Facts and Myths on COVID-19
How to Serve Society During this Crisis
Disclaimer

- While making reasonable efforts to ensure that all information presented during this webinar is accurate and up to date, Sri Sathya Sai International Organization (SSIO) makes no representation or warranty of the accuracy, reliability, or completeness of the information.

- The information provided in this webinar is for informational purposes only. It is not a substitute for medical advice. All medical information presented should be discussed with your healthcare professional, and in consultation with local, state, or country health regulations, or policies and procedures of your healthcare facility/system.

- Presentation slides may not be redistributed, republished, modified, displayed, posted, or transmitted without the express written consent of the SSIO.
Care of the Critically ill COVID–19 patient

KALPALATHA K. GUNTUPALLI MD
CHIEF OF PULMONARY/CRITICAL CARE MEDICINE
BEN TAUB HOSPITAL,
OSCAR FRIEDMAN ENDOWED PROFESSOR, BAYLOR COLLEGE OF MEDICINE
HOUSTON, TX
This is a first!

1. When did we see an infectious disease that affected *someone you know* and is seriously ill from it and some of them die from it?

2. When did we see (8-14%) our *colleagues infected* from patients?

3. When did we see the lockdown for the world and we are the “*new soldiers* - boots on the ground” in the trenches with serious risk to ourselves and perhaps our families?

4. When did we see hospitals filled with patients with *one* disease?

5. When did we in the recent past see so many patients *younger than 50 critically ill* and die from one disease?
6. When did we see ophthalmologists and neurosurgeons take *primary care* of ICU patients?

7. When was there a health crisis that *no one could volunteer* because they were needed locally too?

8. When did we think construction workers can donate N95s and oil industry CAPRs and engineer make us safe intubation boxes?

9. When did *sports arenas become hospitals*?

10. When did the whole world *stay home but were afraid to socialize*. *Home but not on vacation*?
• **Coronavirus** – “crown”-like spikes
• Bats, birds, rodents, cattle, dogs → humans
• Family of viruses that cause:
  • The common cold
  • SARS (Severe Acute Respiratory Syndrome) - 2003
  • MERS (Middle East Respiratory Syndrome) - 2012
  • **COVID-19** (Coronavirus Disease 2019) - 2019
The Perfect Storm...
The Pandemic Spreads

Tracking the spread of the novel coronavirus

LAST UPDATED: APRIL 11, 2020 10:00 PM

April 10, 2020

1,732,635 cases

Transmission

Human-to-Human
Sneezing/coughing/talking
Droplets/airborne?
Aerosol – 3 hrs
On surfaces*
Stainless steel: 5-6 hrs (→72h)
Plastic: 6-7 hrs (→72h)
Copper: max 4 hours
Cardboard: max 24 hrs

Fecal-oral?

Asymptomatic carriers

Who Gets COVID-19?

• Anyone can, including young people!
• >50% of patients admitted to hospital due to COVID-19 are <50 yrs old

Risk factors:
• People >60 years
• Pre-existing diabetes, hypertension, heart disease, lung disease, cancer, immune treatments

What’s the Incubation Period?

• 2-14 days, usually around 4-5 days
What are the symptoms of COVID-19?

- Fever
- Dry cough
- Shortness of breath
- Headache, facial pain
- Sore throat, fatigue, muscle aches
- Diarrhea, sometimes with blood
- Nausea, vomiting, abdominal pain
- Loss of smell, loss of taste, loss of appetite
- Severe Acute Respiratory Syndrome, low blood oxygen
- Blood clots
- Chest pain mimicking a heart attack

