Is Long Covid a Functional Disorder?

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In the UK alone, there are an estimated 1.5 million people experiencing symptoms persisting over a year after infection with SARS-CoV-2. 72% report that their symptoms interfere with daily function and 15% (or around 340 000) report that their daily function is 'limited a lot'.[1] Post-COVID-19 Syndrome or Long Covid is common and often debilitating, and yet it remains poorly understood. Even in the most severe cases, standard medical tests are frequently normal. In light of the ongoing uncertainty around its nature, some clinicians and researchers are beginning to suggest Long Covid be considered a 'functional disorder'. This editorial discusses the current state of knowledge of the condition and whether applying the 'functional' label would be helpful.

The National Institute for Health and Care Excellence (NICE), the Centers for Disease Control (CDC) and the World Health Organization (WHO) have all proposed similar diagnostic criteria for Long Covid. These are based on the presence of commonly encountered persistent symptoms after a confirmed or clinically suspected episode of Covid-19.[2] Whilst there is as yet no validated diagnostic test for Long Covid, research to date has revealed a number of compelling findings suggesting that an array of different, possibly interacting, pathophysiological processes may be at play. Changes have been identified in the autonomic nervous system, gut microbiome, clotting and interoceptive processes.[3] There are findings suggesting that viral persistence and/or autoimmunity may contribute.[3] It is hoped that more clarity emerges from this work in the coming years.

'Functional disorders' are described as resulting from pathological changes in bodily 'function' rather than 'structure'. This conceptualisation is thought to offer an explanation as to why standard medical investigations are commonly unremarkable. Other conditions that fall under the umbrella of 'functional disorder' include Fibromyalgia, ME/CFS, Chronic Pelvic Pain, Functional Dyspepsia, Functional Neurological Disorder and Overactive Bladder Syndrome. Some clinicians, researchers and patient advocacy groups are supportive of the term as it can be used to validate the patient's experience in lieu of a clear biological explanation. I suggest, however, the label of 'functional disorder' might in other ways be unhelpful. In its most clumsy usage, the term 'functional' suggests a fundamental difference between those conditions that are easily explained biomedically and those that aren't. This distinction is not reflective of real life clinical practice. Diseases thought to be well understood biomedically continue to confound. Firstly, the degree of disability of two patients with the same disease, with the same objective 'severity' can diverge massively in terms of their level of disability. For example, in chronic obstructive pulmonary disease (COPD) it is common for different patients with similar imaging and lung function testing results to present entirely differently.[4] Secondly, the relationship between proposed biomedical mechanisms and disease outcomes is not straightforward. For example, behavioural factors, such as stress and bereavement, independently increase the risk of adverse cardiac outcomes. Put simply, no two disease presentations are alike, regardless of the results of investigations. Categorising diseases as 'functional' or not risks limiting our curiosity about such complexity.

The term 'functional' evolved from now outdated terms such as 'psychosomatic' or 'hysterical'. Unfortunataly, however, the insidious and stigmatising question of whether a condition is 'in your head' or not continues to rear its head. Simply replacing 'psychosomatic' with 'functional' can seem, at its worst, somewhat cloak and dagger. Its use in this way risks furthering an unhelpful and inaccurate distinction between mind and body. Yet another critique of Descartes' Cartesian dualism is not required – this has been widely written about elsewhere.[5] Any disease or injury, be it Long Covid or a broken arm is experienced in the mind. Designating Long Covid a 'functional disorder' may perpetuate stigma and impede scientific curiosity.

Pursuit of unanswered questions is a vocational responsibility of researchers and healthcare professionals. The biomedical model of disease helped to revolutionise healthcare and led to the development of countless life-saving treatments, but at the cost of leaving behind those conditions and individuals that failed to fit snugly into its mould. I suggest we need courage to sit with the uncertainty that surrounds Long Covid. It is a new condition, with similarities to other poorly understood syndromes. There are interesting signals from research that we must learn more about. At present we diagnose it phenomenologically – that is, based on symptoms rather than specific tests.

We may, in time, find that the symptoms patients experience are, in fact, caused by more than one mechanism and that 'Long Covid' is too big an umbrella for the range of presentations seen. We must continue to ask questions, learn from our patients, pursue research and study treatment options, both pharmacological and rehabilitative. Ideally, over time, we are able to move from a symptom-based diagnosis to one supported by validated and dedicated tests. Labelling the condition as 'functional' will not move us any closer to these important goals.

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