

Update on long COVID symptom prevalence estimate

ONS, 4 February 2021

Purpose

To update the PM on the prevalence of 'long COVID' in the population of England, based on the UK Coronavirus Infection Survey (CIS).

Background

'Long COVID' has been clinically defined as covering ongoing symptomatic COVID-19 (signs and symptoms lasting 4-12 weeks) and post-COVID syndrome (signs and symptoms that develop during or after an infection consistent with COVID-19, continue for more than 12 weeks, and are not explained by an alternative diagnosis).¹

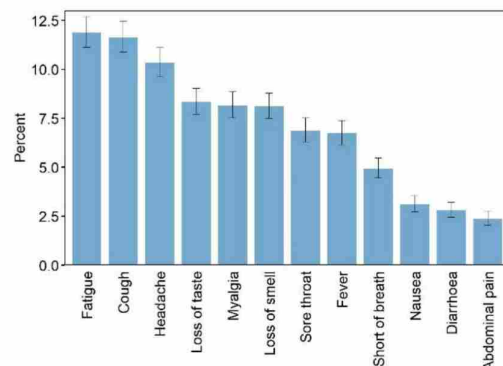
Symptoms reported as part of the long COVID experience include fatigue, fever, breathlessness, taste and smell disturbance, muscle ache, cognitive impairment, and feelings of anxiety and depression.²

In this experimental analysis, we quantified symptom prevalence using data from 9,000 respondents to the CIS who tested positive for COVID-19 up to 14 December 2020. The CIS is a survey of randomly sampled households in the UK with monthly follow-up. Due to the nature of the data collected, we concentrated on 12 of the most common physical symptoms persisting for 5-12 weeks after infection.

ONS estimates of long COVID symptom prevalence

ONS estimates that during week-commencing 27 December 2020, there were 301,000 people in private households in England with COVID-19 symptoms that had persisted for between 5 and 12 weeks (95% confidence interval: 274,000 to 329,000).

22% of respondents were still reporting at least one symptom at 5 weeks following infection, and 10% still had symptoms at 12 weeks. Prevalence at 5 weeks was slightly higher in females than males, at 24% and 21%, respectively. When grouped by age, 5-week prevalence was greatest in people aged 35-49 years (27%), followed by 50-69 (26%) and 25-34 years (25%). The most common symptoms at 5 weeks were fatigue (12%), cough (12%), and headache (10%):



Implications

There is evidence of medium-term symptom manifestations following COVID-19 infection (although the longer-term picture remains unclear). This has the potential to place considerable burden on healthcare systems and society, particularly as prolonged symptoms seem to be most evident in young adults and middle-aged people. Further research is required to understand the biological mechanisms underpinning these findings, and the risk factors for developing long COVID.

Ongoing work at ONS

Long COVID is an emerging phenomenon, so our analysis is experimental and there remains considerable uncertainty around the results. ONS is continuing to refine its measure of long COVID prevalence, including launching new questions on the CIS, improving its statistical methods, and assessing various risk factors for developing long COVID.

¹ National Institute for Health and Care Excellence. COVID-19 rapid guideline: managing the long-term effects of COVID-19. 2020. <https://www.nice.org.uk/guidance/ng188>

² Michelen M, Manoharan L, Elkheir N, et al. Characterising long-term covid-19: a rapid living systematic review. 2020. <https://www.medrxiv.org/content/10.1101/2020.12.08.20246025v1>