Long Covid; terminologies, classifications and real world

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Oral presentation
Abstract

The difficult task of finding a place for the Long Covid in medical nosography becomes clear when we look at the medical terminologies that mention it. This exercise is made possible by the use of the HeTOP multi terminology server at the University of Rouen[1]. The heterogeneity of the terms used by the main medical terminology sources is surprising. The following concepts are used: condition, disease, disorder, diagnosis, symptom, syndrome and sequelae. Most treat Long Covid as a general disease. Only ICPC and MedDRA use the term respiratory. Human Phenotype Ontology does not include Long Covid.
However, Deer et all chose this ontology to analyze the content of 47 articles dealing with Long Covid in 2021 to develop the Long Covid Phenotype Ontology (LCPO). LCPO 286 entries have been mapped to ICPC3, enabling to show the intensity of neurological and psychiatric problems identified by doctors in the articles consulted.
Understanding Long Covid requires an active access to knowledge. A classified bibliography on Long covid is available online, using ICPC and Q-Codes.[2]
Finally, the results of observation of a cohort of around one hundred patients accompanied by the author in family medicine since July 2021 are discussed. The suffering and abandonment of patients by medicine is terrible. Two-thirds of them women (66%) - of working age (average age 42) - see their lives broken, their brains washed away, with no hope of evolution for most of them, no understanding on the part of doctors and no treatment.
A quick overview of the known physiopathology of Long Covid shows the intensity of neurovascular problems[3] [4].
The use of technetium scintigraphy (SPECT-CT) shows that cerebral perfusion is severely disrupted in cognitively-affected patients[5]. Encephalitis, myocarditis, colitis, asthma and various allergies, and peripheral neuritis are common in Long Covid patients. Finally, access to the transcriptomic laboratory of the Rega Institute (KUL Leuven, Belgium) through the Covid Human Genetic Effort network has enabled us to identify the presence of viral RNA, platelet activation and mast cell genes in a large proportion of our patients. These biomarkers have a strong statistical association with hypoperfusion seen on SPECT-CT.
Viral persistence, immune disorders and organ damage are all present in Long Covid. It is vital to pursue cutting-edge clinical and biological research in this field. The pathway of this translational research has been described in a poster available online[6].

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[1] HeTOP multi terminology server ; https://www.hetop.eu/hetop/en
[2] Long Covid open classified bibliography https://www.zotero.org/groups/4929325/long_covid_open_library/library
[3] Iwasaki, A., & Putrino, D. (2023). Why we need a deeper understanding of the pathophysiology of long COVID. The Lancet Infectious Diseases, 23(4), 393-395.
[4] Monje, M., & Iwasaki, A. (2022). The neurobiology of long COVID. *Neuron,10*(21), 3484–3496.
[5] Jamoulle, M., Kazeneza-Mugisha, G., & Zayane, A. (2022). Follow-Up of a Cohort of Patients with Post-Acute COVID-19 Syndrome in a Belgian Family Practice. Viruses, 14(9), 2000. https://doi.org/10.3390/v14092000
[6] Jamoulle M. A research journey in Long Covid in General practice. July 2021-Sept 2023 https://orbi.uliege.be/bitstream/2268/307064/1/Poster%20Long%20Covid.pdf