75-80% recover – differences based on age group etc
Is COVID-19 just another type of flu?
<table>
<thead>
<tr>
<th>Influenza</th>
<th>COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden onset in 1-2 days</td>
<td>Onset over a few days – like a “cold”</td>
</tr>
<tr>
<td>Fever, chills, body aches, headache</td>
<td>Dry cough, fever, difficulty breathing</td>
</tr>
<tr>
<td>Person-to-person spread - droplets</td>
<td>Person-to-person spread: droplet/airborne?</td>
</tr>
<tr>
<td>Spread to ~1 person</td>
<td>Spread to ~2-3 people</td>
</tr>
<tr>
<td>Children, older people, pregnant women, underlying conditions</td>
<td>Older people, those with underlying conditions, pregnant women?</td>
</tr>
<tr>
<td>Reason for Hospitalization: Bacterial pneumonia – need antibiotics</td>
<td>Reason for Hospitalization: Acute respiratory distress syndrome - need for oxygen or ventilators</td>
</tr>
<tr>
<td>Tamiflu, Relenza, others</td>
<td>No treatment so far</td>
</tr>
<tr>
<td>Yearly influenza vaccine</td>
<td>No vaccine</td>
</tr>
</tbody>
</table>
What if I have symptoms?

Treat at home – fluids, acetaminophen, cold compresses, TLC

Talk to your doctor – phone, telemedicine

Isolate yourself (as much as possible) from others in the family, use separate glasses, cutlery, linens

Wear a mask if you have to share the same environment

Caregivers should wear a mask and gloves

If you have a worsening cough with shortness of breath SEE A DOCTOR or GO TO THE ER

Recommendations for women who are pregnant or breastfeeding


cdc.gov, websites of State Departments of Health
Should I get tested for COVID-19?

A moot point in many areas!
Ideally, testing is important. Don’t forget other viruses!
Testing criteria vary in different countries

- Serious symptoms
- Healthcare worker or first responder
- Resident of long-term care or other facility

Outpatient settings: MD offices and clinics, drive-through testing

Inpatient settings: hospitals, nursing care facilities

Where do samples come from?

- Nasopharynx
- Sputum
Are Treatments Available?

No treatment is proven or approved yet!!

Avoid self-medicating - can lead to adverse reactions, like cardiac toxicity

Anti-viral: remdesivir

Anti-malarial: chloroquine/hydroxychloroquine

Anti-bacterial: azithromycin

Anti-HIV medications

Drugs that modify the immune response of the body

Plasma from patients who had COVID-19 and recovered

Other – vitamin C

Anecdotal – herbal remedies etc
So what should I be doing?

KEEP CALM AND STAY AT HOME
Why is it SO important to stay home?
Let’s look at the usual public health approach to a contagious disease.

Ideally, a person is tested and if found positive, he/she is isolated at home until they recover and can’t infect others, and their uninfected family members and other contacts are quarantined.

Contact tracing – finding all persons who came in contact with the infected person and placing them in quarantine and/or test them.

Quarantines, isolation and contact tracing work by limiting the number of people exposed to an infection.

Some states can still try to do this – hampered by lack of widespread testing.
Modeling the spread of a respiratory infection in a population of 200 people going about their daily routine as usual.

https://www.washingtonpost.com/graphics/2020/world/corona-simulator/
Now what if only 1 in 8 people was out and about?

https://www.washingtonpost.com/graphics/2020/world/corona-simulator/
What can we do to help?

(Self)-Quarantine – separating oneself from others if you’ve potentially been exposed to a sick person

(Self)-Isolation – keeping a sick person separated so that healthy persons are not infected, and until the sick person is not contagious

Physical Distancing – keeping at least 6 feet distance between you and others. Closing of schools, restaurants and businesses, cancelling sports events, STAYING AT HOME are all part of physical distancing
STUFF WE JUST CAN'T DO ANYMORE FOR QUITE A WHILE
BE IN CROWDS
TOUCH YOUR FACE
SHAKE HANDS
HUG RANDOMLY
IGNORE NEWS & QUALIFIED ADVICE

HOME IS WHERE THE HEART IS
- STORE
- GYM
- OFFICE
- SCHOOL
- BANK
- THEATER
- DAYCARE
- CHURCH
- RESTAURANT

Monte Wolverton Copyright 2020 Cagle Cartoons
Joe Heller Copyright 2020 hellertoonz.com
So that’s the science....
But we have Swami!
What should we practice and what can we learn?

