself from others
- Not taking care of oneself
- The reduced overall level of activities

Feeling

- Persistent sadness
- Not having the motivation to do things
- Low interest in activities that were interesting earlier
- Experiencing low energy

Other symptoms

- Disturbed sleep and appetite
- Reduce weight

Suicide and management

People with depressive symptoms or independently during a stressful situation like pandemic can express suicidal thoughts. Suicide is an act of ending one's life. It is usually associated with a sense of hopelessness and helplessness. Suicide attempts may be planned or impulsive.

What are the warning signs?

- Talking about wanting to die or to kill oneself due to unexpected life situations during the pandemic. (Eg: Fear of losing a job)
- Looking for a way to kill oneself, such as searching for methods on the internet, in newspapers or buying sleeping pills or pesticides
- Talking about feeling hopeless or having no reason to live. (Eg: stating that, "anyways situation is uncontrollable and all the people would die due to the pandemic")
- Talking about feeling trapped or in unbearable (eg: Reporting that there are no other ways to manage financial commitment due to this pandemic situation).
- Talking about being a burden to others.

- Increasing the use of alcohol or drugs.
- Acting anxious or agitated; behaving recklessly. (Eg: Getting angry for a trivial reason, pacing around in the room excessively)
- Sleeping too little or too much. (Eg: Early morning awakening)
- Withdrawing or feeling isolated. (Eg: Not interacting with anyone in the house)
- Displaying extreme mood swings. (Eg: Crying without any reason or showing extreme anger)

II. Anxiety disorders

Case 2

Mrs P is 31 years old nurse working in the causality of the district hospital. Mrs P is married with two kids. Her elderly in-law parents stay with her. During the pandemic, she starts feeling afraid and her mind keeps telling her that something really bad has happened to the family and kids. She has been recently posted to the COVID-19 ward. She feels anxious and panicky thinking of the risk of transmitting the infection to her parents. Her children cry when she goes for work and this makes her tearful. She worries that she cannot manage her family and work. Further, She finds it difficult to relax. She also recognizes that he is more anxious than is necessary but is not able to stop it. And if asked what she is anxious about, he has no clear answer, which further frustrates her.

What is an anxiety disorder

Anxiety is the sensation of feeling fearful and nervous. Like depression, this is normal in certain situations. For example, a person might feel anxious that his family would affect COVID infection. Some people seem to be always anxious but still seem to cope. Like depression, anxiety becomes an illness if it lasts long (generally more than two weeks), is interfering with the person's daily life or is causing severe symptoms

Signs and Symptoms of anxiety

People with extreme or severe anxiety feel very worried or “on the edge” much of the time. They can have trouble sleeping or forget things. Plus, they can have physical symptoms. Other symptoms follow,

- Worries about things going wrong
- Preoccupation with various every-day events
- Difficulties in concentration
- Constant apprehension
- Inability to feel at ease/relaxed

- Bodily symptoms such as shortness of breath, sweating, abdominal discomfort, dry mouth

III) Substance use disorders and management during COVID 19

A person is said to be dependent on alcohol or drugs when their use harms the person's physical, mental or social health. Typically, it becomes difficult for people to stop using these substances because they may develop physical discomfort and an extreme desire to consume the substance ('withdrawal syndrome'). In the pandemic related stressful situation often increase the use of substances (frequency/quantity) for a variety of reasons which may include stress, boredom etc

- Change in pattern of existing substance use such as an increase in frequency and quantity (commonly Alcohol/Tobacco).
- Use of additional substances along with using of exiting substance

IV) Grief

Pandemics can cause tragic loss of lives. People may lose their family members, friends, and other loved ones. Things can be further aggravated owing to the inability to attend funerals, guilt regarding the inability to save etc. Individuals with complicated grief have a greater risk of adverse health outcomes, should be diagnosed and assessed for suicide risk and comorbid conditions such as depression and posttraumatic stress disorder, and should be considered for treatment. (Simon, 2013; Crunk, Burke and Robinson, 2017)

V) Sleep disturbances

One of the common issue during a stressful situation. Distress, anxiety, exhaustion, shift work, substance use can all present with sleep disturbances. It is important to clarify these aspects when frontline personnel report with sleep disturbances. Sleep disturbance may present with difficulty in

- Initiating sleep
- Frequent awakenings during the night
- Early morning awakening
- Excessive sleep (relatively infrequent)

Session III

Assessment of Psychosocial Issues in Covid 19 Patients

Duration of training for Session III: 90 minutes

Introduction

Assessments will be taken to understand the beneficial effects of naturopathy, yoga, and psychosocial interventions. All the assessments are self-assessed by patients in a quiet room. If the patient is not able to understand the language, COVID warrior can assist the patient.

The assessment is taken before the start of the intervention, and post-assessment will be taken after 10 days. Follow up assessment can be taken at 30 days.

The duration of conducting all the said assessments is 30 minutes.

1. Self-rated questionnaire:

The Likert scale is a five-point scale that is used to allow the individual to express how much they agree or disagree with the statement, mainly used in clinical research to measure the intensity or frequency of symptoms.

