

PUBLIC HEALTH AND MEDICAL CARE CONDITIONS DURING THE GREEK INDEPENDENCE WAR (1821)

UVJETI JAVNOGA ZDRAVSTVA I MEDICINSKE NJEGE
TIJEKOM GRČKOGA RATA ZA NEOVISNOST 1821.

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SUMMARY

The 1821 Greek War of Independence, following 400 years under Turkish occupation, resulted, after long-term sacrifices, in the establishment of Greece as a sovereign nation-state, marking the first in the autocratic Europe of the time. The poor public health and the lack of doctors, medical supplies, safe water, food, and sewage favored the outbreak of epidemics. The Greek cause attracted worldwide support, and a great number of philhellenes, physicians, and aristocrats offered services and even their lives on the battlefields. Greek and foreign historians stress the international importance of the Greek Revolution for the activation of the term nation into a social force for democracy and the right to public and individual health and welfare all around the world.

Keywords: 1821 Greek War of Independence, nation-state, public health, medical doctors, empirical practitioners

INTRODUCTION

The Greek War of Independence (Greek Revolution of 1821) was a decade-long (1821–1831) successful war by the Greeks against the Ottoman Empire's harsh

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rule. One of the most brutal malpractices of the conquerors against the enslaved was the *devshirme* – forcibly recruiting soldiers from among the children of their Christian subjects and converting them to Islam (Jelavich & Jelavich, 1963).

The American War of Independence in 1776, the French Revolution in 1789, and the Latin American wars of liberation (1808–1826) inspired the Greek people to claim their freedom despite the Treaty of Vienna (1815), which divided post-Napoleonic Europe among the major powers and fiercely opposed state-building revolutions. The Austrian Chancellor Klemens von Metternich (1773–1859), as the organizer of the Congress of Vienna (1814–15), was the symbol of those forces, eager to preserve the status quo (Kitromilides, 2021; Palmer, 1972).

Under these *unfavorable circumstances* and after great sacrifices, Greece became the first independent European nation to emerge in the 19th century, although it contained less than one-third of the 2.5 million Greek inhabitants of the Ottoman Empire within its borders (Gallant, 2015; Runciman, 2009).

From the health point of view, the spirit of the Greek Revolution transformed the authoritative management of health issues, as it was expressed during the 18th century of absolutism, so as to establish a high-quality Public Health System and produce better health outcomes and greater social welfare in the new state.

HISTORIOGRAPHY OF THE GREEK 1821 REVOLUTION

Postrevolutionary relevant publications, until about 1880, were mainly memoirs of the author-fighters and historical books about the Greek Revolution, containing information about the medical practice of the time, among which some by foreign liberal authors. From 1890 to 1910, there was an increased interest in the publication of memoirs of the struggle. Initiated by Giannis Vlachoyannis (1867–1945), the Greek General State Archives were created in 1914 (Vlachogiannis, 1940).

Konstantinos Paparrigopoulos (1815–1891), a prominent Greek historian and professor of History at the University of Athens, in his 1874 work “History of the Greek Nation”, formed the basis of the national conception of the revolution. His line was followed by his spiritual successor Pavlos Karolidis (1849–1930), who continued to publish his professor’s History, and by the most prominent Greek historians of the late 19th and early 20th centuries, professors Dimitrios Vernardakis (1833–1907) and Spyridon Lambros (1851–1919), the most important Greek historian of the period from 1880 to 1920 (Paparigopoulos-Karolidis, 1925; Stathis, 2021).

Although liberal scholars such as Anastassios Polyzoidis (1802–1873), Demetrios Vikelas (1835–1908), demoticists (who debated whether the vernacular or literary language should be the official Greek language in the 19th and 20th centuries), and the first socialists expressed different approaches, Paparrigopoulos' national historiography completely dominated. It was not challenged until the emergence of Greek Marxism, namely by Georgios Skliros in 1907, who stated that the 1821 revolution was a bourgeois (social) revolution. Skliros later influenced Yanis Kordatos, who in 1924 published a history of the 1821 Revolution, triggering reactions (Kordatos, 1924; Stathis, 2021).

