

275 YEARS SINCE THE EPIDEMIC OF PLAGUE IN CLUJ: DR. ALEXANDRU LENGHEL'S CONTRIBUTION TO ITS INVESTIGATION

LILIANA ROGOZEA¹, FLORIN LEAȘU¹,
DINU IULIU DUMITRASCU², DAN L. DUMITRASCU³

¹Department of Fundamental Disciplines and Clinical Prevention, Faculty of Medicine, Transilvania University of Brasov, Romania

²Department of Anatomy and Embryology, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

³2nd Department of Internal Medicine, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

Abstract

Plague is one of the most impressive diseases in the cultural history of mankind. Its lethality has influenced the evolution of society and it is frequently represented in fine arts and literature.

The principality of Transylvania was also affected by this infection, the plague having strongly impacted both economic and social development.

Between 1738 and 1739 an important plague epidemic spread in Transylvania. The authors introduce and discuss a less known work on this epidemic, with focus on its impact on the city of Cluj - a book written in 1930 by Dr. Alexandru Lenghel, who later became a target of political persecution during the Stalinist period, while his work entered a cone of shadow.

Keywords: Cluj, history of medicine, plague

Introduction Plague Epidemics

Plague is a zoonosis caused by the *Yersinia pestis* bacillus spread over the entire globe with the exception of Australia and the Antarctic, being also infrequent in the north of America.

It is responsible for at least three major epidemics, the best known being the Justinian plague (5th–7th century) and the Black Death (13th–15th century), and represented a true calamity with a major impact on the level of mortality of the time [1,2].

Whether it occurred in antiquity or during the later centuries, each plague epidemic represented a major public health issue [2,3,4,5].

The fight against plague became more efficient once measures like quarantines and sanitary cordons were put into place in the 15th century, or with the emergence of the lazarettos (plague hospital/infirmaries) [6,7].

The Plague in Transylvania

In his novel “The Plague” Albert Camus wrote: “as the order of the world is shaped by death, perhaps it is better for God that we don’t believe in Him and struggle with all our strength against death, without raising our eyes to heaven and to His silence”. And such struggle can only be sustained by the means of civilization.

The Romanian principalities, regardless on which side of the Carpathians, were not spared the calamity inflicted by the plague.

According to Huttman and Barbu, the town of

Braşov was hit by plague epidemics in 1338, 1553-1554, 1709-1710, 1718-1719, 1755-1756, 1770-1771, 1813, the first descriptions in Transylvania being provided by Dr. Sebastian Pauschner, a Braşov physician, in his treaty of the plague published in 1530.

Other 17th and 18th century descriptions of the disease are those by Dr. Johann Albrich (3 studies on the plague) and priest Josef Szeli of Braşov [8].

THE HISTORY OF THE PLAGUE OF CLUJ IN 1738-39 [9]

The book we bring to light and further discuss is entitled “Istoricul ciumei in Cluj la 1738/39.” (“The History of the Plague at Cluj in 1738/39”).

This study was published under the auspices of the University of Cluj, the Institute for History of Medicine, Pharmacy and Medical Folklore, interim director Valeriu Bologa, MD, PhD (Figure 1).

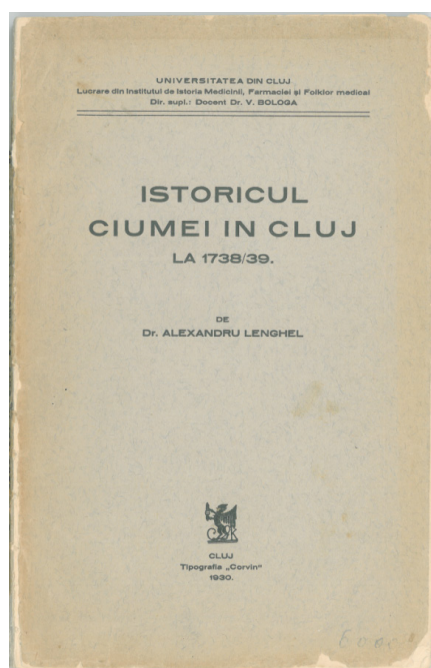


Figure 1. Cover of the book: History of the plague in Cluj by Alexander Lenghel.

