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The Unrecognized Threat: Evaluating the Global Impact of Post-Acute COVID-19 on Children and Adolescents

Abigail Sprague

Binghamton University--SUNY

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The Unrecognized Threat: Evaluating the Global Impact of Post-Acute COVID-19 Syndrome on Children and Adolescents

Presenter: Abigail Sprague

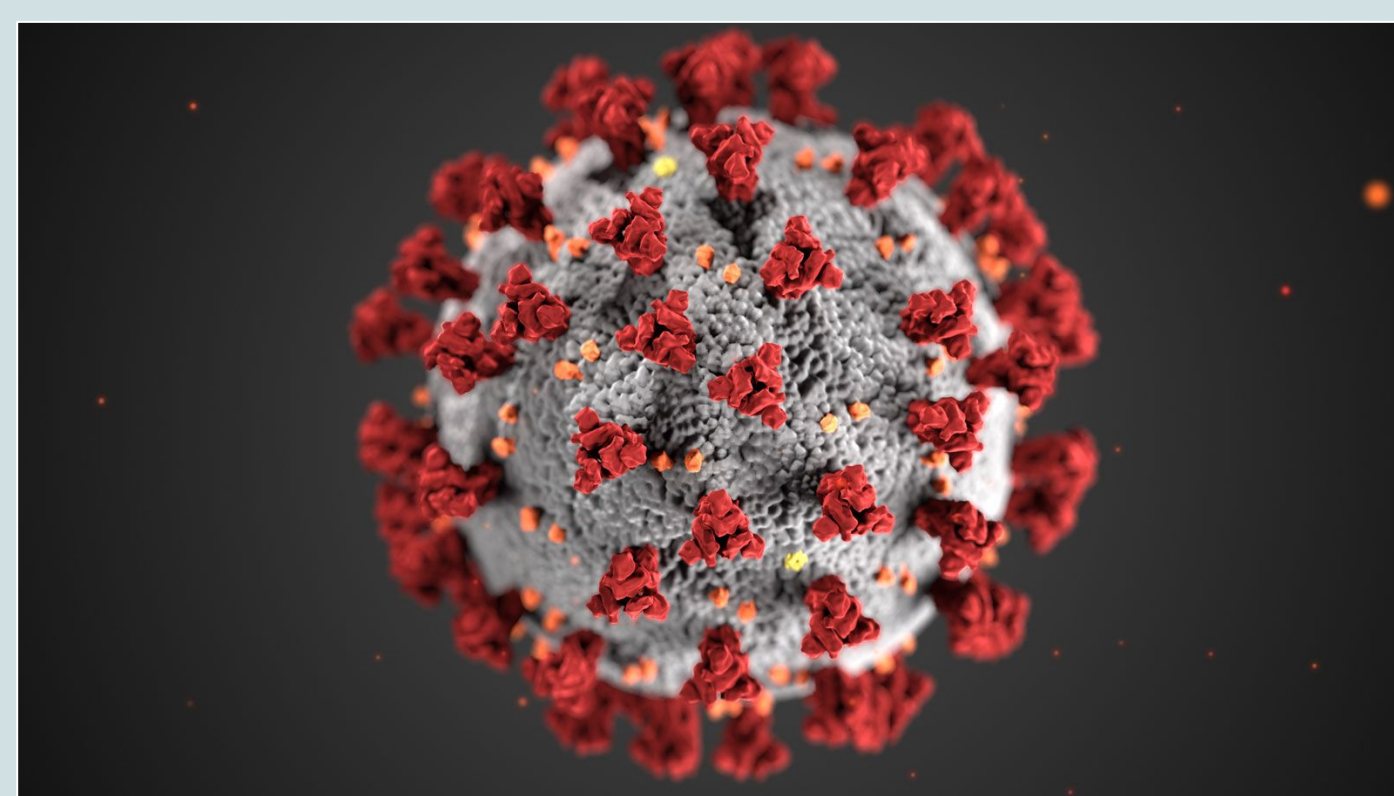
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Introduction

Post-Acute Sequelae COVID-19 (PASC), also referred to as long covid or chronic COVID-19, is characterized by symptoms that persist for at least 12 weeks following the initial onset of acute COVID-19 (Nalbendian, 2021).

The syndrome has a multi-system impact most commonly leading to symptoms such as fatigue, headaches, difficulty concentrating, anxiety disorders, and shortness of breath.

The long-term effects of COVID-19 on children and adolescents are under-reported in media and studies, and there is a widespread belief that children without pre-existing conditions are not at risk for severe complications regarding COVID-19.



Purpose

This research evaluates the impact that Post-Acute COVID-19 Syndrome (PASC) has on the youth population, highlighting the underrepresented personal experiences and demonstrating the significance of the disease through evaluation of the long-term effects of comparative pandemics; Russian Influenza and Spanish Influenza.

Methods & Materials

Databases: Binghamton University Libraries, Google Scholar & National Archives

Mixed-method qualitative approach:

