


Gestation and birth of panendemic

Gestación y nacimiento de panendemia

Alvaro J. Idrovo¹ 

Suggested citation: Idrovo AJ. Gestation and birth of panendemic. Salud UIS. 2021; 53: e21014. doi: <https://doi.org/10.18273/saluduis.53.e:21014> 

Words are born, compete with each other, and some die, showing the language dynamics and the influence of historical contexts¹. During 2020, the meaning of the word pandemic has been discussed and a new meaning has emerged^{2,3}. Traditionally in epidemiology, “pandemic” was used when in a relatively short period of time, there was a widespread geographical distribution of a disease, including some countries and continents⁴, which contrasts with the moment when the World Health Organization decided to decree it for the COVID-19 pandemic. In this case, the criteria indicated by the classic epidemiological definition were met several days before the pandemic was declared. Even an intermediate step was to declare Public Health Emergency of International Concern (PHEIC) understood as: *“an extraordinary event which ‘constitute[s] a public health risk to other States through international spread of disease and...potentially require[s] a coordinated international response’”*⁵. In this way, potential panic was controlled, and the word pandemic was left for circumstances that require the maximum attention of all States, for a joint response, given its very high potential for disease and death.

It was a clear example that epidemics reveal the problems of societies, exacerbating many of the inequalities and inequities, including linguistic problems of epidemiological concepts. They can be solved with new meanings for words already known or by creating new terms. During 2020 the word pandemic was in vogue, and its use was expanded to highlight the importance of various health and non-health related events. However, its use was not always correct because it does not include increases in the occurrence or in its spatial distribution. For instance, some authors used the word pandemic to increase attention to a disease or health-related; let’s see some examples. The global prevalence of obesity (body-mass index > 25 kg/m²) has gradually increased over time. In 1980, 28.8% of men and 29.8% of women were obese, and it increased to 36.9% of men and 38.0% women in 2013⁶. In this case there was an increase in the occurrence, which was not sudden, but relatively slow. Neglected tropical diseases such as dengue, Chagas disease, leishmanioses, soil-transmitted helminthiasis, among others, are prevalent among the poorest social groups in endemic countries⁷, but they do not constitute a pandemic. Although its occurrence is important in some regions, in general the cases remain relatively stable over time, without having sudden increases. Intimate partner violence is a good example of health-related problems that increased in occurrence during the COVID-19 pandemic. Due to its importance, it was described as a “pandemic within a pandemic”⁸, but it might be better described as a time with some clusters, outbreaks or epidemics in different regions of a country.

There was no word in epidemiology to describe the health problems with high prevalence, relatively stable occurrence over time, and which are widely distributed in several countries or continents. To express these health problems a new word was required. In the early 90’s, during the study of spondyloarthropathies among primates, Bruce M. Rothschild and Robert J. Woods used the word “panendemic” to indicate a high occurrence of these osseous alterations in Africa and Asia⁹. The new word was gestated by derivation, or adding the prefix “pan”, and it could be defined as a situation in which a disease or health event has high occurrence and is endemic in many countries of the world. It is built with words of Greek origin $\pi\alpha\nu + \epsilon\nu + \delta\eta\mu\omicron\varsigma$ (used in English for “all”, “in” and “people”, respectively).

However, the use of “panendemic” was not widely welcomed by the scientific community, and few articles used the new word to express high occurrence and wide distribution of a disease. Recently, T. Jacob John –a retired pediatrician-cum-virologist- proposed again the word “panendemic”¹⁰. The meaning was the same expressed by

1. Universidad Industrial de Santander. Bucaramanga, Colombia.

Correspondence: Javier Idrovo. Address: Cra. 32 29-31, Bucaramanga. Phone number: +57 634 4000. Email: idrovoaj@uis.edu.co

Rothschild and Woods some years ago, but in a context where pandemic had a new epidemiological purpose. This allows for greater clarity of the words that indicate differences in the occurrence of health-related events. For instance, “panendemic” is useful to describe diseases in the first places of occurrence of national epidemiological profiles. In this category are cardiovascular and chronic respiratory diseases with wide distribution and high prevalence during some years in countries of all continents.

Moreover, with the word “panendemic” it's possible to better understand the current meaning of syndemic, another little-known word until the COVID-19 pandemic. In its original conception, syndemic refers to two or more epidemics that occur at the same time, with biological and social effects. From a critical biocultural approach, the concept attempted to describe the interconnections among health problems, lay's perceptions of illness or diseases, the social determinants, and the environmental conditions associated¹¹. However, more recently, the use of syndemic was extended to situations when there are not necessarily epidemics¹². Thus, a syndemic can occur with endemics, epidemics, pandemics or “panendemics” (see **Figure 1**). What is important is understanding the complexities associated to the biological and social relationships occurring during illnesses or diseases.

