

INPLASY PROTOCOL

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Corresponding author:
Carmen Galán Arroyo

mamengalan.tq@gmail.com

Author Affiliation:
Physical and Health Literacy
and Health-Related Quality of
Life (PHYQoL), Faculty of
Sport Science, University of
Extremadura.

Support: Universidad de Las
Américas.

**Review Stage at time of this
submission:** Preliminary
searches.

Conflicts of interest:
None declared.

Quality of Life of Children and Adolescents with Post-Acute COVID-19 Syndrome: a Scoping Review Protocol

Rojo-Ramos, J¹; de los Ríos-Calonge, J²; González, DP³;
Castillo-Paredes, A⁴; Galán-Arroyo, C⁵.

Review question / Objective: The aim is to conduct a scoping protocol to identify and map how post-acute COVID-19 syndrome affect the quality of life (physical-mental-social functioning) of children and adolescents.

Eligibility criteria: Studies will be assessed for inclusion in the review according to the following criteria: **Study Design:** We will only include studies that investigate the impact of Post-Acute COVID-19 Syndrome on Quality of Life in children and adolescents. This includes primary research (peer-reviewed research articles), evidence synthesis (narrative reviews, systematic reviews, scoping reviews, rapid reviews, etc.), conference abstracts, discussion articles, editorials, and thesis. We will not limit the included studies by the sample size of the study. **Outcomes:** We will include studies examining outcomes under the concept quality of life (physical-mental-social functioning), both quantitatively and qualitatively. **Study Population and Additional Characteristics:** We will only include studies where the study population meets the characteristics of the following MeSH (Medical Subject Headings): - "Child, Preschool": An individual 2 to 5 years old. - "Child": A person 6 to 12 years of age. - "Adolescent": A person 13 to 18 years of age. We will not limit included studies by their ethnicity, country of origin, economic characteristics, or geographic region. We will limit included studies to those published in English, Spanish and Portuguese.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 April 2023 and was last updated on 17 April 2023 (registration number INPLASY202340049).

INTRODUCTION

Review question / Objective: The aim is to conduct a scoping protocol to identify and map how post-acute COVID-19 syndrome affect the quality of life (physical-mental-

social functioning) of children and adolescents.

Background: The COVID-19 pandemic has affected a wide range of people around the world since the end of 2019, in many cases

leaving consequences that persist to this day. COVID-19 is a single stranded RNA virus of coronavirus type, it transmits between people directly through contact and inhalation of respiratory droplets and aerosols, or indirectly by con-tact with contaminated objects or even by vertical transmission, causing in many cases what is known as severe acute respiratory distress syndrome (SARS-CoV-2) (Paules, Marston, & Fauci, 2020). The infection could be asymptomatic, or it could trigger mainly respiratory and gastrointestinal symptoms that may be mild, moderate or severe, requiring conventional symptom management or invasive interventions in the hospital (Koc, Xiao, Liu, Li, & Chen, 2022). COVID-19 has had a big impact worldwide, generating mil-lions of deaths and sequelae of the disease that affect quality of life of people who suffered it (Koc et al., 2022; Paules et al., 2020).

Multiple studies have reported a big variety of symptoms that occur in people with post-acute COVID-19 syndrome, some of them are fatigue, dyspnea, chronic cough, head-ache, cognitive dysfunction, joint pain, autonomic dysregulation, alterations in the perception of smells and tastes, chest pain, skin rashes, hair loss and gastrointestinal disorders, among other (Lopez-Leon et al., 2022). Those clinical manifestations have been reported in around 10% to 87% of adult patients, being more common in women (Piazza et al., 2022). But it's important to emphasize that even when adults are the most affected by post-acute COVID-19, they are not the only ones affected by this condition, some other population like children could suffer it. The above has turned into a public health issue, due to the lack of consensus about clinical definitions and clear management for this illness (Lopez-Leon et al., 2022; Piazza et al., 2022; Zimmermann et al., 2021).

Even though there are some clinical studies about post-acute COVID-19 in children, to the moment they are not enough, and in addition most of them don't talk about life quality in this population (Yong, 2021). The lack of information on this topic should not be a barrier for health care area, which makes important to create literature that cover and update the knowledge about this

issue. The knowledge on how quality of life is affected by post-acute COVID-19 in children is important to identify the primary aspects that require to be attended in this population that have special needs, which is important for future research on strategies that may be developed to improve life quality of this patients.

