



KING EDWARD MEDICAL UNIVERSITY

POST COVID-19 LONG HAUL SYNDROME: A SYSTEMATIC REVIEW

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INTRODUCTION

Long Haul Syndrome is a set of conditions that persist for more than 4 weeks after a confirmed diagnosis of COVID-19. Just like COVID-19 diverse symptomatology, the post-COVID19 syndrome also exhibits a diverse clinical spectrum including respiratory (fatigue, shortness of breath, sore throat), cardiovascular (chest pain, palpitations, tachycardia), physical (arthritis, myalgia, weakness), neurocognitive (sleep disorders, anxiety, mood swings, cognitive impairment) and multi-organ diseases. There are certain criteria defining long haul syndrome or post-COVID19 syndrome. It may be defined as “No recovery after symptoms appear for weeks to months regardless of confirmatory diagnostic testing. There is an estimate that SARS-CoV-19 impacted billions of people worldwide across 200 countries since a large population is at risk of developing long-haul covid19. Hence, it is a globally addressed issue of public health. This review will be a nutshell of guiding information covering maximum dimensions from the basis of disease to its multifaceted effects.

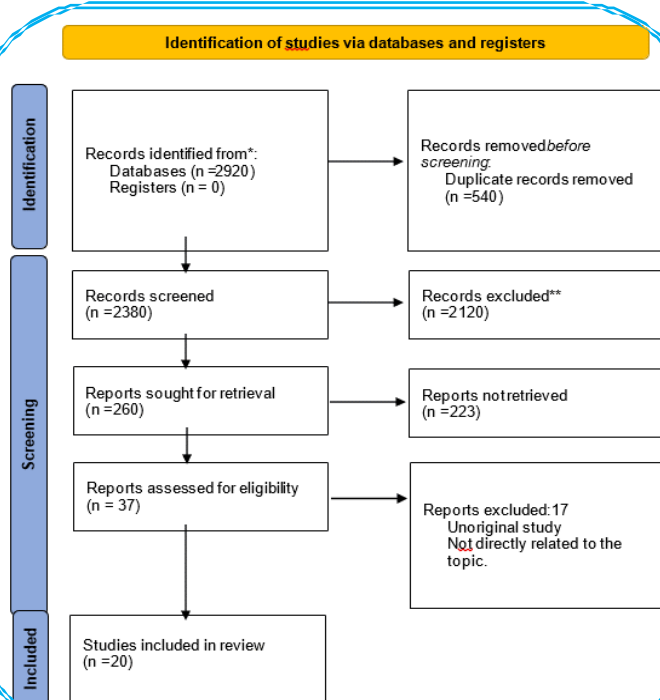
METHODOLOGY

A Systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) guidelines.

Study population: Studies on Covid19 victims showing clinical symptoms for weeks to months after recovery.

Study duration: A systematic literature search was done from March 22 till October 22.

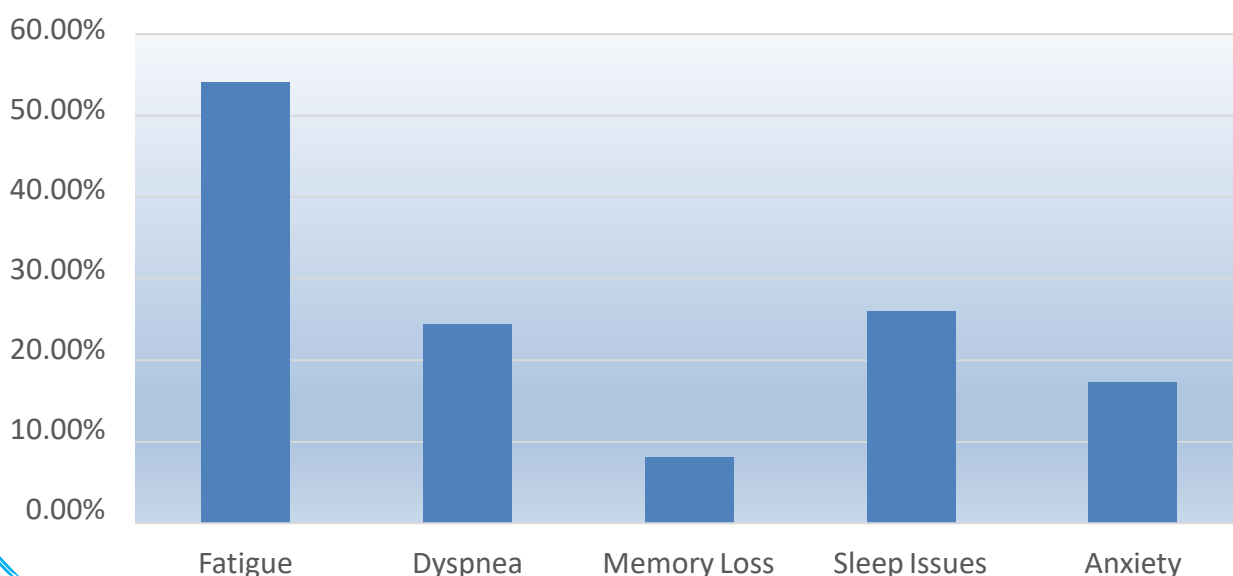
Data collection: A comprehensive search of the Databases has surfed including PubMed, Medline. All available data was later refined according to inclusion-exclusion criteria. Search results citations were downloaded to Zotero. Two reviewers (W.I and A.A) independently performed data extraction and synthesis to remove any possible discrepancies while a third reviewer (M.T) cross checked the entries for accuracy and completeness.



RESULTS

A total of 2920 articles were obtained for this review and 37 publications were evaluated for eligibility. The screening process ended up with a total of 20 articles for final analysis and review. A total of 6 studies were from Bangladesh, Victoria, Mexico, China, Nigeria, and the Mediterranean region. Others include the US, the UK, and different populations. All the studies were based on hospitalized and non-hospitalized covid19 patients with proper follow-up history for more than a month. These study participants have multi-faceted effects, more than 35 types of symptoms, and multi-organ involvement in various diseases. The results demonstrated that the patients experienced post-COVID-19 symptoms, with post-viral fatigue being the most common symptom mentioned in 17 studies. Patients started having anxiety or depression. A small percentage of the participants reported experiencing more severe symptoms. The severity of the condition was associated with the existence of other comorbidities. The intensity of post-COVID-19 symptoms was associated with the severity of COVID-19.

Frequency of Symptoms



LIMITATIONS

Small number of included studies with underpowered sample sizes, and variation in defined outcomes leading to the heterogeneity of the results. Many studies used a self-reporting method which can produce an interobserver bias. There is no definition of the effect of late effects of COVID-19 and its associated symptoms. A critical illness survivor can have prolonged symptoms while a patient with mild disease can recover early from the same problem.

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CONCLUSION

The incidence of multifaceted effects of post COVID-19 has continued to impact the victims for weeks or months. These include multi-organ diseases and need multidisciplinary care and proper follow-up treatment.