- Trust Swami
- Stay positive – “This too shall pass”
- Strengthen our faith
- Redouble our sadhana and namasmarana
- Pray, pray, pray – for everyone
- We are indeed all one
Jai Sai Ram!
Facts and Myths on COVID-19

HOW TO SERVE SOCIETY DURING THIS CRISIS

Axay Shanti Kalathia MD
Otolaryngology (ENT)
Florida USA
How to do Service During a Pandemic?
What is Service?

Service does not mean helping with hands alone. Talk softly and sweetly. Speak good words. That is also a form of service. Nov 20, 2000

This can be practiced and performed at home!
Why do Service?

Selfless service is a more exalted means of spiritual progress than such other ways as meditation, bhajan and yoga. This is so because when we undertake meditation, japa (chanting), or yoga, we do so for our own benefit and not for the good of others. SSB 1979 p8

Staying at home is a benefit to society. Our personal sacrifice for the good of the whole!
How to do Service?

Any little service performed with love is enough. If you give a glass of water to a thirsty person with genuine love, it is more than enough. 22 July 2002

This can be practiced and performed at home!
What about the quantity of Service?

In whatever service you do, it is the quality that counts, not the quantity. No act of service should be considered trivial or debasing. SSS Veda Vani p 333

It is not the quantity of service you do that matters; nor is the variety. It is the inner joy, the love that you radiate that is important. May 19, 1969.

Don’t underestimate the service that can be done at home because on the surface it seems “trivial”

Love is the most important component
You must get out of this narrow groove, outgrow your selfish tendencies and learn to regard the whole of mankind as one family. That is true service. Few have such a large-hearted approach today. - Divine Discourse, Nov 19, 1987

Respecting the needs of society by doing your part and isolating is service.

Following the law of the land is service.
Types of Service at Home

Serve our body
Serve our mind
Serve our spirit
Serve our family
Serve our community
Prayer for All
Prayer for Virtues
Demonstration of at home Healthy Routine

Sathya Sai Young Adults
SaiLens #015
April 2020 / Special Edition
SaiLens #015: April 2020 / Special Edition

FAMILY TIME
SaiLens #015: April 2020 / Special Edition
SaiLens #015: April 2020 / Special Edition
What should prompt Service?

Really speaking, only those who are afflicted with agony, equal agony, at the sight of pain and suffering, distress, or disease have the right to offer service, for they are not serving others, they are serving themselves, serving to remove, as fast and as intelligently as they can, their own agony. April 21, 1967.

Feeling the pain of others – that empathy is driving force.

How can we utilize that force and follow isolation orders?
Personal Protective Equipment

**Homemade Masks:**
- Prevent wearer from spreading
- Prevent wearer from touching face
- Protect sparse N95 mask

**Surgical Masks**
- Fluid restriction; large droplets

**N95 respirator mask**
- 95% of small and large particle aerosol
- Tight fitting
Types of Service at Home

Homemade Mask and PPE (Personal Protective Equipment) Service

Botswana, Canada, Mauritius, Nigeria, Thailand, UK, USA

Benefits:
- meets a need (hospitals, nursing homes, etc.)
- respects isolation requirements
- learn skills
- entire family including children participate

Goal - supply at least 95,000 Masks, shields and gowns
Homemade Mask and PPE Service Project

March 29, 2020

We understand that with the shortage of masks during the Novel Coronavirus pandemic we have an opportunity to help by providing masks. This can be done on a local basis under the guidance of your regional service coordinator and your regional medical director. Please review the attached ‘guidelines’ documents prior to commencing the project.

1. If your local hospitals, nursing homes, homeless shelters and other medical offices are requesting volunteers to make and provide masks and they have a recommended protocol including material to be used you should follow their protocol.

2. If they request masks without a specific protocol to follow, we have provided instructions. If you have another method you would like to use you can send a proposal to the SSIO Mask Service Project Committee and if approved, will be posted on the national website.

3. Please only distribute the masks to institutions with which you have a signed disclaimer form that shows that they accept full responsibility to how the masks are used.