Rationale: COVID-19 has left traces, one of those is post-acute covid, which means the symptoms that persist after an acute infection. This has turned into a public health issue due to its impact on quality of life in patients that undergo this infection, part of the population affected by this illness are children, a special interest group due to their special characteristics and the impact of post-acute covid in their daily life.

METHODS

Strategy of data synthesis: Sources of Information and high-sensitivity search strategies.

Embase

('child, preschool' OR 'preschool child' OR 'children, pre-school' OR 'preschool children' OR 'child' OR 'children' OR 'adolescent' OR 'adolescents' OR 'adolescence' OR 'teens' OR 'teen' OR 'teenagers' OR 'teenager' OR 'youth' OR 'youths') AND ('Quality of Life' OR 'Life Quality' OR 'Health-Related Quality Of Life' OR 'Health Related Quality Of Life' OR 'HRQOL') AND ('Post-Acute COVID-19 Syndrome' OR 'COVID-19 Syndrome, Post-Acute' OR 'Post-Acute COVID-19 Syndromes' OR 'Long Haul COVID-19' OR 'COVID-19, Long Haul' OR 'Long Haul COVID 19' OR 'Long Haul COVID-19s' OR 'Post Acute COVID-19 Syndrome' OR 'Post Acute COVID 19 Syndrome' OR 'Long COVID' OR 'Post-Acute Sequelae of SARS-CoV-2 Infection' OR 'Post-COVID Conditions' OR 'Post-COVID Condition' OR 'Long-Haul COVID' OR 'COVID, Long-Haul' OR 'Long Haul COVID' OR 'Long-Haul COVIDs')

MEDLINE

((child, preschool* or preschool child* or children, preschool* or preschool children* or child or children or adolescent or

adolescents or adolescence or teens or teen or teenagers or teenager or youth or youths) and (Quality of Life* OR Life Quality* OR Health-Related Quality Of Life* OR Health Related Quality Of Life* OR HRQOL) and (Post-Acute COVID-19 Syndrome* or COVID-19 Syndrome, Post-Acute* or Post-Acute COVID-19 Syndromes* or Long Haul COVID-19* or COVID-19, Long Haul* or Long Haul COVID 19* or Long Haul COVID-19s* or Post Acute COVID-19 Syndrome* or Post Acute COVID 19 Syndrome* or Long COVID* or Post-Acute Sequelae of SARS-CoV-2 Infection* or Post-COVID Conditions* or Post-COVID Condition* or Long-Haul COVID* or COVID, Long-Haul* or Long Haul COVID* or Long-Haul COVIDs*))

ScienceDirect

("child, preschool" OR child OR adolescent) AND ("Quality of Life" OR "Health Related Quality Of Life" OR HRQOL) AND ("Post-Acute COVID-19 Syndrome" OR "Long COVID" OR "Post-COVID Conditions")

Scopus

TITLE-ABS ("child, preschool" OR "preschool child" OR "children, preschool" OR "preschool children" OR child OR children OR adolescent OR adolescents OR adolescence OR teens OR teen OR teenagers OR teenager OR youth OR youths) AND ("Quality of Life" OR "Life Quality" OR "Health-Related Quality Of Life" OR "Health Related Quality Of Life" OR HRQOL) AND ("Post-Acute COVID-19 Syndrome" OR "COVID-19 Syndrome, Post-Acute" OR "Post-Acute COVID-19 Syndromes" OR "Long Haul COVID-19" OR "COVID-19, Long Haul" OR "Long Haul COVID-19s" OR "Post Acute COVID-19 Syndrome" OR "Post Acute COVID 19 Syndrome" OR "Long COVID" OR "Post-Acute Sequelae of SARS-CoV-2 Infection" OR "Post-COVID Conditions" OR "Post-COVID Condition" OR "Long-Haul COVID" OR "Long-Haul COVIDs ") AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "Spanish") OR LIMIT-TO (LANGUAGE , "Portuguese"))

