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Long covid: Hair loss and sexual dysfunction are among wider symptoms, study finds

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People experiencing long covid have reported a wider set of symptoms than previously thought, including hair loss and sexual dysfunction.

Electronic health records of 2.4 million people in the UK from January 2020 to April 2021 were analysed for a study published in *Nature Medicine*. The cohort included 486 149 people with confirmed SARS-CoV-2 infection who were not admitted to hospital, matched with a control group of 1.9 million people with no recorded evidence of coronavirus infection.

People who tested positive for the virus reported at least one of 62 symptoms more frequently 12 weeks after initial infection with SARS-CoV-2 than those who had not contracted the virus. The symptoms with the largest adjusted hazard ratios were anosmia (6.49 (95% confidence interval 5.02 to 8.39)), hair loss (3.99 (3.63 to 4.39)), sneezing (2.77 (1.40 to 5.50)) ejaculation difficulty (2.63 (1.61 to 4.28)), reduced libido (2.36 (1.61 to 3.47)), and shortness of breath (2.20 (1.57 to 3.08)). Other common symptoms were chest pain, a hoarse voice, and fever.

Shamil Haroon, associate clinical professor in public health at the University of Birmingham and senior author, said, "This research validates what patients have been telling clinicians and policy makers throughout the pandemic, that the symptoms of long covid are extremely broad and cannot be fully accounted for by other factors such as lifestyle risk factors or chronic health conditions.

"The symptoms we identified should help clinicians and clinical guideline developers to improve the assessment of patients with long term effects from covid-19 and to subsequently consider how this symptom burden can be best managed."

Comorbidities

The study also suggested that women, young people, and people from a black, mixed, or other minority ethnic group had an increased risk of long covid. Being from a poor background, smoking, and being overweight or obese were also linked with reporting of persistent symptoms.

A wide range of comorbidities were also associated with an increased risk of long covid symptoms including chronic obstructive pulmonary disease, benign prostatic hyperplasia, fibromyalgia, anxiety, and depression.

A limitation of the study is the use of routinely coded healthcare data, which may under-represent the true burden of symptoms experienced by people with long covid. Another limitation is potential misclassification bias, as community testing for SARS-CoV-2 was very limited during the first surge of the pandemic.

Anuradhaa Subramanian, research fellow at the Institute of Applied Health Research, University of Birmingham, and lead author, said, "Our data analyses of risk factors are of particular interest because it helps us to consider what could potentially be causing or contributing to long covid.

"Women are, for example, more likely to experience autoimmune diseases. Seeing the increased likelihood of women having long covid in our study increases our interest in investigating whether autoimmunity or other causes may explain the increased risk in women."

The Office for National Statistics' latest covid infection survey estimated that two million people in private households in the UK (3% of the population) were experiencing self-reported long covid—defined as reporting symptoms more than four weeks after infection—as of 4 June 2022.²

This week research carried out by the Institute for Fiscal Studies³ has estimated that one in 10 people stop work because of long covid symptoms, with around 110 000 people missing from work at any one time. The research also suggests that people who were less well off before the pandemic are more likely to have long covid.

Patient registry for Wales

Meanwhile, the independent Bevan Commission think tank has recommended setting up a long covid patient registry or similar mechanism in Wales to support long term monitoring and service improvements.

Ilora Finlay, co-vice chair of the commission and coauthor of a paper outlining the recommendations in the *Journal of the Royal Society of Medicine*, ⁴ said, "Despite the uncertainties of long covid, the need for long term monitoring is essential to support research, service improvement, and patient engagement."

In England a long covid registry for patients attending the NHS post-covid assessment clinics was established by July 2021.⁵

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