Apostolos Vakalopoulos (1909–2000), one of the greatest Greek historians of the 20th century, also refers to the importance of the emergence of a distinct Greek national identity following the 1821 struggle (Vakalopoulos, 1961).

Finally, Paparrigopoulos' approach to the continuity and unity of the nation without social dividing lines became much more functional in the political-ideological environment of the time (Stathis, 2021).

Foreign historians stress the national and international narrative of the Revolution. Roderick Beaton (2021), a professor from the Centre for Hellenic Studies at King's College London, states: "The Greek Revolution truly was never a matter for Greeks alone. In the very first declaration of independence, issued by Alexandros Ypsilantis at Jassy in Moldavia on 24 February / 8 March 1821, under the headline 'Fight for Faith and Fatherland', the call went out to the enlightened peoples of Europe".

Mark Mazower (2021), a historian from Columbia University, draws particular attention "to the crucial idea of the post-Napoleonic nation-state. Philhellenic support for the Greek cause became a way to address colonial power and monarchy".

Dr. Antonia (Ada) Dialla (2022), Professor of European History at the Department of Theory and History of Art, School of Fine Arts, Athens, Greece, states that before the Revolution, the term "nation" was a neutral category within an imperial framework and afterward became the primary and the dominant element of political identity.

Thanasis Barlagiannis' book, "Medical history of the Revolution of 1821. The beginnings of the establishment of Greek public health, 1790–1831" (2022), belongs to the special branch of medical history. It studies the particular health consequences of the Revolution, presents military medicine, and examines the mechanisms of medical management of poverty.

According to a Professor of History at the University of Constantinople, Esra Özsüer: “The proposed opinion in Turkish historic teaching is that revolutions across Balkans were the result of the ungratefulness of Greeks and other Balkan nations, who were peacefully living under the Ottoman bliss” (as cited in Markeas, Papachristos & Daras, 2021).

PHILHELLENE PHYSICIANS AND BENEFACTORS

Philhellenism was an intellectual movement, mostly at the turn of the 19th century, when the educated, liberal-minded, and prosperous middle and upper classes of both European and overseas societies focused on the heritage of Classical Greece. Under these circumstances, the Greek uprising constituted a source of romantic inspiration to re-create a Greek state as it was sanctified in Antiquity. In American universities, ancient Greek grammarology was a major field of study, and American philhellenes, who had visited Greece at those times, had described the hard Ottoman rule on the land of democracy, predisposing their audiences in favor of the “Greek Cause” (Winterer, 2002). Many of those who volunteered to fight with the Greeks were either physicians or philanthropists.

Samuel Gridley Howe, MD (1801–1876) from Boston, USA, a Harvard Medical School graduate of 1824 and a surgeon in the Greek Army, authored a book about the Revolution in 1828 (Richard, 1909).

Heinrich Treiber (1796–1882), a Bavarian military doctor who specialized in surgery, first put his foot in Greece in 1822. By 1828, he was directing the small military hospitals in Nafplion and Salamina. During the 1854 cholera epidemic, he offered his services for free (Karger, Kind-Kovacs & Bernasconi, 2017).

The Swiss philhellene Jacob Meyer (1798–1826), a physician and apothecary, was the publisher of the first printed newspaper, “Greek Annals” («Ελληνικά Χρονικά»), in Missolonghi (Meyer, 1825). He founded the first military hospital (using simple planks instead of beds) and pharmacy in rebellious Greece. He was killed along with his family during the Exodus. A monument to him stands in the Garden of Heroes in Missolonghi (Vlachogiannis, 1940).

The Swiss doctor Louis-André Gosse (1791–1873) was a typical example of a selfless Philhellene. He did not fight with the sword and rifle but with a box of surgical tools (one of the few that existed in Greece at that time). With his knowledge and organizational abilities, he became a crusader of Swiss Philhellenism. He cooperated with banker Jean-Gabriel Eynard and organized money and resource transfers to rebel Greeks (Dardavesis, 2011).

George Jarvis (1797–1828), the first American Philhellene, who took part in the Greek Revolution with Samuel Gridley Howe and Jonathan Peckham Miller as members of the Philhellenic Committee of America, distributed much-needed medication, clothing, and food to the suffering Greek population. He died in Argos and was buried within the premises of Agios Ioannis church (Vakalopoulos, 1990).