Interpretative phenomenological analysis and qualitative content analysis

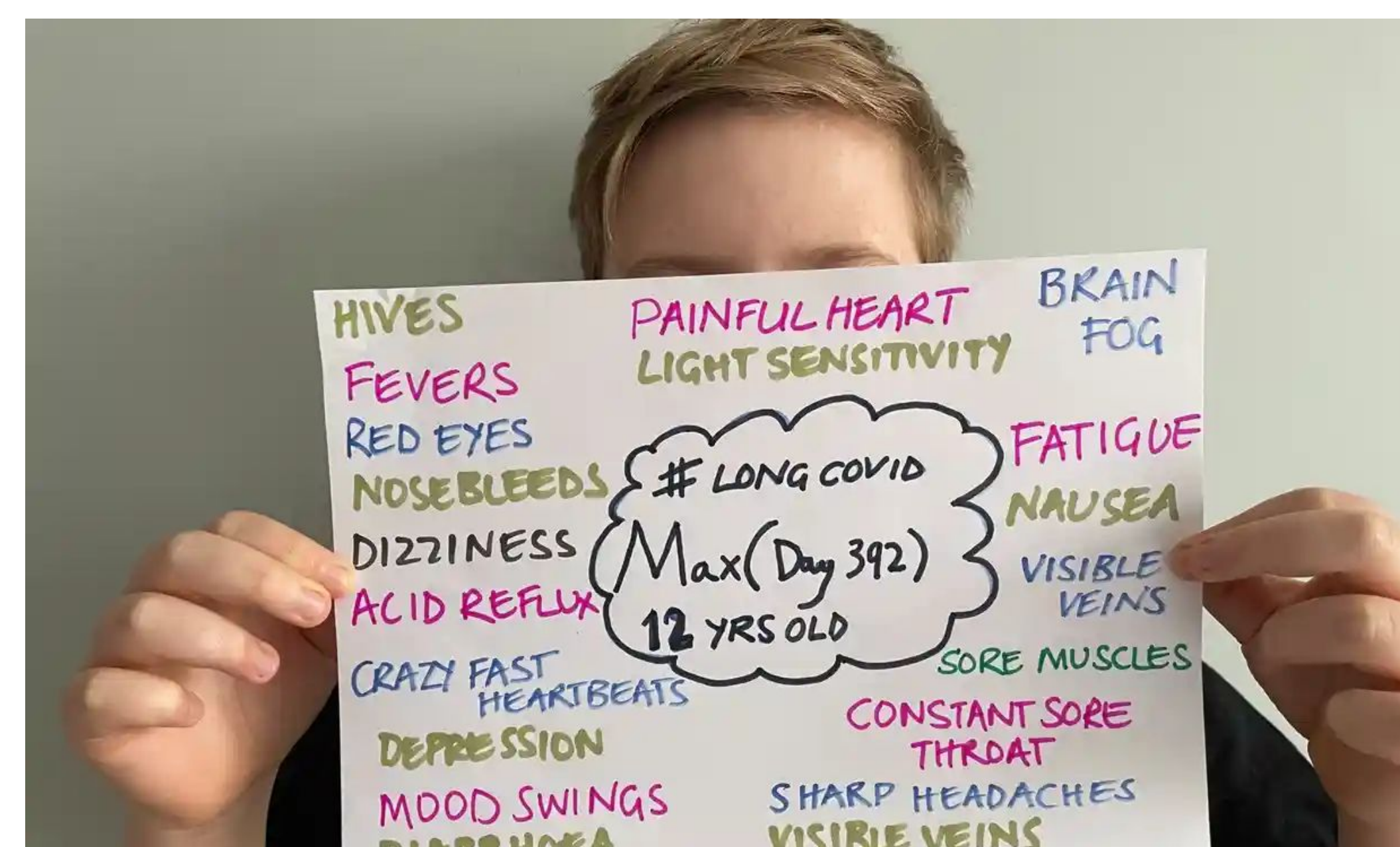
Inclusion criteria: English research articles and editorials from March 2020-March 2022

* Key primary sources including letters, news articles, and blogs were utilized to supplement the research articles

Keywords: COVID-19, coronavirus, adolescents, children, Post-Acute COVID-19 Syndrome, chronic, multi-inflammatory syndrome, Russian Influenza, and Spanish Influenza, psychosis, mental health

Titles, abstracts, and author qualifications were screened

Existing literature provides a descriptive analysis of the frequency of symptoms, evaluates the impact of comorbidities and pre-existing risk factors, and investigates case studies of the virus's impact on body systems.



Hill, A. (2021). [Picture of Max, COVID-19 long hauler patient, displaying his symptoms] [Photograph]. The Guardian. <https://www.theguardian.com/society/2021/may/03/its-terrifying-parents-struggle-to-get-help-for-children-with-long-covid>

Results

- ❖ 25 studies (15 qualitative, 3 quantitative, 7 mixed-methods)
- ❖ N = 708,640 participants
- ❖ 3 news articles detailing Russian and Spanish influenza, 8 blogs detailing individual pediatric cases, and 1 collection of letters from 1889 detailing the effects of Russian influenza

Themes

I. Multisystemic effects

Most prominently nervous, respiratory, and cardiovascular system involvement

II. Symptomatology

Fatigue, headaches, anxiety, depression, shortness of breath, weakness, and gastrointestinal problems

III. Future Morbidities and Risk Factors

Increased probability of morbidity in long hauler patients

IV. Decline in Quality of Life / Interruption of Daily Activities

Inability to attend school
Limited physical activities
Difficulty focusing
Lack of motivation
Lethargy

V. Repeated History: Similarity to long-term presentation of Russian and Spanish Influenza

Patients reported depression, suicidal thoughts, and lethargy. Weakness and difficulty in performing daily tasks

Conclusions & Significance

The evidence contradicts the claims that children are unaffected by COVID-19 infection demonstrating that **Post-Acute COVID-19 Syndrome (PASC) diminishes children's quality of life and can have profound future health implications.**

By including personal experiences and comparison to other viral outbreaks, this study further indicates that post-COVID-19 syndrome is not a new phenomenon and can have serious consequences that can potentially impact children for their entire lives, raising awareness towards the significance of preventive COVID-19 measures.

Future Works

Future works should continue to evaluate the long-term effects of PASC, investigating how the virus affects children's development, long-term health, and daily life. The impact of vaccination on the prevention of PASC should also be researched.

Acknowledgments

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