For each question below, circle the response that best characterizes how you feel about the symptom in the last days

Name _____ Date _____

Age _____ Gender (Circle): M / F

Tick the appropriate box in the symptoms given

Sl.No	List of symptoms	No symptoms	Mild	Moderate	Severe	Very severe
1	Fever	0	1	2	3	4
2	Sore throat	0	1	2	3	4
3	Cough	0	1	2	3	4
4	Runny nose	0	1	2	3	4
5	Shortness of breath	0	1	2	3	4
6	Chills	0	1	2	3	4

7	Vomiting	0	1	2	3	4
8	Nausea	0	1	2	3	4
9	Diarrhoea	0	1	2	3	4
10	Headache	0	1	2	3	4
11	Rash	0	1	2	3	4
12	Muscle ache/joint ache	0	1	2	3	4
13	Loss of appetite	0	1	2	3	4
14	Loss of smell	0	1	2	3	4
15	Fatigue	0	1	2	3	4
16	Other symptoms	Yes No If yes, specify:				

2. Perceived Stress Scale (PSS):

PSS is a self-reported psychological instrument to measure the perception of stress. PSS-10 is a 10-item scale assessing the thoughts and feelings of the individual which particularly evaluates the degree of life which has been unpredictable, uncontrollable and overloaded in the past one month. It has two factor structure including negative word items (requires non-reverse worded scoring) and positive word items (requires reverse worded scoring). Items are general in nature, not specific to any particular event and has to be answered quickly. (Lee, 2012)

PSS Questionnaire

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name _____ Date _____

Age _____ Gender (Circle): M/F

0 = Never | 1 = Almost Never | 2 = Sometimes | 3 = Fairly Often | 4 = Very Often

1.	In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2.	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3.	In the last month, how often have you felt nervous and “stressed”?	0	1	2	3	4
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5.	In the last month, how often have you felt that things were going your way?	0	1	2	3	4

6.	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7.	In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8.	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9.	In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

Scoring:

- Add up the response scores of six negatively stated items i.e., 1, 2, 3, 6, 9 & 10
(e.g., 0=0, 1=1, 2=2, 3=3, 4=4)
- Reverse scoring of the responses four positively stated items 4, 5, 7, & 8 to has to done
(e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) and then summed up
- Now add both summed up scores together to know the perceived stress levels.

Total =

Interpretation of scoring:

0-13: Low stress

14-26: Moderate stress

27-40: High perceived stress

3. Yoga Performance Assessment (YPA):

YPA is a yoga instructor rated scale which helps to rate the performance of subject’s practice during the supervised yoga sessions. The scale consists of two domains:

- (i) Performance of individual practices are scored on a scale of 0-3 [0-Can’t practice at all, 1-Needs assistance throughout the practice, 2-Needs assistance through some steps of the practice, 3-Can practice with ease (without assistance of instructor)]
- (ii) Similar rating for overall yoga performance ability was sought on parameters like: (a) Completes the entire yoga sequence, (b) remember and completes each step of the yoga practice and remember the sequence, (c) co-ordinates breathing with yoga-asana, (d) breathing as instructed in Pranayama and able to chant AUM correctly (e) relaxes during the yogic practices and in shavasana. (Hariprasad VR et al., 2013)

YPA TOOL

Yoga Performance Assessment	Not at all	Little	Moderate	Very well
Able to complete the whole set of Yogic Practice	0	1	2	3
Able to remember and complete the sequence of Yogic Practice	0	1	2	3
Able to follow the steps of each yogic practice	0	1	2	3
Able to coordinate Breathing in each Yogic Asanas as suggested	0	1	2	3
Able to relax in each Yogic asana	0	1	2	3
Able to follow Inhalation & Exhalation in each Prayanama as instructed	0	1	2	3
Able to chant (A U M) correctly	0	1	2	3
Able to relax in Shavasana	0	1	2	3
<i>TOTAL SCORE =</i>				

4. Generalized Anxiety Disorder – 7 (GAD – 7)

Over the <u>last 2 weeks</u>, how often have you been bothered by the following problems? (Use “□” to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
(For office coding: Total Score	T _____ = _____ + _____ + _____)			

5. Patient Health Questionnaire – 9 (PHQ – 9)

Over the <u>last 2 weeks</u> , how often have you been bothered by any of the following problems? <i>(Use “□” to indicate your answer)</i>	Not at all	Several days	than half the days	every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	1	3

FOR OFFICE CODING 0__ + ____ + ____ + ____ = TOTAL SCORE: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult Very difficult Extremely difficult

6. WHO(Five) Well-Being Index(1998 version. Topp et al., 2015)

Over the last two weeks	All the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1. I have felt cheetful and in good spirits	5	4	3	2	1	0
2. I have felt calm and relaxed	5	4	3	2	1	0
3. I have felt active and vigourous	5	4	3	2	1	0
4. I woke up feeling fresh and rested	5	4	3	2	1	0
5. My daily life has been filled with things that interest me	5	4	3	2	1	0

Scoring:

The raw score is calculated by totalling the figures of the five answers. The raw score ranges from 0 to 25, 0 representing worst possible and 25 representing best possible quality of life.

To obtain a percentage score ranging from 0 to 100, the raw score is multiplied by 4. A percentage score of 0 represents worst possible, whereas a score of 100 represents best possible quality of life.

Interpretation:

It is recommended to administer the Major Depression (ICD-10) Inventory if the raw score is below 13 or if the patient has answered 0 to 1 to any of the five items. A score below 13 indicates poor wellbeing and is an indication for testing for depression under ICD-10.

Monitoring change:

In order to monitor possible changes in wellbeing, the percentage score is used. A 10% difference indicates a significant change

Session IV

Naturopathy Intervention for Management of Covid-19

Duration of Training for Session IV: 90 minutes

Objectives:

1. To enhance quality of life
2. To reduce possibility of proliferation of virus and give symptomatic relief
3. To modulate immune response for Corona virus

General Instructions:

- The naturopathy therapies suggested can be performed by the participant themselves. In case the participants are unable to administer the therapies on their own assistance can be given by the nursing staff, keeping in the mind the precautions for social distancing or personal protection.

I. NATUROPATHY MODALITIES

1. Steam inhalation:

- Take water in a vessel and heat up the water into boiling temperature
- Add 5-10 drops tulsi/ eucalyptus or peppermint oil.
- Lower your head towards the hot water and maintain a gap. Avoid direct contact with the water
- Inhale the steam slowly and deeply through the nose for 2-5 minutes
- Drape the towel over back of your head to cover yourself, continue the same and keep inhaling the steam through the nose for 2-5 min
- Don't steam longer than 5 minutes/sitting

Duration: 2-5 minutes/twice in a day

Note: Facial steam generators are also available and can be used instead of vessel

2. Hot Foot Immersion:

- Pre procedure – drink 2 glasses of warm water
- Expose the leg until knees
- Procedure - Take hot water (as hot as tolerable) in a bucket
- Place both the legs up to mid-calf inside the bucket of water for 10-15 min.
- Remove the legs from the bucket & dry the legs with a towel and drink 2 glasses of warm water

Duration: 10-15 minutes/ day, if possible, can be done twice.

