
POKRETANJE ZDRAVSTVENIH REFORMI U MEĐURATNOM RAZDOBLJU: SLUČAJ GRČKE I ULOGA ZDRAVSTVENE ORGANIZACIJE LIGE NARODA

Gavriil Kouris*, Constantinos Trompoukis**, Xenophon Contiades***, Anastas Philalithis****

SUMMARY
During the Interwar period (1918–1939), financial aid and technical assistance were given to countries worldwide by the League of Nations Health Organisation (LNHO) in an attempt to reform public health systems, address population health problems, and control infectious diseases. Greece was one of the countries that received this aid, and in 1928 cooperation with the LNHO was initiated. The aim of this alliance was an integrated health reform plan entitled “Collaboration with the Greek government for the sanitary reorganization of Greece”
and had a dual purpose: a) the reorganisation of the health services and b) the establishment of a unified public health system that provided comprehensive healthcare for all citizens.

The current article discusses the collaboration between Greece and the LNHO and their endeavour to reorganise the health system during the Interwar period. More specifically, it investigates the significant legislative and policy initiatives and their impact on the health system’s evolution. In addition, it aims to explore the factors that affected the outcome of LNHO’s reform plan. It is also argued that the proposed health reform plan was not fully implemented due to intense political and social conflicts that resulted from the institutional measures taken to address public health problems as well as financial and technical constraints.

Keywords: health system, health policy, public health, reform, League of Nations, Greece, Interwar

**Introduction**

The Interwar years (1918–1939) are considered a critical period in the history of public health and health policy in Europe. During this period, public health issues arose as a central concern both in the political and social arena of various nations (Borowy, 2007). To resolve these issues, a new system of international health organisations and institutions was established. Such institutions were designed to address the adverse conditions as well as the numerous and acute problems that appeared after mass destruction, disease, and population displacements of the First World War and the impact of the influenza pandemic of 1918–1919. Moreover, they were targeted towards promoting the health and welfare of the population by using a range of medical and social measures (Manuila & World Health Organization, 1991; Weindling, 2008).

To this end, the LHNO constituted an integral part of the League of Nations (LN) and was established in 1920 in an attempt to target, control and prevent disease and epidemics (League of Nations, 1931). Specifically, the core objective of the LNHO was to advise the LN in matters affecting public health, to establish links between foreign administrative health authorities, to facilitate and ensure rapid interchange of information on urgent matters where immediate precautions against disease were required and to simplify methods for acting rapidly thereon (Hampton, 1925). According to Borowy (2009), the LHNO was the first world-wide health organisation with a comprehensive mandate which acted as a technical agency of the League of Nations in a broad spectrum of issues, including public health data, various diseases, biological standardisation, and the reform of national health systems.

The LNHO also saw the conclusion of international agreements, as well as a collection of important information toward the fulfilment of these agree-
ments. Moreover, it provided technical advice and support to other organisations regarding health issues at an international level (Weindling, 2006). However, the real task of the LN, according to Boudreau (1937), “was not so much to carry out direct work as it was to provide opportunities for the national health administrations to cooperate among themselves”. In this framework, a lot of countries and health reformers turned to the LNHO for guidelines on public health provision. This resulted in the following: the establishment of many central hygiene institutes and peripheral health centres around Europe with the financial support of the Rockefeller Foundation (RF) (Table 1), the formation of a dynamic system of interchange of public health personnel from 1922 onwards, the statistical monitoring of morbidity and mortality which enabled comparisons between countries, and a steady flow of publications on health services (Dubin, 1995; Weindling, 1995).

Greece was among the countries that appealed to the LNHO. In 1928, Greek Prime Minister Eleftherios Venizelos strived for international cooperation in an endeavour to effectively deal with the accumulated public health problems (The League of Nations Assembly, 1929; W. H. H., 1930). The approval of the Greek request by the League of Nations Council mobilised a team of public health experts to assist in the reorganisation of the Greek health system and services based on a scientific, structured health reform plan that incorporated international experience and best practice.