PubMed,

SPORTDiscus,

Web of science ISI, Wiley Online Library

("child, preschool" OR "preschool child" OR "children, preschool" OR "preschool

children" OR child OR children OR adolescent OR adolescents OR adolescence OR teens OR teen OR teenagers OR teenager OR youth OR youths) AND ("Quality of Life" OR "Life Quality" OR "Health-Related Quality Of Life" OR "Health Related Quality Of Life" OR HRQOL) AND ("Post-Acute COVID-19 Syndrome" OR "COVID-19 Syndrome, Post-Acute" OR "Post-Acute COVID-19 Syndromes" OR "Long Haul COVID-19" OR "COVID-19, Long Haul" OR "Long Haul COVID-19s" OR "Post Acute COVID-19 Syndrome" OR "Post Acute COVID 19 Syndrome" OR "Long COVID" OR "Post-Acute Sequelae of SARS-CoV-2 Infection" OR "Post-COVID Conditions" OR "Post-COVID Condition" OR "Long-Haul COVID" OR "Long-Haul COVIDs").

Eligibility criteria: Studies will be assessed for inclusion in the review according to the following criteria: Study Design: We will only include studies that investigate the impact of Post-Acute COVID-19 Syndrome on Quality of Life in children and adolescents. This includes primary research (peer-reviewed research articles), evidence synthesis (narrative reviews, systematic reviews, scoping reviews, rapid reviews, etc.), conference abstracts, discussion articles, editorials, and thesis. We will not limit the included studies by the sample size of the study. Outcomes: We will include studies examining outcomes under the concept quality of life (physical-mental-social functioning), both quantitatively and qualitatively. Study Population and Additional Characteristics: We will only include studies where the study population meets the characteristics of the following MeSH (Medical Subject Headings): - "Child, Preschool": An individual 2 to 5 years old. - "Child": A person 6 to 12 years of age. - "Adolescent": A person 13 to 18 years of age. We will not limit included studies by their ethnicity, country of origin, economic characteristics, or geographic region. We will limit included studies to those published in English, Spanish and Portuguese.

Source of evidence screening and selection: We will search the information

sources Embase, Medline OVID, PubMed, ScienceDirect, Scopus, SPORTDiscus, Web of Science ISI and Wiley Online Library. Additional searches of grey literature will include the first 100 results of a Google Scholar search, hand searches and contact with study authors. The reference list of relevant review papers and included articles were hand searched for additional articles. These searches will be done through the Extremadura University and the Miguel Hernández University of Elche (Embase) library services. We will continue searches until we attain reasonable confidence that essentially all relevant studies for each review outcome have been considered for inclusion. We will also search the registries in the International Platform of Registered Systematic Review and Meta-analysis Protocols (INPLASY) and the International Prospective Register of Systematic Reviews (PROSPERO) to identify planned, ongoing, or recently published systematic reviews.

Data management: A thematic analysis will be conducted in order to identify meanings and patterns that answer the research question. In addition, the type of study and the level of evidence of the study design will be examined using the JBI Critical Appraisal Checklist.

Reporting results / Analysis of the evidence: The guide for the final report will be PRISMA-ScR and the synthesis of evidence from the extracted data will be done using tables, thematic maps and diagrams for a better understanding of the findings (Plan for the presentation of findings: Appendix A). This step will be divided into (1) data analysis, (2) presentation of findings linked to the research questions, and (3) interpretation of the implications of the findings for further research and services. As important findings, we expect to find information based on design, measurement, effectiveness and/or testimonials related to Quality of Life of Children and Adolescents with Post-Acute COVID-19 Syndrome. A summary of the findings related to the study objectives will be produced and gaps

in the knowledge area will be highlighted for future studies (e.g. systematic reviews). Translated with <http://www.DeepL.com/Translator> (free version).

Language restriction: English, Spanish and Portuguese.

Country(ies) involved: Spain.

Keywords: Post-acute COVID-19 syndrome; children; adolescents; quality of life.

Contributions of each author:

Author 1 - Jorge Rojo-Ramos - Drafted the original manuscript and contributed project administration.

Email: jorgerr@unex.es

Author 2 - Javier de los Ríos-Calonge - Contributed methodology and formal analysis.

Email: javier.rios01@goumh.umh.es

Author 3 - Daniela Peñaloza González - Contributed to the development of the selection criteria and risk of bias assessment strategy.

Email: danielapenalaza@gmail.com

Author 4 - Antonio Castillo-Paredes - Contributed supervision, provided feedback and funding acquisition.

Email: acastillo85@gmail.com

Author 5 - Carmen Galán-Arroyo - Contributed to the review, validation, supervision and project administration.

Email: mamengalana@unex.es