Note: Can be done before taking bath

3. Gargling:

- Add half a teaspoon of table salt to glass of warm water, stir until it dissolves completely
- Take a big sip of water and hold it in your mouth
- Tilt your head back and gargle the salt water in your throat for 30 seconds
- Then spit it out
- Repeat the same till 250ml of water emptied.

Duration: 5 min/ twice a day (if symptomatic like sore throat – can be practiced more times)

Note: Can be practiced along with brushing.

4. Aromatherapy + Massage Therapy:

- Procedure: Expose the upper back and chest area
- Apply lukewarm oil in palm and rub the palms together (Preferred oil coconut, mustard and gingelly)
- Do massage on chest and upper back region for 10-15 min just before bath

Duration: 10-15 min/ once a day

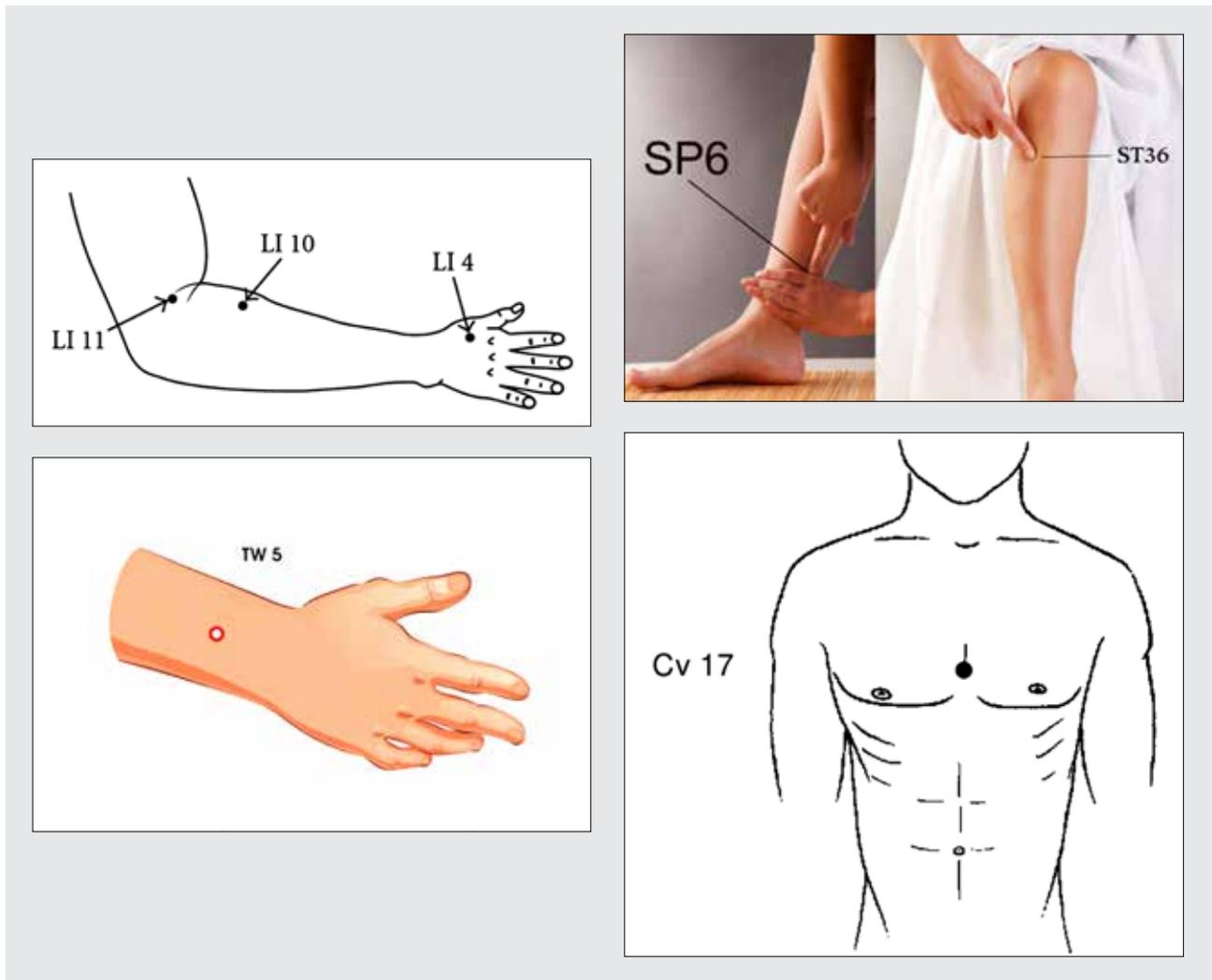
Sniffing: Apply 1-2 drops of mentioned essential oil drops in a handkerchief and sniff it for 6 times in a day.

Oils can be used: Eucalyptus oil, Peppermint oil, Thyme oil (Ács et al., 2018)

5. Acupressure:

- Applying manual pressure with the thumb to certain points in the body is known to confer immunity and improve respiratory effort (REF?).

- Individuals should be taught to apply intermittent pressure over acupressure points LI-4, LI11, SP6, TW 5, CV17, ST36 (LIU et al., 2020)
- Pressure should be applied till the participant has comfortable or tolerable level of pain. Discontinue the practice if pain/discomfort persists.