Author of the study is Dr. Alexandru Lenghel, at that time honorary assistant at the Institute for the History of Medicine and assistant bacteriologist at the Inspectorate for Hygiene of Cluj.

According to its introduction the book was finished on 1 September 1930. At that time, Valeriu Bologa was not yet full professor for history of medicine in Cluj; he was to succeed Jules Guiart as head of Chair for the History of Medicine. The book was printed by Tipografia Corvin publishers of Cluj in 1930.

In the foreword by the mentor of Dr. Lenghel, the future professor Valeriu Bologa, this work is included in the field of historical epidemiology, and was later considered as

having played a significant role in the field between the two world wars. Bologa states that the book is a continuation of Guiart’s study on the pneumonic plague, subsequently followed by the studies of other investigators like Colhon, Prelipceanu and Bologa himself.

The book written by Alexandru Lenghel was multiplied in print on 160 pages of 230x150 mm format and included 19 figures, 18 tables and a number of annexes consisting of official deeds, private correspondence, official protocols and diaries. The book was structured into 7 chapters preceded by a preface and a foreword and included among the cited references the great names of Transylvanian medical history like Adam Chenout, Martin Lange or Lucian Bologa.

In the introduction Dr. Lenghel pays tribute to his mentors, Guiart and Bologa. He is also dedicating the work to Adam Chenot, a physician from Luxemburg, who had established modern measures to fight the plague, had a major contribution to the eradication of the plague in Transylvania and was in his own right the author of an important treaty on the history of plague, the “Historia pestis Transylvaniae ann. 1770, 1771”.

The chapters of the book are: The Plague in Transylvania; The Plague in 1738/39 (Figure 2); Statistics of the Casualties; Measures Taken by the Authorities to Contain the Epidemic (Figure 3); Evolution of the Epidemic According to the Protocol of the City Sanitary Council; The Morale During the Plague Epidemic in Cluj; The Place of the Cluj Epidemic within the Framework of the Plague Epidemic in Transylvania; References. As mentioned, the chapters are completed by four annexes: Official Deeds, Private Correspondence, Official Protocols; Diaries.

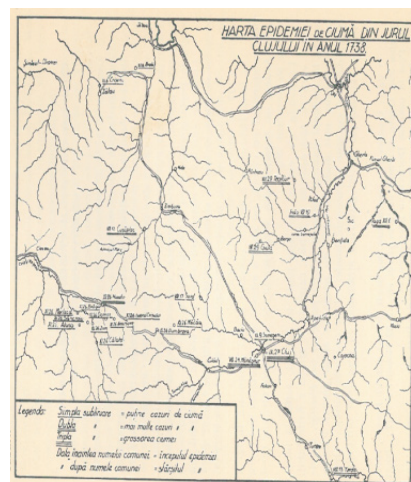


Figure 2. Map of the plague around Cluj in 1738; source: Alexander Lenghel, History of the plague in Cluj.

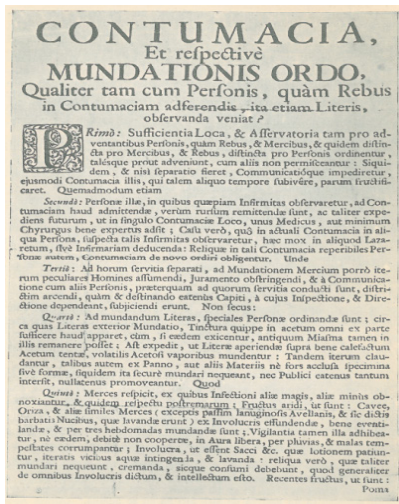


Figure 3. Disinfection instructions of the central government from Vienna (1738); source: Alexander Lenghel, History of the plague in Cluj.

