

Editorial II

A Brief Account of the Very Early History of Pandemics

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The history of infectious disease outbreaks and plagues among human populations is long, as recorded in centuries-old religious and secular texts, as well as through Indigenous oral histories (Edinborough et al., 2017; Huremović, 2019; Stefano, 2021). One early account is of a plague that ravaged parts of North Africa and Greece in the late 5th century BCE. Known as the Athenian Plague, it was detailed at the time by the Greek historian, Thucydides, in his History of the Peloponnesian War. Over the course of a week or more, a series of gruesome symptoms would travel from head to toe – from “inflammation of the eyes”, bloody throat, violent retching, breakouts of “pustules and ulcers”, and diarrhea, among others. For those who recovered, a reported loss of memory left them not knowing “themselves or their friends” (Thucydides, 2003). Greatly devastating the population of Athens, it has been recently suggested that it may have been an ancient outbreak of the Ebola virus (Chastel, 1996).

In the late 1st century CE, the Antonine Plague, documented by the Greek physician, Galen, spread westward from the Middle East across vast swaths of the Roman Empire, including Rome. Claiming millions of lives, and setting the stage for the eventual fall of the empire, it is likely to have been a smallpox pandemic (Fears, 2004). Later, the Justinian Plague, caused by Yersinia Pestis, ravaged 6th century populations, and is believed to have originated either in North Africa or Central Asia. Over time, it spread across the Roman Empire via well-worn trading routes. The 14th century saw the arrival of a global bubonic plague, the Black Death, which traveled along the Silk Road from China in the 1330s and into Europe in the following years. Its death toll is estimated to have been 150 million lives lost, significantly reducing the global population (Huremović, 2019). The Black Death was documented in religious texts, and greatly influenced writers and painters of the time.

References

- Huremović D. (2019). Brief history of pandemics (Pandemics throughout history). *Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak*, 7–35. https://doi.org/10.1007/978-3-030-15346-5_2
- Edinborough, K., Porčić, M., Martindale, A., Brown, T. J., Supernant, K., & Ames, K. M. (2017). Radiocarbon test for demographic events in written and oral history. *Proceedings of the National Academy of Sciences*, 114(47), 12436-12441. <https://doi.org/10.1073/pnas.1713012114>
- Stefano G. B. (2021). Historical Insight into infections and disorders associated with neurological and psychiatric sequelae similar to long COVID. *Medical science monitor: international medical journal of experimental and clinical research*, 27, Article e931447. <https://doi.org/10.12659/MSM.931447>

- Thucydides (2003). The history of the Peloponnesian War (R. Crawley, Trans.). *BoD–Books on Demand*. <https://www.gutenberg.org/files/7142/7142-h/7142-h.htm> (Original work published 431 BC)
- Chastel, C. E. (1996). The dilemma of xenotransplantation. *Emerging infectious diseases*, 2(2), 10. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2639821/pdf/8964060.pdf>
- Fears J. R. (2004). The plague under Marcus Aurelius and the decline and fall of the Roman Empire. *Infectious disease clinics of North America*, 18(1), 65–77. [https://doi.org/10.1016/S0891-5520\(03\)00089-8](https://doi.org/10.1016/S0891-5520(03)00089-8)