6. Heliotherapy (Sun Bath)

- Sun exposure for 15-20 minutes daily may help boost immunity by production of adequate amount of Vitamin D

Incorporating naturopathy therapies as a part of daily routine

- Naturopathy therapies should become a part of daily routine. This can be easily done by following these simple tips
- Gargling can be performed along with brushing the teeth

- Chest and back massage, acupressure and hot foot immersion can be done just before going for bath

II. NUTRITIONAL INTERVENTIONS

1. Natural Immune Boosting by Herbal Decoction

- All the below mentioned ingredients should be boiled till the raw smell goes away.

Ingredients:

Indian Gooseberry Juice 50ml,

Tulsi (Basil) juice 50 ml,

Ginger juice 10ml,

Fresh Lime Juice 5ml,

Turmeric Powder $\frac{1}{4}$ Tsp, and Drinking Water 150 ml.

- Strain and to drink it hot.

Dose: Adult: 250ml twice a day.

Children: 100ml twice a day

2. Natural Immune Boosting by Hot Drink:

All the below should be boiled till the raw smell goes away

Ingredients:

Peeled Crushed Ginger 5 gm,

Tulsi (Basil) leaves 10 gms,

Freshly crushed black pepper $\frac{1}{4}$ tsp,

Crushed Adhimaduram 5gms (liquorice root), (Murck, 2020)

Turmeric powder $\frac{1}{4}$ tsp and drinking water 250ml.

- To strain and to drink it hot.

Dose: Adult: 50 ml twice a day

Children: 20 ml twice a day

Diet Chart for COVID 19 – Helps to enhances the immunity:

- This diet is suggested can be modified according to seasonal fruits and vegetables.
- Diet chart can modify according to region

Day/ Time	6.00 am	7.00-7.30 am	8.30-9.00 am [breakfast]	1.30-2.00 pm [lunch]	5.00-5.30 pm	8.00-8.30 pm [dinner]
Day-1	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	Kichadi/ Pongal with little salt – 1 bowl	2-3 chapatis/ 1 cup rice + 1 cup carrot curry/ rasam	Natural Immune Boosting Hot Drink	2 chapatis + mixed vegetable curry
Day-2	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	Upma with tomato, carrot, onion - 1 bowl	2 chapatis/ 1 bowl millets rice + rasam + beans curry	Natural Immune Boosting Hot Drink	1 bowl of broken wheat upma.
Day-3	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	Dhaliya/ 3-4 idly's with mildly spiced chutney (2 spoons)	2 chapatis/ 1 bowl of rice + 1cup of beetroot curry	Natural Immune Boosting Hot Drink	1 bowl of upma using broken rice (add bottle guard, tomato, onion)
Day-4	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	Veg Pulav – 2 serves	Multigrain roti + sabzi/ 1 bowl of brown rice + 1 cup double boiled tomato dal + spinach curry.	Natural Immune Boosting Hot Drink	1 bowl of millets upma or porridge using vegetables.
Day-5	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	Kichadi/ pongal with little salt – 1 bowl	2-3 chapatis/ 1 cup rice + lady's finger curry + ½ cup curd	Natural Immune Boosting Hot Drink	2-3 dosa/ chapatis + chow chow curry/ chutney
Day-6	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	Poha (beaten rice) upma/ avalakki with tomato, carrot, onion.	2 chapatis/ 1 bowl of brown rice + 1 cup double boiled tomato dal + spinach curry.	Natural Immune Boosting Hot Drink	1 bowl of upma using broken rice (add bottle guard, tomato, onion)
Day-7	300-500 ml lukewarm water.	250 ml of Natural immune boosting decoction	3-4 idly's with mildly spiced chutney (2 spoons).	2-3 chapatis/ 1 cup rice + 1 cup green leafy vegetable curry.	Natural Immune Boosting Hot Drink	1 bowl of broken wheat upma.

Session V

Yoga Intervention for Management of Covid-19

Duration of training for Session V: 90 minutes

Introduction

Yoga as a therapy has shown promising results in treating various non-communicable diseases and has also shown to improve the immunity in communicable diseases like common cold and other infections. Yoga not only helps in strengthening our immunity but also improves the lung function and acts as the best strategy in treating the mental health concerns. Yoga may play a vital role in psycho-social rehabilitation of COVID-19 patients in quarantine centres and isolation. Yoga for COVID-19 care can benefit patients in many ways: (1) Yoga lowers the stress hormones and helps to manage the stress and tension, (2) It helps to improve the immune response, (3) It stimulates the lymphatic system and thereby facilitate to carry away the toxins from the body, (4) It improves the lung functions, and (5) It calms the mind and helps in better sleep quality.

Considering these aspects, there seems to be a dire need to develop a simple yoga module for COVID-19 positive patients, that helps in treatment and post-recovery of the disease, which can be easily trained by any BNYS students or doctors. In the interest of the current pandemic situation, a tele-yoga module was developed by the Department of Integrative Medicine, NIMHANS Bengaluru, which contains a set of yoga practices (Table 1) including breathing exercises, asanas, pranayamas and guided relaxation techniques. This module was found to significantly decrease the perceived stress levels after a one month of practice (Jasti et al., 2020).

This training manual provides a complete guideline for BNYS students to administer yoga practices to the patients in quarantine centres and in isolation. This is a 40-minutes module which can be given as an add-on treatment to the conventional medicine in COVID patients.

Objectives of Yoga module for COVID-19:

- To bring modulation in the immune system and to strengthen the respiratory system.
- To improve overall mental wellbeing of the patients as a part of psycho-social rehabilitation.

Do's and don'ts for the Yoga Practice:

Instructions regarding yoga room setting:

- Ensure proper air conditioning of the yoga room with adequate cross ventilation.

- Restrict the number of participants in each session to ensure adequate floor area (4m² per person) during the practice.
- Practices can be administered for the individuals in isolation/ asymptomatic/ symptomatic cases of COVID.
- It can be either practiced in the COVID-19 quarantine centers or in a tele-mode for minimum of **10 supervised sessions**.
- Disinfection of the room should be done after each session.

