

eLetters

Naming the 2019 Coronavirus

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Abstract:

Less aligned emphasis has been given to naming the 2019 novel coronavirus and pathogenic disease. Global profusion of squab names has found their ways in daily communication, and our survey promises to articulate that many of them may have contributed to backlash against Chinese people. Here, based on brief critical reviews on the naming of coronavirus and human coronaviruses, we scrutinize a clear sense of pros and cons of previous multifarious names and punctuate heuristic introspection of naming practices. Our findings suggest that full-fledged official names are duly contribute to the resilience of healthy collective usages in current infodemic scenario.

One Sentence Summary:

An epoch-making name of the 2019 novel coronavirus and pathogenic disease should be scientifically pithy and socially acceptable.

Main Text:

On the occasion of the Chinese Lunar New Year of 2020, the 2019 novel coronavirus disease (now known as COVID-19) outbreak was first reported from Wuhan City of China, home to 11 million people. However, less aligned emphasis has been given to naming the 2019 novel coronavirus and pathogenic disease. So far, there is not a universally accepted name yet, either for academic-industrial usage or consistency with international virus taxonomy. The arguments in academic-industrial sphere flew to and fro, and nothing seemed certain or obviously right. In real dilemma, layered on top of this, making informed and judicious choice is a catch-22 for each authoritative body.

The past few weeks has witnessed an explosive growth of tangled monikers and hashtags of the virus, which have found their ways in daily communication. The virus is thought to have originated in China, which led to it being frequently named the “Wuhan coronavirus” or “Chinese coronavirus” and our survey pinpoint that those unofficial names may have contributed to backlash against Chinese people.

On 12 January 2020, the WHO provisionally named the 2019 novel coronavirus disease “2019-nCoV”. In fact, the word ‘novel’ is confusing in the way that neither the disease nor the host range can be used to reliably determine the novelty of a virus.

Before that, the 2019 novel coronavirus was designated as “WH-Human-1 coronavirus” or “Wuhan-Human-1 coronavirus” by a group of scientists in *Nature* on 3 February (1). In the same vein, on February 11, another name “HARS-CoV”, with ‘Han’ standing for ‘Wuhan in Chinese’, was proposed in *The Lancet* (2). Obviously, such practices are against the naming principles of

WHO (3) – geographic locations should be avoided in disease names, and the name should be short and easy to pronounce. Such names might provoke unintended negative impacts by stigmatizing Wuhan citizens and even Chinese people, and should be duly corrected.

In response to such concerns, on 11 February, WHO officially renamed “2019-nCoV” as “COVID-19”, with ‘CO’ meaning ‘corona’, ‘VI’ for ‘virus’, ‘D’ for ‘disease’, and ‘19’ referring to 2019. This generic descriptive reassignment offers an overdue corrective to those strongly-held but flawed notions, with the hope of minimizing stigma.

Shortly after the WHO’s latest announcement, in a bioRxiv preprint (4), it was named “Severe Acute Respiratory Syndrome coronavirus 2” or “SARS-CoV-2” by the Coronavirus Study Group of the International Committee on Taxonomy of Viruses (ICTV-CSG), a global authority on the designation and naming of viruses. ICTV-CSG explains that this designation highlights the new strain’s similarity to the SARS-CoV.

Although it seems to be natural for ICTV-CSG to add a numeral ‘2’ behind “SARS-CoV” to signify their relation, many prominent scientists scramble to refute the latest claim. To the untrained eye, the hasty designation may mislead the public to perceive the new virus as a direct descendant of SARS-CoV, rather than a close relative to the pathogen that caused China’s another major viral outbreak in 2002-03.

The looming worry is that the public are susceptible to SARS-CoV, which evokes the memory of higher death rate. On 9 February, Chen Huan-chun, Chinese academician and virologist, made a public apology for mistakenly saying 2019-nCoV is SARS-CoV, which had stung a sensitive nerve and caused panic in the Chinese public.

Recently, global profusion of squab candidates has been discussed inside the scientific community, as well as on social media. For example, PARS-CoV (5), TARS-CoV (6), and CARS-CoV, with ‘ARS’ standing for ‘acute respiratory syndrome’, ‘P’ for ‘pneumonia’, ‘T’ for ‘transmissible’, and ‘C’ for ‘contagious’. Therefore, it is necessary to punctuate heuristic cautions and continuous introspection of previous multifarious names, which is a bedrock of such scientific efforts.

At this critical moment, an epoch-making name is expected to be scientifically pithy and socially acceptable, with the faith of minimizing unintentional negative impacts on nations, economies and people. This is a positivist doctrine, not merely for naming a virus but for the vitality of science and the promotion of social progress.

References:

1. F. Wu *et al.*, A new coronavirus associated with human respiratory disease in China. *Nature* (2020), doi:10.1038/s41586-020-2008-3.
2. L.-F. Wang, D. E. Anderson, J. S. Mackenzie, M. H. Merson, From Hendra to Wuhan: what has been learned in responding to emerging zoonotic viruses. *Lancet* (2020), doi:10.1016/S0140-6736(20)30350-0.
3. K. Fukuda, R. Wang, B. Vallat, Naming diseases: First do no harm. *Science* **348**, 643–643 (2015), doi:10.1126/science.348.6235.643
4. A. E. Gorbalenya *et al.*, The species and its viruses – a statement of the Coronavirus Study Group. *bioRxiv* (2020), doi:10.1101/2020.02.07.937862.
5. S. Jiang, S. Xia, T. Ying, L. Lu, A novel coronavirus (2019-nCoV) causing pneumonia-associated respiratory syndrome. *Cell. Mol. Immunol.* (2020), doi:10.1038/s41423-020-0372-4.
6. S. Jiang, Z.-L. Shi, The first disease X is caused by a highly Transmissible Acute Respiratory Syndrome Coronavirus. *Viol. Sin.* (2020), doi:10.1007/s12250-020-00206-5.

Author contributions

Z.H., Z.L. and Q.L. contributed equally to this work. Y.H. and Z.H. were involved in the conceptual design of the study. Z.H., Z.L. and Q.L. performed the metadata analyses.

Acknowledgments

This work was supported in part by the National Natural Science Foundation of China under Grant U1936208.