Jonathan Peckham Miller (1797–1847) was an American abolitionist who fought in Greece in 1824 and returned with Lucas Miltiades, a four-year-old Greek orphan he adopted and raised (Appletons Encyclopedia, 2015).

James Jakob Williams (1785–1829), an African American runaway slave severely injured fighting for the Greek cause, was carried to the home of the American abolitionist and philhellene Jonathan P. Miller in Poros, where he recovered and lived out the rest of his life as a free man in Greece (Miller, 1828).

The famous English poet George Gordon Byron (1788–1824), the most celebrated philhellene of all, organized funds, started from the Epirus region. After the heroic Souliotes exodus, he lived at Missolonghi, where he died in 1824. His death strengthened European sympathy for the Greek cause (Brown, 1928; Michaleas, 2021).

PUBLIC HEALTH - SOCIAL WELFARE

Public health was poor as a result of the enslaved Greeks' unfavorable living conditions, constant warfare, malnutrition, and lack of safe water and sanitation. Greek populations were served by 90 doctors / 1,000,000 inhabitants and did not exceed 500 after Greek and Philhellenic doctors' arrival.

In the 18th century, young Greeks studied medicine at Western European universities. Through the dissemination of books in Greek to the enslaved homeland, they enhanced the educational level and strengthened the national identity. Some medical students organized philhellenic committees in Europe, such as Petros Ipititis from Epirus, who studied Medicine and Philosophy in Vienna, where in 1816, just 21 years old, he published the work "Infection or about the plague, its prevention and eradication". In 1834, he was appointed a member of the Medical Council of King Otto, and in 1837, he was sent to Poros to deal with the plague epidemic (Michaleas, 2021).

There were also empirical practitioners using local herbs as medications, close to the ordinary people, offering their services for free, in contrast to the dangerous so-called charlatans or kombogiannites, being untrained and oriented only to profit gain. Practical medical schools operated in Athens, Karpenisi, Sparta,

Chios, and Mystras. The latter was founded by Panagiotis Giatrakos, who studied medicine in Italy for a while (Pouqueville, 1824).

Empirical doctors practiced medicine in parallel with the graduated ones, and not only where no doctors existed at all. They proved more effective in surgical cases, mainly in war injuries, with Pyrros referring to them as Hippocratic (Vladimirov, 2014, pp. 61-62). They are witnessed to have saved extremities from amputation, which was a rule to save the life in cases of severely injured limbs. In Greek Ionian Island Leukada, during an English occupation battle, an Englishman entrusted the most famous Greek leader Kolokotronis, recommending him Greek empirical surgeons, who saved his hands and legs. In a Hydra ship, under Greek Admiral Sahtouris, an injured 12 years old poor boy from Psara Island, at risk of both legs' amputation, begged to let him rather die and in 1838 he visited Sahtouris, astonished to see the little fighter, having him for dead, with both legs. General Makrygiannis also denied amputation and saved his limbs (Vladimirov, 2014, pp. 175-177).

Medical procedures such as asepsis, antiseptics, and anesthesia were unknown during the Hellenic Revolution. Louis Pasteur, Robert Koch, and Joseph Lister were just born at that time. The seriously wounded on the battlefield were mainly treated in monasteries (such as Oblou Monastery in Achaia and Zoodochos Pigi Velanidi-as Monastery in Messenia) and later in rudimentary hospitals (Finlay, 2014).

Raki (a traditional alcoholic drink) was used for external wound cleaning, and an ointment mixture of olive oil, raki, and egg albumin was inserted inside. In some cases, they disinfected the wound with hot fat, as General Makrygiannis mentions in his Memoirs. (Makrygiannis, 1957). Wounds of any kind and severity were dressed with cloth bandages and small rods of wood or tissue paper (Dardavesis, 2011; Vladimirov, 2014, p. 177).