Instructions for the patients:

- These practices should be done in empty stomach (4 hours after full meals and 2hours after light breakfast).
- Instruct the patients to empty their bladder and bowel before the practice.
- Clothing should be loose and comfortable, preferably of cotton material.
- To maintain social distancing of 6ft during the practice in the COVID care centers.
- Personal yoga mats should be used during the practice and sharing of yoga mats with others is not at all recommended.
- Practices should be performed within the patient's comfortable limits.
- Can be done sitting on the chair if required (patients who have breathing difficulty or weak).
- Respiratory etiquettes to be strictly followed by the patients. Patients should cover their mouth and nose while sneezing or coughing with a tissue/ handkerchief/ flexed elbow and has to dispose the used tissues.
- Spitting should be strictly prohibited.
- Should be practiced with mindfulness and in a joyful state of mind.
- To be practiced only under the guidance of trained yoga instructor.

Instructions and precautions to be taken by instructor:

- Maintain a safe distance of at least 10 ft – 15 ft from the patient.
- Ask the patients about their underlying health condition and administer yoga practices accordingly.
- Do not push the patient to do all the practices compulsorily if they are unable to do any practice due to their underlying health condition (e.g., knee pain, back pain, hypertension etc.)
- Ask the patients not to overexert while doing any breathing practices if they have breathing difficulty.

- Wear a protective facial mask (in particular N-95 masks) and face shield mandatorily at all times in the premises, however during yoga practice, as far as possible, only a visor may be used (use of N-95 mask during the practice may cause difficulty in breathing).

Yoga Module for COVID-19 patients:

Minimum of 10 supervised yoga sessions are required. Practices should be continued by the patient for at least 2-weeks after their discharge and the follow-up will be done through online.

Table 1: List of the Practices with precautions

Sl. No.	Name of the Practice (Sanskrit)	Name of the practice (English)	Number of Rounds	Duration (Mins)	Precautions
<p>Starting prayer: Om saṃgacchadhwaṃ saṃvadadhwaṃ saṃ vo manāṃsi jānatām devā bhāgaṃ yathā pūrve sañjānānā upāsate Meaning: May you move in harmony, speak in one voice; let your minds be in agreement; just as the ancient gods shared their portion of sacrifice.</p>					
1	<i>Shvasa Kriya - 1</i>	Hands in and out Breathing	10	2	
2	<i>Shvasa Kriya - 2</i>	Hand stretch Breathing	5 rounds each at 90°, 135° and 180°	3	Those with cardiac disorders should not raise the hands above the head.
3	<i>Kati-chakrasana</i>	Spinal Twisting	10	2	
5	<i>Vibhagiya Pranayama (Chin mudra, Chinmaya mudra, Adi mudra)</i>	Sectional Breathing	5 rounds each in three mudras (breathing ratio 4:8:8:4)	9	Can start with breath count 4:4:4:4 for inhalation: hold: exhalation: hold for beginners and gradually bring it to 4:8:8:4.
6	<i>Kapalabhati Kriya</i>	Skull-shining Breath	30 rounds, 2 cycles (rest for 30 s in between)	3	To be avoided during menstruation and 2 nd and 3 rd trimester of pregnancy. To be avoided by those suffering from epilepsy or hernia or those who have undergone abdominal/ reproductive organ surgery in the past 6 months.

Sl. No.	Name of the Practice (Sanskrit)	Name of the practice (English)	Number of Rounds	Duration (Mins)	Precautions
7	<i>Bhastrika</i>	Bellows Breathing	20 rounds, 2 cycles (rest for 30s in between)	5	To be avoided by those with cardiac disorders, uncontrolled hypertension and epilepsy. Those with neck pain/cervical spondylosis should perform without raising the hands.
8	<i>Ujjayi</i>	Victorious Breath	9	2	
9	<i>Nadi-shuddhi Pranayama</i>	Alternate Nostril Breathing	6	5	
10	<i>Nadamu-sandhana with Positive affirmation at the end</i>	Mantra Chanting (A, U, M)	5 rounds each with A, U, M and AUM together respectively. Feeling vibrations with hand kept on chest, throat and head respectively	8	Those with migraine/ chronic headaches should chant very gently.
	Total time			40 minutes	

Positive Affirmation (3 times): “My immune system is getting stronger and stronger, I am happy and Healthy.”

Ending prayer:

Om, Sarve bhavantu sukhinah

Sarve santu nirāmayāḥ |

Sarve bhadraṇi paśyantu

Mā kashchit duḥkha bhāgbhavet |

Om Shāntiḥ, Shāntiḥ, Shāntiḥ ||

Meaning: Om, may all be happy, may all be free from illness, may all see what is auspicious, may no one suffer. Om let peace prevail

Yogic Counselling: 5 minutes after every yoga practice session

Session 1: Understanding about Panchakoshas

Session 2: Concept of Health – Disease according to Panchakosha Model (Adhi-Vyadhi)

Session 3: Importance of breath, connection between breath and mind according to Yoga Texts, Breath as a tool to calm down the mind

Session 4: Introduction to various practices at each level of existence (Kosha) – How asanas work?

Session 5: What is the concept of Prana? Disease manifestation as per prana concept. How can prana be channelized using shifting of the awareness and pranayama.

Session 6: Chanting and resonance and its relation to mind. How stress is understood as speed of mind. How yoga practices can help reduce speed of thoughts.

Session 7: Concept of Happiness according to Taittiriya Upanishad. Happiness as silence and expansion of mind. Happiness analysis concept.

