Last update: 15/11/2022

METADATA – LONG COVID

Description	Symptoms that persist or develop for more than 3 months after a COVID-19 infection and cannot be explained by another diagnosis (1)
Rationale	Since the onset of the COVID-19 pandemic, most research has focused on the physiopathology and management of the acute symptoms of COVID-19, yet some people tend to experience symptoms beyond the acute phase of infection, that is, long COVID (3). However, evidence on the prevalence of long COVID, its symptoms, and its mechanisms are still not well understood. With a deeper understanding of long COVID, it has become clear that this public health issue has become a burden and should be considered a public health priority. The evidence highlights a strong need for a multidisciplinary approach and early post-acute physical and psychological rehabilitation interventions depending on symptom patterns (2)
Primary Data source	National data :
	Sciensano, Covimpact study
Indicator source	National data :
	Own calculations based on the data in the Covimpact study.
Periodicity	Covimpact study: Every 3 months for 2 years, depending on the participant's entry point in the study.
Calculation, technical definitions, and limitations	Calculations:
	The proportion of long COVID is calculated by using several variables to identify individuals with long-term COVID at 3 months and 6 months:
	 reporting symptom(s) related to COVID-19 infection (YES/NO),
	 feeling recovered from COVID-19 (Feeling: Not at all recovered from COVID- 19, not too recovered, neither yes nor no, somewhat yes, very much so),
	being diagnosed with long-term COVID by a health care professional.
	The Health-Related Quality of Life (HRQoL) was assessed using the EQ-5D-5L questionnaire developed by the EuroQol Group. It is a questionnaire that assesses the impact of health status on quality of life along 5 dimensions:
	mobility,
	personal autonomy,
	performance of daily activities,
	pain/discomfort,
	anxiety/depression.
	Each dimension has five response levels. Based on the responses to the five dimensions, it is possible to assign each respondent an HRQoL score where 100 represents the best possible HRQoL. This questionnaire is also used in the Belgian Health Interview Survey (BHIS) and allow us to compare the HRQoL before the infection using the participants of the BHIS as a reference group compared to people with and without long COVID 3 and 6 months after their initial infection (4)

Limitations: The Covimpact study does not have a control group of people not infected with COVID-19. The data from the participants are self-reported. A selection bias may occur during the recruitment phase because some people do not have a mobile phone, so they will not have access to the SMS link to the first questionnaire. In addition, some people may not have access to the Internet or the necessary skills to respond to the online questionnaire. Analyses were weighted based on certain characteristics of the eligible population (age, gender, and having at least one symptom in the acute phase of the infection) to partially account for this selection bias. Also, a bias related to the loss of follow-up participants (who no longer respond to questionnaires or who leave the study) may occur because people with long-lasting symptoms of COVID are potentially more likely to continue to participate and those lost to follow-up could more likely be participants who do not have/any longer have symptoms of COVID-19, or conversely, people who have passed away (4).

International comparability

Availability: yes

Comparability: There is still no consensus on the long COVID definition and that hampers comparability between studies (3).

Reference list

- (1) National Institute for Health and Care Excellence,(NICE). (2020). COVID-19 rapid guideline: Managing COVID-19. NICE. https://www.nice.org.uk/guidance/ng191
- (2) Castanares-Zapatero D, Kohn L, Dauvrin M, Detollenaere J, Maertens de Noordhout C, Primusde Jong C, RondiaK, Chalon P, Cleemput I, Van den Heede K. Long COVID: Pathophysiology – epidemiology and patient needs. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). 2021. KCE Reports 344. D/2021/10.273/31.
- (3) Michelen, M., Manoharan, L., Elkheir, N., Cheng, V., Dagens, A., Hastie, C., O'Hara, M., Suett, J., Dahmash, D., Bugaeva, P., Rigby, I., Munblit, D., Harriss, E., Burls, A., Foote, C., Scott, J., Carson, G., Olliaro, P., Sigfrid, L., & Stavropoulou, C. (2021). Characterising long COVID: A living systematic review. BMJ Global Health, 6(9), e005427. https://doi.org/10.1136/bmjgh-2021-005427
- (4) Smith P, Charafeddine R, Drieskens S, De Pauw R, De Ridder K, Demarest S, Van Cauteren D. Etude COVIMPACT: Infection COVID-19 et ses implications physiques, mentales et sociales à long terme Résultats du suivi à 3 et 6 mois suivant l'infection. Bruxelles, Belgique. Juin 2022. Numéro de dépôt: D/2022.14.440/36 DOI: /10.25608/gyzc-w673