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## Global Prevalence of Post-Coronavirus Disease 2019 (COVID-19) Condition or Long COVID: A Meta-Analysis and Systematic Review

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### Abstract

**Background:** This study aims to examine the worldwide prevalence of post-coronavirus disease 2019 (COVID-19) condition, through a systematic review and meta-analysis.

**Methods:** PubMed, Embase, and iSearch were searched on July 5, 2021 with verification extending to March 13, 2022. Using a random-effects framework with DerSimonian-Laird estimator, we meta-analyzed post-COVID-19 condition prevalence at 28+ days from infection.

**Results:** Fifty studies were included, and 41 were meta-analyzed. Global estimated pooled prevalence of post-COVID-19 condition was 0.43 (95% confidence interval [CI], .39-.46). Hospitalized and nonhospitalized patients had estimates of 0.54 (95% CI, .44-.63) and 0.34 (95% CI, .25-.46), respectively. Regional prevalence estimates were Asia (0.51; 95% CI, .37-.65), Europe (0.44; 95% CI, .32-.56), and United States of America (0.31; 95% CI, .21-.43). Global prevalence for 30, 60, 90, and 120 days after infection were estimated to be 0.37 (95% CI, .26-.49), 0.25 (95% CI, .15-.38), 0.32 (95% CI, .14-.57), and 0.49 (95% CI, .40-.59), respectively. Fatigue was the most common symptom reported with a prevalence of 0.23 (95% CI, .17-.30), followed by memory problems (0.14; 95% CI, .10-.19).

**Conclusions:** This study finds post-COVID-19 condition prevalence is substantial; the health effects of COVID-19 seem to be prolonged and can exert stress on the healthcare system.

**Keywords:** Post-Acute Sequelae of COVID-19; epidemiology; infectious diseases; long-COVID; post-COVID-19 condition.

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Potential conflicts of interest. All authors: No reported conflicts. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest.

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