This initiative was, in a historical context, the first well-organised attempt to reform the health system in Greece under the scientific assistance of an international organisation such as the LNHO, which took place in a period of intense socio-economic conditions and acute sanitary problems. Considering this, the presentation and analysis of the findings, policy recommendations and actions, as well as the highlighting of the barriers that were related to the implementation of the LHNO’s plan, have a special scientific value, taking into account that the existing literature about health policy issues and health reform initiatives in interwar Greece is limited and not comprehensive.

Among the relevant publications that stand out and offer a specific review of Greek health policy developments during the Interwar is that of Mastroyiannis (1960), who records the social welfare services and the legislative work that was achieved in the health sector during the period 1821-1960, of Giannuli (1998) who examines the Rockefeller Foundation’s involvement in the reorganisation of the Greek public health system in the years 1929–1940 and of Theodorou and Karakatsani (2008) who analyse the framework and the
accomplishments of the collaboration agreed between the Greek state with the RF and the LNHO for the reform of the Greek health system. Moreover, Liakos (1993) and Borowy (2009) have also studied extensively aspects of the health reform trajectory in interwar Greece in connection with the role of international organisations like ILO and LNHO, respectively.

Table 1. European hygiene institutes with Rockefeller Foundation funding.

<table>
<thead>
<tr>
<th>Country</th>
<th>City</th>
<th>Institute/School</th>
<th>Director</th>
<th>RF Funding</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czecho-slovakia</td>
<td>Prague</td>
<td>State Institute of Hygiene</td>
<td></td>
<td>1921-25</td>
<td>790,000</td>
</tr>
<tr>
<td>Great Britain</td>
<td>London</td>
<td>School of Hygiene and Tropical Medicine</td>
<td>Balfour</td>
<td>1921-29</td>
<td>2,330,000</td>
</tr>
<tr>
<td>France</td>
<td>Paris</td>
<td>Office Nationale d’Hygiene Sociale</td>
<td></td>
<td>1921-30</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Poland</td>
<td>Warsaw</td>
<td>Central State Institute of Hygiene</td>
<td>Chodzko</td>
<td>1921-26</td>
<td>292,000</td>
</tr>
<tr>
<td>Yugo-slovakia</td>
<td>Belgrade</td>
<td>Central State Institute of Hygiene</td>
<td>Stampar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yugo-slovakia</td>
<td>Zagreb</td>
<td>State Institute of Hygiene</td>
<td>Borcic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>Copenhagen</td>
<td>Serological Institute</td>
<td>Madsen</td>
<td>1924-27</td>
<td>200,000</td>
</tr>
<tr>
<td>Hungary</td>
<td>Budapest</td>
<td>State Institute of Hygiene</td>
<td>Johan</td>
<td>1924-27</td>
<td>290,000</td>
</tr>
<tr>
<td>Norway</td>
<td>Oslo</td>
<td>Serological Institute</td>
<td></td>
<td>1925-28</td>
<td>187,000</td>
</tr>
<tr>
<td>Spain</td>
<td>Madrid</td>
<td>State School of Hygiene</td>
<td>Pittaluga</td>
<td>1924/1930</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>Athens</td>
<td>School of Hygiene</td>
<td>White</td>
<td>1930</td>
<td>5,500</td>
</tr>
</tbody>
</table>

Thus, the article seeks to present a comprehensive account of the Greek health system and the structural challenges that it faced during the Interwar period to analyse the framework of the collaboration between the LNHO and
the Greek state that aimed at the reorganisation and modernisation of the public health services as well as to examine the factors that influenced the implementation and the outcome of the LNHO’s health reform plan.

**Social-economic and political reality in Greece of the Interwar**

Worldwide health policy is heavily influenced by political, economic, social, institutional, and historical factors (Hsiao, 1992; Saltman & Figueras, 1997; Figueras, Saltman & Mossialos, 1997; Oliver & Mossialos, 2005). According to Saltman and Figueras (1997), health sector reform is affected by a wide range of contextual elements, including the process of reform, the context in which it occurs, the actors involved in it and the distribution of power between them, while Walt (1994) supports that health issues have a close interaction with several socio-political actors, whose views, strategies and goals have a major impact on the process of health policy formulation and implementation. Immergut (1992) also argues that political institutions decisively shape the ability of different groups to activate power resources and influence the making of health policies.

