



Introduction

- Since early in the pandemic, it has been clear that patients infected with Covid-19 are at risk of experiencing lingering symptoms and chronic health problems.
- Long Covid** has emerged as a chronic syndrome triggered by SARS-CoV-2.
- Although children are less likely than adults to experience severe acute Covid-19, they are still at risk for **Long Covid** sequelae.
- There are overlapping symptoms and clinical features between **Long Covid** and myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS).

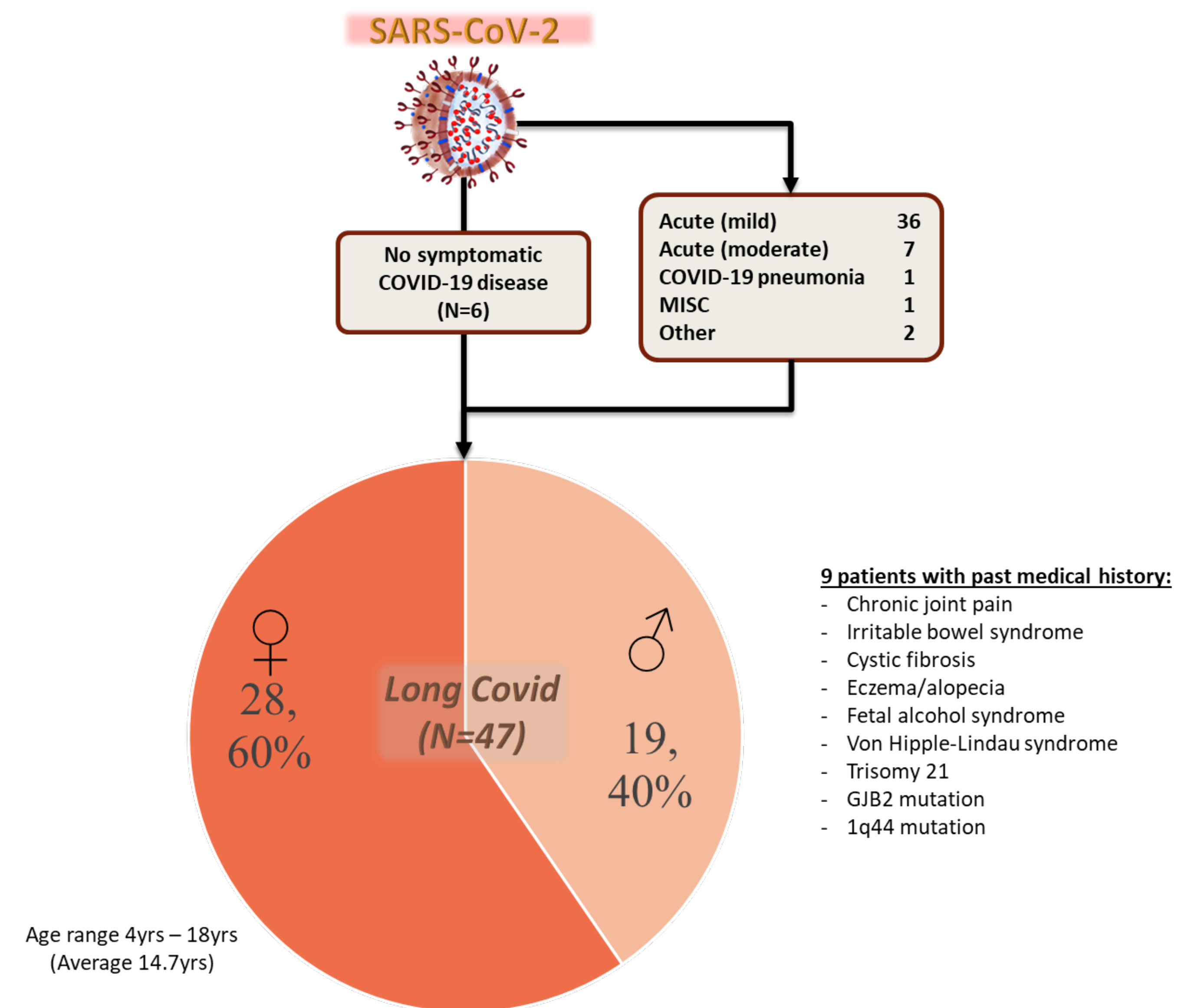
Aim

To describe the demographic and clinical presentation of children with **Long Covid**.