The medications used were mainly acquired from the flora of the Greek countryside, such as cardamom (*Elettaria cardamomum*), ginger (*Zingiber officinalis*), elderberry (*Sambucus nigra*), and absinthe (*Artemisia absinthium*). Some medicines and chemicals were supplied, whenever possible, from Smyrna, Constantinople, the Ionian Islands (at that time under Venetian rule), and Trieste. They included borax (sodium borate), theriaca (a drug consisting of a mixture of herbs, an antidote for poisons, known from the time of Galen), oxymel (a mixture of sweet, aged wine, honey, raisins, and fig extract). Opium was used as a hypnotic for young children so that they would not cry during the heroic exodus from the besieged Missolonghi (Apostolidis, 1960).

For the suturing of wounds, apart from thread and needle technique, Makrygiannis (1957) mentions the use of ant heads. Vladimirov Lazaros (2014, p. 181) dis-

puts this technique, although as far as back as the Neolithic period (12000 years ago), the use of the jaws of giant ants, especially in the suturing of bowel injuries, has been documented (Haddad, 2010). Entomologist Justin Schmidt (2020) of the University of Arizona describes the healing process as follows: “A wound could have several ants’ heads holding it closed, like buttons on a sweater” (rated at 1.5 pain level on the Schmidt Pain Index (Schmidt, 2016, Langley, L. 2020).

In the 1st chapter, “From Liberation to 1864”, out of the four, Mastrogiannis Ioannis (1960, p. 23) gives a description of the social welfare of the time: On the island of Aegina, an orphanage was built in 1828 by the first Greek Governor, Ioannis Kapodistrias, for the orphans of the war, starting with 100 children. Orphanages also existed in Poros and Nafplio. At the same time, schools were built with the support of Greek-educated Konstantinos Economou from Economon, philhellenes such as Samuel Howe and Edward Everet, Loudovikos von Bavaria, the Swiss Eynard, and Greeks from Trieste, Angona, Malta, and Venice. All were built by unemployed people through the programme “Social Welfare through Work”. This marked the beginning of the application of the mutual learning method (p. 23). Between February and March 1828, 50 such schools had been built on the Aegean islands with 15,000 pupils in a population of 693,000. By 1830, there were 48 teachers and 55 in the Peloponnese teaching in these schools. The first Free Greece Hospital was the Municipal Hospital of Syros Island, built in 1825–1826. It is later named the “Vardakeio & Proio General Hospital of Syros” after the benefactors Vardakas & Proios (Mastrogiannis, 1960, pp. 97-100).

In other Greek regions outside Ottoman sovereignty, such as Crete, which was under the rule of Mehmed Ali from Egypt since 1822, sent by the Sultan to suppress the Christian insurgency, the Austrian doctor Sieber describes the progress in living conditions in general and public health in particular, compared with those witnessed by himself in 1817. There was a lack of medical care, hygiene, and hospitals, with very few and underqualified doctors, while plague and smallpox decimated the population. In 1827, the first Western-style teaching hospital and medical school were established in Egypt by the French physician Dr. A. B. Clot. Mehmed Ali himself ordered the smallpox vaccine to be brought to Crete from Europe and provided to infants for free (Krokidas & Gekas, 2007; Sieber, 1823).

In 1823, a police agency, a port agency, and a health agency were promoted in an effort to limit the spread of plague (Barlagiannis, 2022, p. 199) recorded in 1823 and 1828 in the refugees’ district Providence of Nafplio, Poros, and Aegean islands (Karger, Kind-Kovacs & Bernasconi, 2017).

DISCUSSION

The study of medical care and public health during the Greek 1821 Revolution shows that the central role of the Greek nation in world history was not limited to ancient and medieval times. Through a literature search, it became evident that in modern times, the Greek Revolution was the major event in European history in the nineteenth century. It substantially led to the dissolution of the absolutist Holy Alliance. At the same time, it awakened the national consciousness of the subjects of the Ottoman Empire, leading to the emergence of new nation-states.

From the very beginning, it was not realized that this was the deep desire of so many nations. Widespread philhellenism is the expression of popular yearning for the emergence of their own nations after centuries of strict authoritarian empire rule.

Edward Everett (1794–1865), an American Harvard president, pastor, and diplomat, stressed that by supporting the Greek cause, the Americans felt destined and obliged to act according to their prescribed role as leaders for all other emerging republics (Yemenedzi-Malathouni, 2022).