The book closes with a summary in French, the scientific language of the time and a token of the French influence on Romanian culture in general and on the Romanian history of medicine in particular.

The original work also includes some ancient engravings and photographs.

The main contribution of Dr. Lenghel that needs to be highlighted is the presentation of the Protocol of the Sanitary Council, previously ignored. The protocol reveals that plague prevention and fighting were organized similarly to the measures taken in the Western countries at that time.

An entire chapter is dedicated to the measures put in place by the authorities of the time aimed at containing the epidemic, based on the rules set for the entire empire and coordinated by a specialist board called *Aulica Sanitatis Commissio*.

The main measures concerned the closing of borders, quarantine rules and even the role of a medical structure: the Sanitary Board of Sibiu. For the whole of Transylvania the measures should have been implemented even before the outbreak of the epidemic, but unfortunately the imperial clerks treated the issue superficially, which caused the first cases to go unidentified in due time.

The dispositions of the authorities of Cluj can be found in documents like the Protocol of the Sanitary Council of Cluj of 1738, or the diary of a Unitarian theologian (Figure 4).

As to the human resources involved in fighting the plague, mention should be made of surgeon Borbély Dániel, replaced upon falling ill by Fogarasi Ștefan, pharmacist Clemens Mihaie specialized in plague patients, plague inspector Borberekio Ioan, patient commissar Szentgyörgyi Boldizsár, the undertakers and their commander, the recorder of the dead and deaths and the reporter of news concerning the dead (Figure 5).

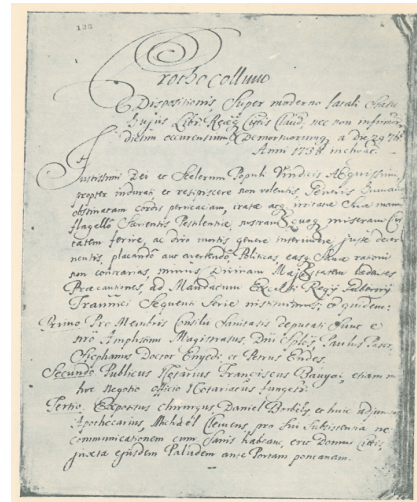


Figure 4. The Protocol of the Health Council from Cluj source: Alexander Lenghel, History of the plague in Cluj.

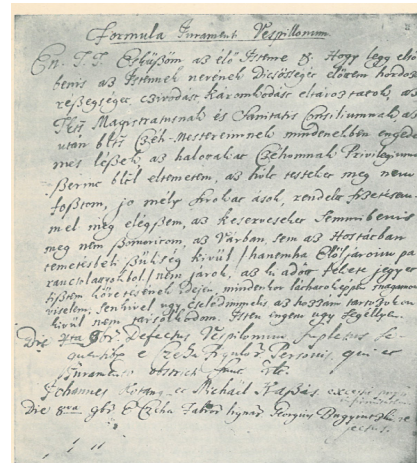


Figure 5. The Oath of the grave diggers; source: Alexander Lenghel, History of the plague in Cluj.

The epidemic broke out, even though the authorities had tried to create a framework for prevention and containing, including the establishing of a lazaretto in the tanners' garden in Cluj.

According to the statistics completed by Dr. Lenghel and following the analysis of the documents made available by him, we agree with the author of this impressive monograph that, just like at present, at first the authorities had tried to conceal the outbreak and then proved not only incapable of containing it, but also keep accurate records of its evolution.

Considered the last severe plague epidemic in Transylvania, the description of the epidemic of Cluj in Lenghel's book is based on documents made available in the annexes: official local government documents of 1738 (12), fragments from private letters (24), official protocols (6), excerpts from diaries of the time (2).



Figure 6. Alexandru Lenghel; source: Dan Culcer collection.

The book is little known, as confirmed by a recent work on the epidemics of North-Western Romania (Chiș, Florin Ioan: *Epidemiile și eradicarea lor în Nord-Vestul României (secolele XVIII-XIX)* [*Epidemics and Their Eradication in North-Western Romania in the 18th and 19th Centuries*], Editura Mega, Cluj-Napoca, 2012), which does not make any reference to Alexandru Lenghel's monograph.

