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Post-acute covid-19 in primary care

Practice must adapt to meet patients' diverse needs after covid-19 at home or in hospital

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As of 13 December 2021, 270 million cases of covid-19 have been recorded worldwide,¹ but the scale and impact of the long term sequelae of this disease remain unknown. Persistent symptoms, termed long covid, post-covid syndrome,² or post-acute covid³ have been widely reported in different populations, appearing as clusters of multisystem fluctuating manifestations. Studies report a prevalence of complications ranging from 8% to 50%, with recovery times ranging from three months to non-resolution at to one year.⁴⁻⁹ Overwhelmingly, these studies have been conducted in patients who were admitted to hospital.¹⁰ The cause of post-covid syndrome is unclear but might be due to a direct viral effect, inflammation, or the impact of physiological deconditioning after immobility.¹¹

Post-covid syndrome needs better characterisation to help inform the appropriate targeting of healthcare. The evolving pandemic and emergence of new variants have increased the socioeconomic liabilities of both patients and communities, adding further complexity to this illness and stretching already challenged healthcare systems. In addition, the effect on the societal psyche of an unprecedented infodemic about adverse outcomes from SARS-CoV-2 infection remains unknown. Long covid is perhaps the first illness to be defined by patients through social media.¹²

In a linked paper Whittaker and colleagues (doi:10.1136/bmj-2021-065834) report findings from a retrospective, observational, GP database study, providing invaluable insight into the healthcare seeking behaviours of 456 000 patients attending 23% of general practices in England after covid-19.¹³ This study differs from other reports such as patient surveys, as findings are based on symptoms reported to clinicians by patients with documented positive test results for covid-19. It describes a diverse symptom burden in mostly unvaccinated patients in the second wave of the pandemic characterised by pre-delta variants.

Whittaker and colleagues' findings contrast with those of previously published studies of post-covid symptoms, showing not just differences in the outcome of acute illness between patients admitted to hospital or those in the community, but also differences in clinical presentations and patterns of healthcare use in the months after diagnosis. Outcomes in both groups were compared with those in pre-covid-19 and influenza cohorts.

Although rates of healthcare use and symptoms were markedly lower than those seen in other studies,¹⁴ the diverse spectrum of presentations and high residual symptom burden relative to post-influenza cohorts needs further evaluation and development

of appropriate health services to meet patients' needs. The lower absolute numbers might enable improved targeting of resources to a smaller population of patients.

The need for more analgesics in community dwelling patients without objective disease invites further exploration, as does the reported decrease in post covid-19 symptoms after a first vaccination dose. Higher rates of a wide range of healthcare requests from patients with covid-19 compared with those with a history of influenza suggests the need for a holistic approach to care. Although the study is limited by reliance on health seeking behaviour, and the findings might not be applicable in countries with population demographics different from those in the United Kingdom, Whittaker and colleagues' findings are highly relevant to policy makers and health leaders responsible for service planning.

As with previous studies,¹⁵ three patterns of long covid were observed: organ specific symptoms, such as reduced exercise capacity, anosmia and ageusia, chest pain, palpitations, headache, rash, myalgia, and arthralgia; objective findings of impaired mental health and wellbeing, such as anxiety, depression, non-organic pain, and fatigue; and neurocognitive impairment seen more commonly in cohorts admitted to hospital.^{9 16 17}

In Whittaker and colleagues' study, patients admitted to hospital with covid-19 were older than those not admitted. They had more comorbidities, higher rates of hypoxia, and more severe clinical disease. Symptoms such as loss of taste and smell, arthralgia, breathlessness, venous thromboembolism, cough, fatigue, pain, and insomnia were more commonly reported by the in-hospital group. Patients not admitted to hospital appeared to have higher rates of diagnosed anxiety and depression, although the causes of these were not explored further. As in other studies,¹⁸ rates of cardiovascular complications seemed to be low.

The reductive focus of healthcare on diagnosis, pathology, technological advances—including virtual care—and specialised management of single organ systems will need to change in response to the diverse spectrum of post-acute symptoms reported by patients with covid-19. A more complex, holistic, and better informed response is required. Long covid highlights the importance of a broader and deeper knowledge of patients' needs through primary care with multidisciplinary support—currently at odds with the increasingly complex investigations and healthcare pathways that distance clinicians and patients from each other.¹⁹

Medical evaluation is not just a collection of facts but a narrative that provides “meaning, context and perspective of the patient’s predicament.”²⁰ Highly protocolised, investigation heavy medical pathways that pay little attention to patients’ lived experiences of illness could cause more harm, not less. Listening, evaluating, and agreeing together a bespoke plan of investigation and management is likely to be more appropriate.

An update of this study in the post-vaccine, delta (and omicron) world would be invaluable, and it should be a research priority.

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