Session VI

Psychosocial Rehabilitation Intervention for Management of Covid-19

Duration of training for Session VI: 90 Minutes

Session Objectives

- To train the participants to implement the psychosocial rehabilitation during COVID pandemic

General steps during the intervention

- *Do not turn them away or dismiss their problem, do not pass comments which would dismiss their concern.*
- *Avoid the statement of a judgment of their feeling.*
- *Acknowledge that their fears are understandable in the context of the pandemic's magnitude and worry on the other related issue.*
- *(Validation). This is a crucial aspect to establish a therapeutic alliance and gain trust. Validate once feeling that "it's been understood and it's worrying the person and it leads low mood to him/her"*
- *Make them "feel understood" – first listen to their symptoms in detail and conduct a thorough*
- *physical examination in the first instance. If they continue to report vague symptoms only a local examination is warranted.*
- *Provide them with correct and authentic clinical information about COVID-19 and inform them to discuss with professionals and health workers*
- *Point the discrepancy of the symptoms with which they present and symptoms of COVID-19 in a non-argumentative manner.*
- *Do not provide repeated reassurances or multiple referrals*
- *Assess the severity and magnitude of the mental health issues and provide appropriate referral based on the severity.*
- *The risk situation(Threat to life) should not neglect, do the further assessment.*

Specific interventions for managing depression and anxiety

1. Psychoeducation about the illness

- Depression/ Anxiety is a very common problem that can happen to anybody during the pandemic due to various reasons related to illness.
- Depressed people tend to have unrealistic negative opinions about themselves, their life and their future.
- Effective treatment is possible (based on the severity). It tends to take at least a few weeks before treatment reduces the depression. Adherence to any prescribed treatment is important based on the severity of the illness.
- The following need to be emphasized: – the importance of continuing, as far as possible, activities that used to be interesting or give pleasure, regardless of whether these currently seem interesting or give pleasure; – the importance of trying to maintain a regular sleep cycle (i.e., adequate Sleep hygiene practice)
- The benefit of regular physical activity at the home or gym, as far as possible (by taking care of all the safety precautions);
- The benefit of regular social activity, including participation in games (indoor games), celebration and festivals in the house, contact the family members and friends over telephone, video calls with them, as far as possible;
- *Recognizing thoughts of self-harm or suicide and coming back for help when these occur; (See the content for managing suicide and deliberate self-harm)*

2. Addressing current triggers and stressors

- Offer the person an opportunity to talk, preferably in a private space. Ask for the person's subjective understanding of the causes of his or her symptoms. Concerns related to his/ her health, families health, financial stressors and other issues due to pandemic.
- Ask about current psychosocial stressors and, to the extent possible, allow them to ventilate. *(See the section helping in planning future)*
- Reactivate social networks and enhancing social support(Reactivating social support)
- Offer regular follow-up
- Referral service: Identification of suicidal ideas or death wishes need to be immediately referred to mental health professionals.

3. Management of substance use during COVID 19

Important step

- Offer support
- Talk to him, and listen carefully
- Encourage him or her out for walks, recreation, and other activities.
- Remind him that with time and treatment
 - ▶▶ Handling craving: Try the 4 Ds-Delay, Distract, Drink water, Deep breathing
 - ▶▶ Handling negative mood states
 - ▶▶ lifestyle modifications
 - ▶▶ Follow-ups

Identify stressors and attempt to mitigate the same to the extent possible

Explore for distress/ insomnia

Advice: To either to quit or cut down to previous levels. Reassure that all support will be provided

4. Breaking the bad news

During the pandemic, there are occasions we may have to break the news of positive test results, infection and health-related information of the family members, or even the adverse life event of the family members.

How to Break Bad News

This may involve communication about the death of a loved one to their family members, deterioration of health status, positive test result for COVID, suggesting quarantine and others. Before breaking bad news, confirm the information and study the details.

Ex: Breaking the news of the death of the father to the son in an ICU setting

Prepare yourself to deliver the news.

- Be genuine and honest
- Rehearse in mind how to deliver the news.
- Have details of how the person might respond to bad news
- Choose the right setting to break the news
- Use simple sentences to deliver the news “I’m sorry to have to tell you this”. Don’t overload with information

Steps of breaking bad news

Step 1: Setting up the interview

- Arrange for some privacy
- Involve significant others
- Sit down.
- Make a connection with the patient
- Manage time constraints and interruptions

Step 2: Assessing the patient's/ relatives perception

Example: "what have you been told about your medical situation so far?"

"what are the possibilities of recovery?"

Step 3: Obtaining the patient's/ relative invitation

Example: "how would you like me to give the information about the test results?"

Step 4: Giving knowledge and information to the patient/relatives

Step 5: Addressing the patient's emotions with empathic responses

example: "I can see how upsetting this is to you."

"I can tell you weren't expecting to hear this."

"I know this is not good news for you."

"This is very difficult for me also."

Step 6: Strategy and summary

5. Handling Grief

Steps

- Acknowledge feelings of loss. Tell them that you can't imagine how difficult it must be for them
- Allow them to express their emotions (crying, shock, disbelief)
- If the person is crying or in shock, be with the person and do not interrupt them. Give them time to express their feelings.
- Allow them to talk about the loved person if possible.
- Let the person express the loved person if they are ready to speak.

- Ask them what they need
- This needs to be done sensitively. This is to elicit the needs of the individuals going through grief
- Help them to connect with the persons who will support them
- Ask them about the person who they would like to connect and provide the support for the same (would you like to call anyone now).
- Ask them to get in touch with mental health professionals, if emotional problems worsen.