“The development of medicine, in the age of Enlightenment, contributed through the intensity of disciplines to the transformation of the Christian Ottoman citizen into a free Greek citizen of a nation-state” (Barlagiannis, 2022, p. 265).

At the end of the 18th century, the circulation of medical textbooks and the number of healers increased, and the importance of public health practice in the critical years of the Revolution, highlighted the changes in people’s minds in terms of their relationship with the newly established Greek state.

Regarding the medical aspect, the Revolution had a positive impact on individuals, health practices, and health structures and contributed to the establishment of the Greek public health system. The challenging decade 1821–1831, through the philhellenes and the medical terms of the early 19th century, prevailed by terms of respect to every single’s human health and wellbeing.

CONCLUSION

The human right to health is not applicable during past and present war conflicts. In the context of the Greek 1821 Revolution, public health and medical care appear far from decent in the relevant sources. Authoritarian regimes prevailing in Europe and overseas before the emergence of nation-states were not focused on providing good-quality health care. The term “Organized Healthcare Service” was completely unknown.

The fight for freedom centralized medicine in politics organized military and administrative structures and strengthened social solidarity.

The present study addresses a topic with limitations that needs to be thoroughly solved: how health systems can optimize health care in various contexts by delivering care that improves or maintains health, which is valued and trusted by all people. This goal needs to be constantly targeted, pursued, and protected, especially under unfavorable terms.

REFERENCES

1. Apostolidis, C. (1960). *Trieber H. A. Memories from the Revolution of 1821* (in Greek). Athens.
2. Barlagiannis, T. (2022). Medical history of the Revolution of 1821. The beginnings of the establishment of Greek public health, 1790–1831.
3. Beaton, R. (2021). *The Greek Revolution of 1821 and its Global Significance*. Aiora Press.
4. Brown, L. - C. (1928). International Politics and the Middle East.
5. Dardavesis, I. (2011). *Health Care and Treatment of the Fighters of 1821* (in Greek). Salonika: Society of Macedonian Studies.
6. Dialla-A, A. (2022). Imperial Rhetoric and Revolutionary Practice: The Greek 1821. *Historein*, 20(1). <https://doi.org/10.12681/historein.27480>
7. Earle, M. E. (1927). The American Interest in the Greek Cause 1821–1827. *The American Historical Review*, 33(1), 44-63.
8. Finlay, G. (2014). *History of the Greek Revolution (2 volumes)*. Cambridge University Press,
9. Gallant, T. (2015). *The Winds of Change. The Edinburgh History of the Greeks, 1768 to 1913: The Long 19th Century*. Edinburgh University Press.
10. Haddad, F. (2010). Suturing methods and materials with special emphasis on the jaws of giant ants (an old-new surgical instrument). *Lebanese Medical Journal*, 58(1), 53-6.
11. Jelavich, C. & Jelavich, B. (Eds.). (1963). *The Balkans in Transition*. University of California Press.
12. Karaberopoulos, D. (2003). *The medical European knowledge in the Greek region, 1745–1821*. Athens.
13. Karger, H., Kind-Kovacs, F. & Bernasconi, S. (2017). *From the Midwife's Bag to the Patient's File. Public Health in Eastern Europe*. Central European University Press.
14. Kitromilides, P. (2021). *The Greek Revolution: A Critical Dictionary*. Harvard University Press.
15. Kordatos, Y. (1924). *The social meaning of the 1821 Greek Revolution*. Athens.
16. Krokidas, P. & Gekas, A. (2007). Public Health in Crete under the rule of Mehmed Ali in the 1830's Dossier. *Figures de la santé en Égypte*, 4, 35-54. <https://doi.org/10.4000/ema.1751>
17. Langley, L. (2020, January 24). *The ants that can be used in place of stitches*. Amazing Animals weird news, ripleys .com
18. Makrygiannis, I. (1957). General Makrygiannis, Απομνημονεύματα (Memoirs) (work first published 1907 by Yannis Vlahogiannis) (in Greek). Athens.
19. Markeas, N. G., Papachristos, I. V. & Daras, A. (2021). Provision of medical care to the 1821 Hellenic Revolution Fighters. *Acta Orthop Trauma Hell*, 72(4), 332-339.
20. Mastrogiannis, I. (1960). History of social welfare in modern Greece (1821–1960).
21. Mazower, M. (2021). A Review of “The Greek Revolution: 1821 and the Making of Modern Europe, <https://cgt.columbia.edu/research/books/archive>
22. Meyer, J. (1825). Greek Annals newspaper (in Greek), Missolonghi, 69, 4.