4. Please send questions regarding the overall project to akalathia@sathyasai.us. Send questions pertaining to technical aspects regarding construction and/or sewing to agiridharan@sathyasai.us or cschiernmann@sathyasai.us

Background:

Healthcare facilities throughout the country are facing a shortage of personal protective equipment (PPE) due to the rapid increase in Covid-19 cases. CDC guidelines allow a provision for healthcare facilities to use homemade face masks in times of shortage. Many hospitals are asking members of their community to donate or construct masks, shields and gowns.

Overview:

Local healthcare facilities (hospitals, nursing homes, etc.) can be approached to assess their need for homemade face masks. Many hospitals (or the facility you are communicating with) already have a specific kit and/or design, in which case that would be the preferable mask to construct. Otherwise, several options have been provided with this documentation. Each center should assess their available sewing skill set and material...
Detailed Instructions:

1. Detailed instructions for Sewing technique by using ties by Sacramento YA’s:
   https://youtu.be/JuOF61vKuDs (copy and paste link in browser if link does not work)

2. Detailed instructions for Sewing technique using elastic band:
   https://www.youtube.com/watch?v=ueWkAuY3k6Y

3. Detailed Instructions for hand stitching technique by Sacramento YA’s:

Materials Required:

![Materials](image)

**Step 1:** Cut 9x7 in pieces of the *pre-washed* woven and non-woven fabrics

![Fabric Samples](image)

**Step 2:** Place the right side of the woven fabric on top of the non-woven fabric
Appendix B: Homemade Face Mask Models and Resources

Listed in order with simplest design first:

1. *Unity Point – Easy Semi Shaped Mask with Filter Pocket* Created by Medical Professionals


3. Deaconess Hospital – Basic Flat Elastic Mask from the “Turban Project”. (Pattern, Instructions, Video)
   [https://www.deaconess.com/How-to-make-a-Face-Mask](https://www.deaconess.com/How-to-make-a-Face-Mask)

   [https://www.youtube.com/watch?v=BCjC-e-r7kg](https://www.youtube.com/watch?v=BCjC-e-r7kg)

5. St. Elizabeth Hospital - Basic Flat Tie Mask from the “Turban Project”, (Pattern, Instructions, Video)
   [https://www.steliz.org/Files/Documents/Adult-Face-Mask-Sewing-Instructions-Flyer.pdf](https://www.steliz.org/Files/Documents/Adult-Face-Mask-Sewing-Instructions-Flyer.pdf)
   [https://www.youtube.com/watch?v=ueWkAuYjkl6Y&feature=youtu.be](https://www.youtube.com/watch?v=ueWkAuYjkl6Y&feature=youtu.be)

   [https://psjh.blob.core.windows.net/covid/Instructions%20Community%20Mask.pdf](https://psjh.blob.core.windows.net/covid/Instructions%20Community%20Mask.pdf)


8. Craft Passion – Shaped Mask with Folded Edge Pocket to Hold in a Filter & Pattern Sizes


10. Providence - Mask Manufacturer with Hospital Input (Pattern, Video and Resources) [https://www.providence.org/lp/100m-masks-the-medical-mask-is-not-enough/](https://www.providence.org/lp/100m-masks-the-medical-mask-is-not-enough/)


**Nonwoven Fabrics** used for manufacturing mask: Polypropylene, non-woven polyester, Sun Melt, Sun Bond
Fabrication Process Steps

- Make shield template
- Cut hangar wire, shape ‘needle’

Cut Acetate sheet (shield)

Cut Ribbon to hold shield: 9”

Cut Foam for Shield Support: 9”

Cut Elastic Band: 21”

- Cut corner radius
- Punch holes – ribbon
- Mount acetate on foam and thread ribbon
- Slide elastic band in place
Face shields

https://sathyasai.us/service/hOMEMADE-MASK-SERVICE-2020
Gowns
Tests and Challenges

**Test is the taste of God.** My Dear Students, Vol 2

p 43

- it is to protect, not trouble you
- develops your confidence
- for you to set an ideal for others
- to strengthen your patience and devotion
- help you go to higher stage
You should not allow yourselves to be overwhelmed by difficulties. Develop self-confidence and have firm faith in God. Jan 15, 1992
Mental Health and Well Being During and After the COVID-19 Pandemic