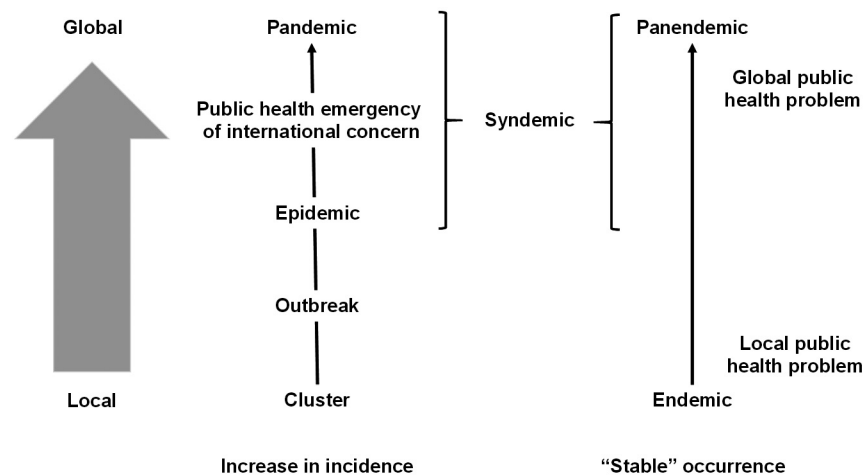


Figure 1. Main epidemiological concepts related with the temporal occurrence of diseases or health-related events.

The new picture of epidemiological words to express the differences of occurrences of health-related events is more complete with “panendemic”. It fills an important gap that was being misused with other concepts. This is one of the positive outcomes that the COVID-19 pandemic has taught humanity.

References

1. Petersen AM, Tenenbaum J, Havlin S, Stanley HE. Statistical laws governing fluctuations in word use from word birth to word death. *Sci Rep*. 2012; 2: 313. doi: [10.1038/srep00313](https://doi.org/10.1038/srep00313). PMID: 22423321
2. Green MS. Did the hesitancy in declaring COVID-19 a pandemic reflect a need to redefine the term? *Lancet*. 2020;395(10229): 1034-1035. doi: [10.1016/S0140-6736\(20\)30630-9](https://doi.org/10.1016/S0140-6736(20)30630-9) PMID: 32178767
3. The Lancet Respiratory Medicine. COVID-19, a pandemic or not? *Lancet Infect Dis*. 2020; 20(4): 383. doi: [10.1016/S1473-3099\(20\)30180-8](https://doi.org/10.1016/S1473-3099(20)30180-8) PMID: 32178762
4. Doshi P. The elusive definition of pandemic influenza. *Bull World Health Organ*. 2011; 89(7): 532-538. doi: [10.2471/BLT.11.086173](https://doi.org/10.2471/BLT.11.086173) PMID: 21734768
5. Mullen L, Potter C, Gostin LO, Cicero A, Nuzzo JB. An analysis of international health regulations emergency committees and public health emergency of international concern designations. *BMJ Glob Health*. 2020; 5(6): e002502. doi: [10.1136/bmjgh-2020-002502](https://doi.org/10.1136/bmjgh-2020-002502) PMID: 32546587
6. Ng M, Fleming T, Robinson M, Thomson B, Graetz N, Margono C, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2014; 384(9945): 766-781. doi: [10.1016/S0140-6736\(14\)60460-8](https://doi.org/10.1016/S0140-6736(14)60460-8)

7. Molyneux DH, Savioli L, Engels D. Neglected tropical diseases: progress towards addressing the chronic pandemic. *Lancet*. 2017; 389(10066): 312-325. doi: [10.1016/S0140-6736\(16\)30171-4](https://doi.org/10.1016/S0140-6736(16)30171-4)
8. Evans ML, Lindauer M, Farrell ME. A pandemic within a pandemic - Intimate partner violence during Covid-19. *N Engl J Med*. 2020;383(24):2302-4. doi: [10.1056/NEJMp2024046](https://doi.org/10.1056/NEJMp2024046) PMID: 32937063
9. Rothschild BM, Woods RJ. Spondyloarthropathy as an Old World phenomenon. *Semin Arthritis Rheum*. 1992;21(5):306-16. doi: [10.1016/0049-0172\(92\)90024-8](https://doi.org/10.1016/0049-0172(92)90024-8) PMID: 1604326
10. John TJ. Will coronavirus pandemic eventually evolve as pan-endemic? *Current Sci*. 2020; 118: 855-856.
11. Singer M, Clair S. Syndemics and public health: reconceptualizing disease in bio-social context. *Med Anthropol Q*. 2003; 17(4): 423-441. doi: [10.1525/maq.2003.17.4.423](https://doi.org/10.1525/maq.2003.17.4.423) PMID: 14716917
12. Singer M, Bulled N, Ostrach B, Mendenhall E. Syndemics and the biosocial conception of health. *Lancet*. 2017; 389(10072): 941-950. doi: [10.1016/S0140-6736\(17\)30003-X](https://doi.org/10.1016/S0140-6736(17)30003-X) PMID: 28271845