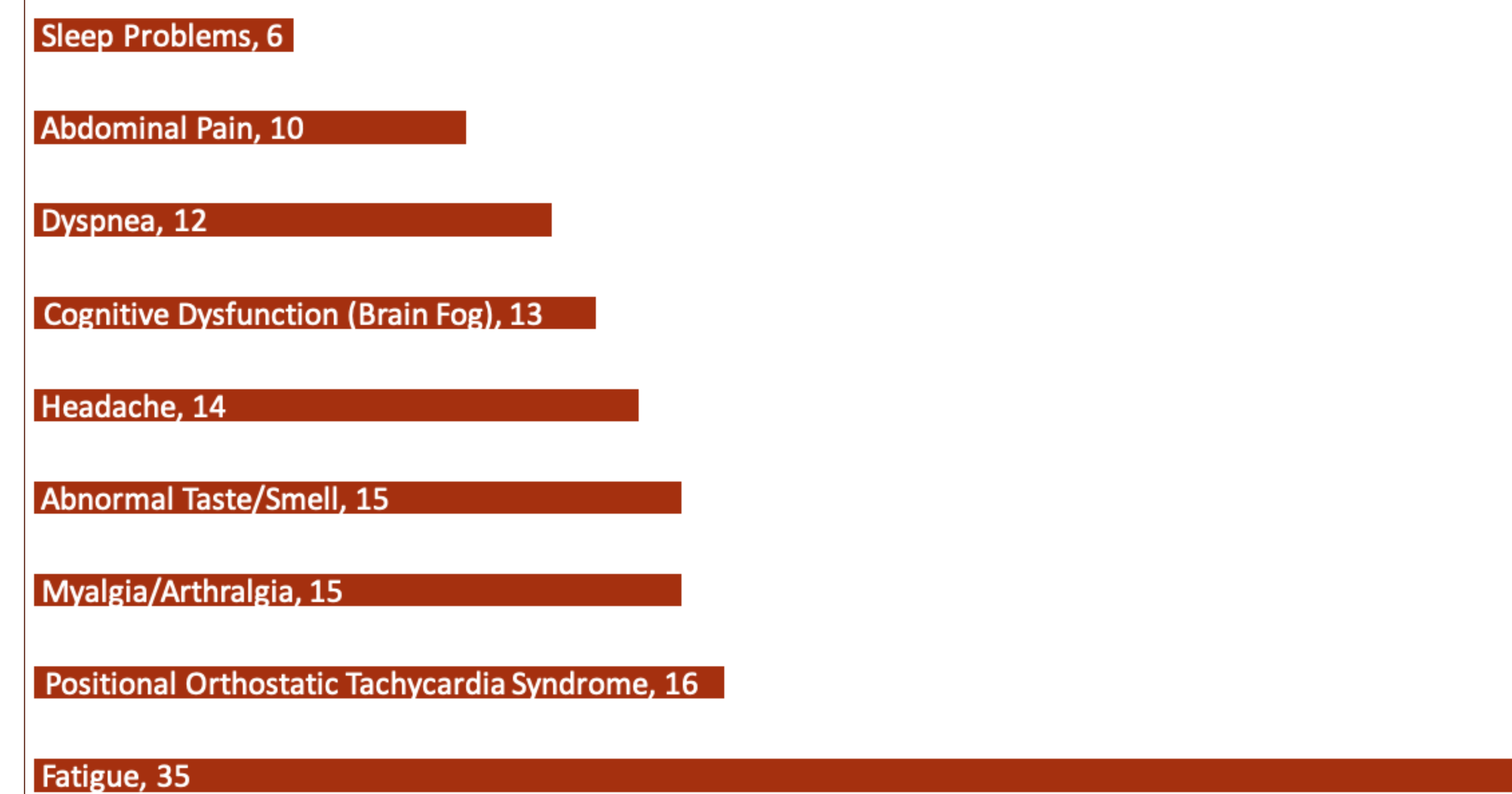
Methods

- We identified a cohort of children who were seen for **Long Covid** at the University of Minnesota Pediatric Covid Clinic between Jan. 2021 and March 2022.
- Long Covid** was diagnosed in patients with new onset of symptoms with impact on everyday functioning, appearing within 3 months of SARS-CoV-2 infection and lasting for at least 3 months.
- IRB approved protocol to collect clinical and demographic data from electronic charts.

Results



Clinical Symptoms in Pediatric Long Covid (N=47)



Discussion

- Exertional fatigue, body aches, and symptoms of POTS are the most common symptoms to linger following SARS-CoV-2 infection in children. Similar clinical features are seen in ME/CFS.
- Long Covid** is more common in teenagers, with females affected more commonly, a demographic pattern seen in ME/CFS.
- 87% of patients with **Long Covid** at our clinic with symptomatic acute Covid-19.
- This data describing the clinical symptoms of pediatric **Long Covid** can:
 - ✓ Increase awareness for ME/CFS, a chronic disease that is often missed and at times dismissed.
 - ✓ Add evidence to the hypothesis linking post-viral immune-mediated processes with many chronic diseases

Future Directions

- Continue to collect data to describe **Long Covid** in the pediatric population.
- Compare post-viral symptoms between different variants and vaccination status.
- Expand the cohort across clinical settings to create comprehensive database and to promote awareness for **Long Covid** and ME/CFS.
- Further explore the hypothesis linking some chronic disease with viral infection, through immune mediated processes.

Contact Information

Taylor Wells, MD
UMN Pediatric Residency Program
Email: wells547@umn.edu
Phone: 507-319-3385

Bazak Sharon, MD
Assistant Professor, Pediatric Infectious Disease and Hospital Medicine
University of Minnesota Masonic Children's Hospital
Email: sharo011@umn.edu

References

- Rowe PC, Underhill RA, Friedman KJ, Gurwitt A, Medow MS, Schwartz MS, Speight N, Stewart JM, Vallings R, Rowe KS. Myalgic Encephalomyelitis/Chronic Fatigue Syndrome Diagnosis and Management in Young People: A Primer. *Front Pediatr*. 2017 Jun 19;5:121. doi: 10.3389/fped.2017.00121. PMID: 28674681; PMCID: PMC5474682.