Alexandru Lenghel (10 April 1897-10 October 1979)

A novel contribution to pandemics in Transylvania is the PhD thesis in medicine and history of medicine of Dr. Alexandru Lenghel, son of Sofia Colceriu (CULCER) and Sighismund Lenghel, priest of the Romanian Church United with Rome, Greek-Catholic in Baia Mare, Maramureș, Romania (Figure 6). The author published articles on the history of medicine in the specialist journals of Cluj. He was honorary assistant at the Institute for the History of Medicine of Cluj led by well-known Romania specialist Valeriu Bologa. After 1935 Alexandru Lenghel took on his mother's maiden surname in order to continue a family branch that was dying out. He had a son, Dan Constantin Culcer, who on his turn fathered three children, Ioana, Bogdana and Matei Culcer (the latter born in 1984)

Dr. Alexandru Culcer, MD is the author of studies on the Glykon snake, and it was he who identified its statue in Constanța. He also published a number of novel brochures on the Romanian physician, biologist and bacteriologist Victor Babeș and the Romanian physician, naturalist and explorer Ilarie Mitrea. This text in the Romanian language was devised by Dan Culcer of Elancourt, France on 27 July 2013.

Conclusions

Although for a long period of time medicine proved incapable of treating this disease, hygienic and sanitary measure were taken from early on such as to reduce the impact of plague in the communities where it broke out.

The presence of plague in Transylvania made the local authorities implement measures such as disinfection and quarantine.

An eloquent example of the negative effects of plague and its impact on the social and economic life of a city is Alexandru Lenghel's work on the plague of Cluj in 1738/1739, an epidemic of particular intensity and duration.

Nowadays plague has been replaced by other diseases, just as feared as the one caused by *Yersinia pestis*.

Acknowledgment

This paper emerged from a lecture given in the Spring Session of the Romanian Committee for the History and Philosophy of Science and Technique of the Romanian Academy, Cluj Branch, 2013.

References

1. Konstantinidou K, Mantadakis E, Falagas ME, Sardi T, Samonis G. Venetian rule and control of plague epidemics on the Ionian Islands during 17th and 18th centuries. *Emerg Infect Dis.* 2009;15(1):39-43.
2. Drancourt M, Roux V, Dang LV, Tran-Hung L, Castex D, Chenal-Francisque V, et al. Genotyping, *Orientalis*-like *Yersinia pestis*, and plague pandemics. *Emerg Infect Dis.* 2004;10(9):1585-1592.
3. Kousoulis AA, Economopoulos KP, Poulakou-Rebelakou E, Androutsos G, Tsiodras S. The plague of Thebes, a historical epidemic in Sophocles' *Oedipus Rex*. *Emerg Infect Dis.* 2012;18(1):153-157.
4. Azizi MH, Azizi F. A history of the human plague in Iran. *Arch Iran Med.* 2010;13(6):563-569.
5. Wheelis M. Biological warfare at the 1346 siege of Caffa. *Emerg Infect Dis.* 2002;8(9):971-975.
6. Tognotti E. Lessons from the history of quarantine, from plague to influenza A. *Emerg Infect Dis.* 2013;19(2):254-259.
7. Kausrud KL, Begon M, Ari TB, Viljugrein H, Esper J, Büntgen U, et al. Modeling the epidemiological history of plague in Central Asia: palaeoclimatic forcing on a disease system over the past millennium. *BMC Biol.* 2010;8:112.
8. Rogozea L. *Medicina brașoveană – un punct de reper în dezvoltarea medicinei românești*. [Medicine of Brasov – a landmark in the development of Romanian medicine] Brașov: Ed. Universității Transilvania; 2010.
9. Lenghel A. *Istoricul ciumei în Cluj la 1738-1739*. [The History of the Plague at Cluj in 1738-1739]. Cluj: Tipografia Corvin; 1930.