In Greece, conditions during the Interwar period (1922–1940) did not allow for the effective planning and implementation of much-needed health system interventions. The public finance situation was in a perilous state as a result of the continuous 10-year participation (1912-1922) in Greece’s consecutive wars (two Balkan Wars, First World War, Asia Minor campaign) (Mazower, 1991). According to Alogoskoufis (2021), the above period was characterised by significant fiscal and monetary instability, which led to the most serious and persistent increases in inflation in the history of modern Greece. It is notable that, due to those war operations, the public debt amounted to $450,000,000 (Mears, 1929).

On the one hand, a high level of unemployment and inflation rate also hampered the country’s effort for economic development, while the arrival of 1,221,849 refugees that followed the Asia Minor Catastrophe (1922) generated an acute national, social and economic crisis, the resolution of which dictated the setting of new priorities (health care, housing, employment, etc.) in the political, social, and economic fields (Pentzopoulos, 1962).

On the other hand, administrative incapacity and the inefficiency of public services appear as the hardest problem that the country was confronted with in the general effort for reconstruction and development. According to
Varvaressos (1952), who produced his influential report on the “Greek Economic Problem”, among the most serious factors of the Greek administrative pathology were “the long-established practices of clientelism, favouritism, and patronage, the blatant violation of meritocracy and the widespread corruption, bribery, and low morale even among the op-ranking officials and administrators, as well as the prevalence of legalism, formalism, and bureaucracy in the functioning and performance of public services”, which inhibited initiative and creativity in tackling the nation’s problems (Makrydemetres & Michalopoulos, 2000).

In addition to the aforementioned, persistent and often rapid changes in public life, combined with the conflicting interests and perceptions expressed by various social interest groups, made it impossible to attempt to create a broader socio-political consensus in order to effectively address the “burning” matters of the country (i.e., refugee, labour, political and public health issues).

An indicator of the instability was the short-lived governmental incumencies during the period 1922-1940, as a result of extraordinary systemic changes that took place in Greek politics, including the frequent interference of the military in politics (the authoritarian regime of 1925–26, an aborted pro-liberal military coup in 1935, and the Metaxas’s dictatorship in 1936) and a split political landscape with a multi-party system that was not able to build consensus and compromises in the social field (Zink, 2000). The average time frame of holding a political office did not exceed 9 months (23 changes of Government-Prime Ministers in 18 years) (Sotiropoulos & Bourikos, 2002). The only government that managed to last the entire four-year parliamentary term was the last government of El. Venizelos (1928–1932). It was his government that attempted to meticulously reorganise the health system for the first time in the modern history of Greece.

**Public health problems in Greece and the League of Nations intervention (1922-1928)**

During the period of 1922–1928, Greek governments were intensely pre-occupied with the development of institutions and policies to secure public health. In this unstable sociopolitical environment, there were two main factors that dictated the immediate action in the health care sector. First, the outbreak of infectious diseases (malaria, tuberculosis, etc.) among the refugees, who, due to the lack of necessary public health infrastructure (such as water
supply and sanitation), increased the risk of expansion of epidemic diseases in the indigenous population (Boudreau, 1929; Livadas & Sphangos, 1940; Livadas, 1973). Second, the scarcity of health institutions combined with the complete failure of state health services to address the increased health needs of the population, particularly in rural areas (Metalinos, 1932). Indicative of the poor sanitary state that characterised the country after the Asia Minor catastrophe (Kopanaris, 1933) was the rapid spread of typhus exanthematicus during the last months of 1923 in almost all ports and cities of the country. At the same time, the mortality rate among refugee patients who lived in rural areas reached the level of 45%.

Given the circumstances, the Greek governments of the period 1922–1928 decided to enact new health legislation to address the consequences of the refugee problem in the public health area. The most remarkable legislative measures and policies that were implemented were: a) the establishment of an autonomous Ministry of Health and Social Welfare (Law 2882, 1922), which would bring together all services that were scattered among other Ministries (Mastroyiannis, 1960) and b) the organisation of a new Regional Health Service through numerous measures some of which were the division of the country into five health regions (Athens, Thessaloniki, Patras, Ioannina, and Komotini), the recruitment of Health Inspectors in these regions, the establishment of a Physicians Service Network in each prefecture, and the appointment of municipal doctors (Zilidis, 1989).

