A Psychosomatic Framework for Considering the Long-term Sequelae of COVID-19

Jeffrey P. Staab, MD, MS, FACP
Professor and Chair, Department of Psychiatry and Psychology, Mayo Clinic, Rochester, MN

Advancing Integrated Psychiatric Care for the Medically Ill

CLP 2021
Disclosure: Jeffrey P. Staab, MD, MS

<table>
<thead>
<tr>
<th>Company</th>
<th>Inno.health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing Fees/Royalties</td>
<td>I</td>
</tr>
<tr>
<td>Scientific Advisory Board</td>
<td>I</td>
</tr>
</tbody>
</table>

D – Relationship is considered directly relevant to the presentation
I – Relationship is NOT considered directly relevant to the presentation
Introductions

- Jeffrey Staab, MD, MS, FACLP -- Professor of Psychiatry, Mayo Clinic, Rochester, MN
  - Overview

- Ryan Hurt, MD, PhD -- Professor of Medicine, Mayo Clinic, Rochester, MN
  - Phenotypes of post-acute sequelae of SARS-CoV-2 infection (PASC)/Long-COVID

- Brandon Hamm, MD, MS -- Instructor, C-L Psychiatry, Northwestern University, Chicago, IL
  - C-L Psychiatrist’s Perspective on Long-COVID

- Andrew Coulter, MD, MA -- Associate Staff Psychiatrist, Cleveland Clinic Foundation, Cleveland, OH
  - Effects of COVID pandemic on children and adolescents

Overview – Risk Factors

- Severe, acute COVID-19
  - Male
  - Older age
  - Non-white
  - Pre-existing conditions
    - Obesity
    - Cardiovascular disease
    - Respiratory disease
    - Hypertension

- Not returning to “usual health”
  - Age > 49
  - # pre-existing conditions
    - Hypertension
    - Obesity
    - Immunosuppressive condition
    - Psychiatric condition (OR=2.32)

- Long COVID
  - Female (24% vs 21%)
  - Age 35-49 years (27%)
  - Pre-existing conditions (asthma)
  - Acute severity (conflicting data)

Crook H, et al., BMJ 2021;374:n1648
Overview – Psychosomatic concepts

- Fully interactive biopsychosocial model
  - Psychosocial factors affect distress and impairment in patients with long-term illnesses.
  - A psychosomatic/clinical health psychology perspective is needed for long-COVID.
    - Together with, not instead of, biomedical concepts.
    - Will require data to back theory.

- Predisposing factors
- Precipitating factors
- Provoking factors
- Perpetuating factors

Predisposing factors
- Temperament – expressive/dramatic, obsessive/anxious
- Lifetime adversity – risk factor or symptom amplifier
- Pre-existing psychiatric illness

Precipitants
- Structural injury – type and severity
  - Including autonomic, immunologic, etc.
- Psychological injury
  - Traumatic stress, loss, social disruption

Provoking factors
- Illness-related beliefs and behaviors
  - Excessive body vigilance, catastrophic thinking
- Acute recovery environment

Perpetuating factors
- Recovery from structural injury
- Illness perceptions & fear-avoidance
- Primary and secondary psychiatric comorbidity (<> XXX due to another medical condition)
- Long-term social environment