6. Sleep Hygiene Technique

- Sleep only when sleepy
- No sleep within 20 minutes, get up and do something
- No naps in the afternoon
- Same time every day
- No exercise 4 hours before bedtime
- Sleep rituals before sleep
- Bed only for sleeping
- No caffeine, nicotine and alcohol 4-6 hours before bed
- Light dinner before bed

7. Reactivating social support

- Identify the what support including primary, secondary and tertiary (Emotional and Financial) currently exists(consider support from the family, friends, employer and who can help the person during the crisis)
- Community resources: Is there an organization which can help such as the red cross, NGOs
- Try any or all of the options and then discuss further alternatives
- Identify the person's prior social activities that, if reinitiated(with taking care of the safety and social distancing)

8. Plan for future

- Financial planning(Family income, number of people employed, current status of the employment, debts and loans, savings)
- Social welfare schemes during the pandemic(State and central)
- Insurance and social security schemes, <https://www.mohfw.gov.in/pdf/PMGKPIinsuranceextensionletter.pdf> <https://www.policybazaar.com/health-insurance/corona-rakshak-policy/>,<https://www.policybazaar.com/health-insurance/corona-kavach-policy/>
- Vocational skilling or re-skilling: Exploring the training options in nearest
- Planning for future employment opportunities

References

- Ács, K., Balázs, V. L., Kocsis, B., Bencsik, T., Böszörményi, A., & Horváth, G. (2018). Antibacterial activity evaluation of selected essential oils in liquid and vapor phase on respiratory tract pathogens. *BMC Complementary and Alternative Medicine*, 18(1). <https://doi.org/10.1186/s12906-018-2291-9>
- Aluka, T., Asibong, U., Gyuse, A., Meremikwu, M., Oyo-Ita, A., & Udonwa, N. (2013). Comparison of cold water sponging and acetaminophen in control of fever among children attending a tertiary hospital in South Nigeria. *Journal of Family Medicine and Primary Care*, 2(2), 153. <https://doi.org/10.4103/2249-4863.117409>
- Baj J, Karakuła-Juchnowicz H, Teresiński G, Buszewicz G, Ciesielka M, Sitarz E, Forma A, Karakuła K, Fliieger W, Portincasa P, Maciejewski R. COVID-19: Specific and Non-Specific Clinical Manifestations and Symptoms: The Current State of Knowledge. *Journal of Clinical Medicine*. 2020 Jun;9(6):1753.
- Boukhatem, M. N., & Setzer, W. N. (2020). Aromatic herbs, medicinal plant-derived essential oils, and phytochemical extracts as potential therapies for coronaviruses: Future perspectives. In *Plants* (Vol. 9, Issue 6, pp. 1–23). MDPI AG. <https://doi.org/10.3390/PLANTS9060800>
- CDC. 2019 Novel Coronavirus, Wuhan, China: Prevention & Treatment. CDC. Available at <https://www.cdc.gov/coronavirus/2019-ncov/about/prevention-treatment.html> January 26, 2020; Accessed: January 27, 2020.
- Charoengam, N., & Holick, M. F. (2020). Immunologic effects of vitamin d on human health and disease. In *Nutrients* (Vol. 12, Issue 7, pp. 1–28). MDPI AG. <https://doi.org/10.3390/nu12072097>
- Cohen, M. M. (2014). Tulsi - *Ocimum sanctum*: A herb for all reasons. In *Journal of Ayurveda and Integrative Medicine* (Vol. 5, Issue 4, pp. 251–259). Medknow Publications. <https://doi.org/10.4103/0975-9476.146554>
- Crunk, A. E., Burke, L. A. and Robinson, E. H. M. (2017) ‘Complicated Grief: An Evolving Theoretical Landscape’, *Journal of Counseling and Development*. doi: 10.1002/jcad.12134.
- Directorate General of Health Services (EMR Division). Guidelines on Preventive Measures to Contain Spread of COVID-19 in Yoga Institutes & Gymnasiums. [Internet]. New Delhi: Ministry of Health & Family Welfare GOI; 2020. Available from: <https://www.mohfw.gov.in/pdf/Guidelinesonyogainstitutesandgymnasiums03082020.pdf>
- Fashner, J., Ericson, K., & Werner, S. (2012). Treatment of the common cold in children and adults. *American Family Physician*, 86(2), 153–159. <https://pubmed.ncbi.nlm.nih.gov/22962927/>

- Heymann, D. L. and Shindo, N. (2020) ‘COVID-19: what is next for public health?’, *The Lancet*. doi: 10.1016/S0140-6736(20)30374-3.
- Jasti N, Bhargav H, George S, Varambally S, Gangadhar BN. Tele-yoga for stress management: need of the hour during the COVID-19 pandemic and beyond. *Asian Journal of Psychiatry*. 2020 Aug 2.
- Jyotindra Dubey (3 September 2020). “Covid-19 Factoid: India has the world’s second-best recovery rate”. *Business Standard*. New Delhi. Retrieved 3 September 2020. Available at: https://www.business-standard.com/article/current-affairs/covid-19-factoid-india-has-the-world-s-second-best-recovery-rate-120090300150_1.html
- Gujarathi, R., Gokhale, V., & Tongaonkar, J. (2013). Effect of Basti (oil enema) therapy for the management of cough in pertussis. *AYU (An International Quarterly Journal of Research in Ayurveda)*, 34(4), 397. <https://doi.org/10.4103/0974-8520.127722>
- Hobday, R. A., & Dancer, S. J. (2013). Roles of sunlight and natural ventilation for controlling infection: Historical and current perspectives. In *Journal of Hospital Infection* (Vol. 84, Issue 4, pp. 271–282). Elsevier. <https://doi.org/10.1016/j.jhin.2013.04.011>
- Huff HV, Singh A. Asymptomatic transmission during the COVID-19 pandemic and implications for public health strategies. *Clinical Infectious Diseases*. 2020 May 28.
- Koulivand, P. H., Khaleghi Ghadiri, M., & Gorji, A. (2013). Lavender and the nervous system. *Evidence-Based Complementary and Alternative Medicine*, 2013. <https://doi.org/10.1155/2013/681304>
- Kulkarni, Sagar (5 July 2020). “India becomes third worst affected country by coronavirus, overtakes Russia”. *Deccan Herald*. New Delhi. Retrieved 5 July 2020. Available at: <https://www.deccanherald.com/national/india-becomes-third-worst-affected-country-by-coronavirus-overtakes-russia-857442.html>
- Lee E.-H. Review of the psychometric evidence of the perceived stress scale. *Asian Nurs. Res.* 2012;6(4):121–127. doi: 10.1016/j.anr.2012.08.004
- Little, P., Mullee, M., Stuart, B., Thomas, T., Johnson, S., Leydon, G., Rabago, D., Richards-Hall, S., Williamson, I., Yao, G., Zhu, S., Raftery, J., & Moore, M. (2016). Effectiveness of steam inhalation and nasal irrigation for chronic or recurrent sinus symptoms in primary care: A pragmatic randomized controlled trial. *CMAJ*, 188(13), 940–949. <https://doi.org/10.1503/cmaj.160362>
- Li X, Geng M, Peng Y, Meng L, Lu S. Molecular immune pathogenesis and diagnosis of COVID-19. *Journal of Pharmaceutical Analysis*. 2020 Mar 5
- LIU, W., GUO, S., WANG, F., & HAO, Y. (2020). Understanding of guidance for acupuncture and moxibustion interventions on COVID-19 (Second edition) issued by CAAM. *World Journal of Acupuncture - Moxibustion*, 30(1), 1–4. <https://doi.org/10.1016/j.wjam.2020.03.005>