23. Michaleas, S. (2021, July 1-4) Doctors during the Greek Revolution of 1821, their action in Epirus. In *Proceedings of the congress: Freedom and Death in the Greek Revolution of 1821. Microhistorical analyses of battles in the Epirotic and Balkan areas Ioannina-Arta*.
24. Miller, Jonathan P. (1828). *The Condition of Greece in 1827 and 1828*. New York: J. & J.
25. Appletons Encyclopedia (2015). Miller P. Jonathan.
26. Palmer, A. (1972). *Metternich: Councillor of Europe* (1997 reprint ed.). London: Orion.
27. Paparrigopoulos, C. & Karolidis, P. (in later editions). (1925). *History of the Greek Nation (Volume I), Biography of Constantine Paparrigopoulos by Pavlos Karolidis* (in Greek). Editions: Eleftheroudakis.
28. Pouqueville. (1824). *History of the regeneration of Greece: Comparing the exact events that took place from 1740 to 1824*. Paris.
29. Richard, L.-E. (1909). *Letters and Journals of Samuel Gridley Howe*. Boston: Dana Estes & Company.
30. Runciman, S. (2009). *Lost Capital of Byzantium: The History of Mistra and the Peloponnesse*. Tauris Parke Paperbacks.
31. Schmidt, J. (2016). *The Sting of the Wild*. John Hopkins University Press.
32. Sieber, F-W. (1823/1994). *Travels in the Island of Crete, in the Year 1817* (Greek translation). Athens: Istoritis.
33. Stathis, P. (2021). The Historiography of the Greek Revolution of 1821: From Memoirs to National Scholarly History, 1821–1922. *Historiein*, 19(2).
34. Vakalopoulos, A. (1961). *History of Modern Hellenism. Ottoman rule (Volume II)*. Thessaloniki, Greece.
35. Vakalopoulos, A. E. (1990). *Selected Basic Historical Sources of the Greek Revolution (Vol. II)*. Vania, Thessaloniki: Editions.
36. Vlachogiannis, I. (1940). *Kasomoulis N. Military Memoirs of the Hellenic Revolution 1821–1833* (in Greek). Athens.
37. Vladimirov, L. (2014). *Doctors and Medicine during the Greek Revolution of 1821* (in Greek).
38. Winterer, C. (2002). *The Culture of Classicism: Ancient Greece and Rome in American Intellectual Life, 1780–1910*. Johns Hopkins University Press.
39. Yemenedzi - Malathouni, S. (2022). American Philhellenes, Protestant Missionaries and the “Orphans” of the 1821 Hellenic War of Independence: The Case of Christodoulos Evangelides. *European journal of American studies*, 17-1. <https://doi.org/10.4000/ejas.17918>

SAŽETAK

Nakon četiristo godina pod turskom okupacijom, Grčki rat za neovisnost 1821. rezultirao je, uz mnogobrojne žrtve, uspostavom Grčke kao suverene nacionalne države, prve takve u autokratskoj Europi toga doba. Loše organiziran sustav javnoga zdravstva te nedostatak liječnika, medicinskog materijala, čiste vode, hrane i sustava odvodnje otpadnih voda pogodovali su izbijanju epidemija. ‘Grčka stvar’ privukla je svjetsku podršku, a velik broj filhelenista, liječnika i aristokrata ponudio je svoje usluge, pa čak i svoje živote na bojištima. Grčki i strani povjesničari ističu međunarodnu važnost grčke revolucije u aktiviranju pojma nacija kao društvene snage za uspostavu demokracije i prava na javno i individualno zdravlje i blagostanje diljem svijeta.

Ključne riječi: *Grčki rat za neovisnost 1821., nacionalna država, javno zdravstvo, liječnici, empirijski praktičari*