

Two-year trajectories of COVID-19 symptoms and their association with illness perception: A prospective cohort study in Amsterdam, the Netherlands

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Abstract

Background We used data from a prospective cohort to explore two-year trajectories of “long COVID” (persistent symptoms after SARS-CoV-2 infection) and their association with illness perception. **Methods** RECOVERED participants (adults; prospectively enrolled following laboratory-confirmed SARS-CoV-2 infection, May 2020-June 2021) completed symptom questionnaires at months 2-12, 18 and 24, and the Brief Illness Perception Questionnaire (B-IPQ) at months 1, 6, and 12. Using group-based trajectory models (GBTM), we modelled symptoms (mean total numbers and proportion with 4 specific complaints), including age, sex, BMI and timing of infection as covariates. In a multivariable linear mixed-effects model, we assessed the association between symptom trajectories and repeated B-IPQ scores. **Results** Among 292 participants (42% female; median age 51 [IQR=36-62]), four trajectories were identified, ranging from Trajectory 4 (8.9%; 6+ symptoms) to Trajectory 1 (24.8%; no symptoms). The occurrence of fatigue and myalgia increased among 23% and 12% of participants, respectively. Individuals in Trajectory 4 experienced more negative adjusted B-IPQ scores over time than those in Trajectories 1-3. **Conclusions** We observed little fluctuation in the total number of symptoms but individual symptoms may develop as others resolve. Reporting a greater number of symptoms was congruent with more negative illness perception over time.

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