- Ministry of Health & Family Welfare. Role of Frontline Workers in Prevention and Management of Corona Virus. (2020). Ministry of Health & Family Welfare. [Internet]. Available at: <https://www.mohfw.gov.in/pdf/PreventionandManagementofCOVID19FLWEnglish.pdf>
- Ministry of Personnel, Public Grievances and Pensions, Govt of India, Department of Personnel and Training. DoPT OM - Preventive measures to be taken to contain the spread of Novel Coronavirus (COVID-19)- regarding. New Delhi: DoPT;16 March 2020 Report No.: F. No. 11013/9/2014-Estt.A.III. Available from:
- Ministry of AYUSH. Guidelines for yoga practitioners for COVID 19. [Internet]. New Delhi: Ministry of AYUSH; 2020. Available from: <https://www.ayush.gov.in/docs/yoga-guidelines.pdf>
- Mooventhan, A., & Nivethitha, L. (2014). Scientific evidence-based effects of hydrotherapy on various systems of the body. In *North American Journal of Medical Sciences* (Vol. 6, Issue 5, pp. 199–209). North American Journal of Medical Sciences. <https://doi.org/10.4103/1947-2714.132935>
- Murck, H. (2020). Symptomatic Protective Action of Glycyrrhizin (Licorice) in COVID-19 Infection? In *Frontiers in Immunology* (Vol. 11, p. 1239). Frontiers Media S.A. <https://doi.org/10.3389/fimmu.2020.01239>
- Meng H, Xiong R, He R, Lin W, Hao B, Zhang L, Lu Z, Shen X, Fan T, Jiang W, Yang W. CT imaging and clinical course of asymptomatic cases with COVID-19 pneumonia at admission in Wuhan, China. *Journal of Infection*. 2020 Apr 12.
- Meenakshi Ray (29 May 2020). “India most infected by Covid-19 among Asian countries, leaves Turkey behind”. Hindustan Times. 29 May 2020. Retrieved 30 May 2020. Available at: <https://www.hindustantimes.com/india-news/india-most-infected-by-covid-19-among-asian-countries-leaves-turkey-behind/story-Jjd0AqIsuL3yjMWg29uJ3I.html>
- Panyod, S., Ho, C. T., & Sheen, L. Y. (2020). Dietary therapy and herbal medicine for COVID-19 prevention: A review and perspective. In *Journal of Traditional and Complementary Medicine* (Vol. 10, Issue 4, p. 420). National Taiwan University. <https://doi.org/10.1016/j.jtcme.2020.05.004>
- PTI (2 September 2020). “India’s COVID-19 fatality rate slides to 1.76%, one of the lowest globally: Health Ministry”. The Hindu. New Delhi. Retrieved 2 September 2020. Available at: <https://www.thehindu.com/news/national/indias-covid-19-fatality-rate-slides-to-176-one-of-the-lowest-globally-health-ministry/article32505195.ece>
- Ramalingam, S., Graham, C., Dove, J., Morrice, L., & Sheikh, A. (2019). A pilot, open labelled, randomised controlled trial of hypertonic saline nasal irrigation and gargling for the common cold. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-018-37703-3>
- Rajgopal T. COVID-19: Epidemiology and public health aspects. *Indian Journal of Community Medicine*. 2020 Apr 1;45(2):111.

- Simon, N. M. (2013) 'Treating complicated grief', *JAMA - Journal of the American Medical Association*. doi: 10.1001/jama.2013.8614.
- Topp C.W., Østergaard S.D., Søndergaard S., & Bech P. (2015). *The WHO-5 Well-Being Index: A Systematic Review of the Literature*. *Psychotherapy and Psychosomatics*, 84, 167-176.
- World Health Organization. Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health. World Health Organization. [Internet]. Available at: https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0
- World Health Organization. (2020). Coronavirus disease 2019 (COVID-19): situation report, 51. World Health Organization. <https://apps.who.int/iris/handle/10665/331475> [Internet]. Available at: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10
- World Health Organization. WHO Coronavirus Disease (COVID-19) Dashboard. [Internet]. Available at: <https://covid19.who.int/>
- World Health Organization. India: WHO Coronavirus Disease (COVID-19) Dashboard. [Internet]. Available at: <https://covid19.who.int/region/searo/country/in>
- World Health Organization. Laboratory testing for coronavirus disease (COVID-19) in suspected human cases: interim guidance, 19 March 2020. World Health Organization; 2020. [Internet]. Available at: <https://apps.who.int/iris/bitstream/handle/10665/331501/WHO-COVID-19-laboratory-2020.5-eng.pdf>
- World Health Organization. Coronavirus disease (COVID-19) advice for the public. World Health Organization; 4 June 2020. [Internet]. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
- <https://www.mohfw.gov.in/pdf/PreventivemeasuresDOPT.pdf>