Meera Narasimhan, MD, DFAPA
Professor and Chair, Department of Neuropsychiatry and Behavioral Science, U of SC
& Service Line Director, Behavioral Health
Prisma Health Columbia, South Carolina, USA
&
Special Advisor to the President, University of South Carolina
Health Innovations and Economic Development
# Stress of COVID-19 Pandemic

## Healthcare Workers

**Professional Level**
- Unknown nuances of disease pathology
- Overwhelming barrage of patients (sick and scared)
- Overwhelming flow of information
- Shifting guidelines
- PPE
- ICU beds
- Negative pressure rooms
- Ventilators

## People

- Disrupts normalcy
- Social Isolation
- Fear, worry, irritability due to binge viewing of media outlets, social media, misinformation
- Worries about family children, elderly
- Potentially bring this virus back home to our loved ones
- Worries about family children, elderly
- Anxious, afraid and threatened
- Painful awareness of our own mortality
- Not being able to be say goodbye to family during their final moments
- Economic implications
Symptoms of Stress during COVID-19

Fear and worry about your own health and the health of your loved ones
Changes in sleep or eating patterns
Difficulty sleeping or concentrating
Feeling anxious and sad
Worsening of chronic health problems
Worsening of mental health conditions
Increased use of alcohol, tobacco and drugs

Mind Body Connectivity

Stress
- Depression
- Anxiety Ds

LIMBIC SYSTEM (Hippocampus)

HYPOTHALAMUS

CRH

ACTH

PITUITARY GLAND
(Anterior Pituitary)

ADRENAL GLAND
(Adrenal Cortex)

Glucocorticoid

Endocrine
- Thyroid
- Adrenals

Cytokines
- Infection
- Pain
- Allergies

+ve

Depression

Anxiety Ds
Therapies and Tools
Coping with the Stress of COVID-19

Mindfulness
Psychological First Aid
Trauma Focused
Grief Counseling
Online therapy companies
AI powered mental health chatbots
Crisis Text lines
Suicide hotlines

(URL links on SSSIO website)
What do we do when we are all experiencing stress quarantined at home with family?

Everyone in your family is experiencing some level of stress right now.

Recognize that feelings of loneliness, fear, and anxiety are normal reactions to a stressful situation like this.

You may need a time out yourself.

Communicate with your child about how you’re feeling. That allows them to also express their feelings and frustration.

Make sure to engage the elderly in conversations as a way to check-in and make sure they are okay.
Do’s and Don’t

Keep your routine as much as possible.
Limit time on social media and watching news.
Some “Me” time for each family member.
If you can venture out get some fresh air be it in your garden or on the porch while maintaining social distancing do it!!
Check in with your spouse, how they are handling the stress of being a parent, working from home etc.
Virtual connect with family and friends
Coping with COVID-19 the SAI way

Rx

Prescription for Mental Wellbeing

S top worrying about things you cannot control
A dd a sense of normalcy to help yourselves, coworkers, family and friends
I nternet, I-phones (Information Technology) in moderation to connect with the world, stay informed, but avoid getting overwhelmed with the surge of information flow
B e healthy by exercising regularly and maintaining a healthy diet
A must is sleep and rest
B e mindful of your emotions, do self checks of your feelings: anxiety, depression & practice mindfulness meditation
A prayer of gratitude to SAI for keeping us safe

Sarve Jana Sukhino Bhavantu
Disclaimer

- While making reasonable efforts to ensure that all information presented during this webinar is accurate and up to date, Sri Sathya Sai International Organization (SSIO) makes no representation or warranty of the accuracy, reliability, or completeness of the information.

- The information provided in this webinar is for informational purposes only. It is not a substitute for medical advice. All medical information presented should be discussed with your healthcare professional, and in consultation with local, state, or country health regulations, or policies and procedures of your healthcare facility/system.

- Presentation slides may not be redistributed, republished, modified, displayed, posted, or transmitted without the express written consent of the SSIO.