However, the lack of a continuous health policy combined with the consistently low level of public health expenditure at 0.7–1.2% of the state budget (Zilidis, 1989) and the instability that characterised the public administration did not allow for the implementation of necessary measures for the formation of a well-organised network of state health agencies. In this framework, and while public health problems remained unsolved, an outbreak of dengue fever (Cardamatis, 1929; Papaevangelou & Halstead, 1977; Halstead & Papaevangelou, 1980; Rosen, 1986), which had emerged in the country during the period 1927-1928, killing over 1,500 people, pushed the liberal government under El. Venizelos’ leadership to turn to the LNHO for assistance.

In 1928, despite the intense reactions of the medical society (Makrides, 1933), the Deputy Minister of Hygiene, Apostolos Doxiadis, with a letter to the LN, set out a request for cooperation and aid in the health care sector. Doxiadis also requested a team of scientific experts to evaluate the country’s health system and submit policy proposals aiming at a more efficient operation of the health care services (Winslow, 1929b).
His request was approved in December 1928 (Winslow, 1929a). Quirones de Leon, an advocate at the LN, related the above appeal to the country’s financial restructuring (League of Nations Health Organisation, 1929a). The Council accepted the request of Doxiadis and decided to set up a Health Committee under the management of the President of the LNHO, Professor Thorvald Madsen. His duty was to oversee a diagnostic preparation of the reform changes needed by the Greek health system. The Council requested the Health Committee “to place at the disposition of the Greek government all its technical means, including its technical commissions in such a manner as would provide its full collaboration to the preparation as well as the later development to the plan at which it would arrive” (Theodorou & Karakatsani, 2008). The Health Committee’s tasks would be supported by a special research group of six eminent health experts, led by the Medical Director of LNHO, Dr Ludwig Rajchman. The rest of the hygiene experts were Haven Emerson, a professor at the University of Columbia, Allen McLaughlin, a Doctor of the U.S.A. Health Organisation, C.L. Park, a Doctor of the Australia Public Health Organisation, B. Borcic, head of the Zagreb School of Hygiene, and M.D. Mackenzie, a hygienist at the League of Nations. The aim of this research group was to conduct a survey of hygiene conditions and health needs of the population in Greece and contribute towards the development of the new health reform programme.

The survey was introduced in representative urban and rural areas of the territory, which had been selected by the Deputy Health Minister, based on geographical, economic, social, and epidemiological criteria. These areas were the following: the Athens-Piraeus metropolitan region; Macedonia, including the city of Salonika; Thrace; the city and district of Patras; the island of Corfu; the western region of Crete, including the city of Chania; and the city and prefecture of Ioannina in Epirus (League of Nations Health Organisation, 1929a). The overall survey period lasted 73 days (from 25 January to 7 April 1929), and during this time, the experts visited 3 major cities (Athens, Piraeus and Thessaloniki), 14 towns and 82 villages and collected data in 148 special reports regarding the population’s health status, the available health services, and medical equipment. At the same time, statistical data on demographic trends, economic situation and available transport networks, and utilities (water supply and drainage) of the chosen areas were also collected by the study group (League of Nations Health Organisation, 1929a).

However, the study findings were not encouraging. According to Dublin (1930), “the group of health surveyors found a population almost exactly that
of New York City; no machinery for disease control except port quarantine; about 30 trained nurses; death rates of about 14 to 22 per 1,000 and birth rates between 18 to 30 against a death rate averaging 12.3 and a birth rate 19.7 in the registration area of United States” (Table 2). They also concluded that 23% of deaths were so immmethodically reported that they could not be classified.

It has also been evidenced (Karanikas, 1937; Valaoras, 1939, 1960) that the high infant and child mortality rates, as well as the high mortality rates of parturient women, posed a major problem in the mid-1930s. These phenomena highlighted the low living standards, the dire living conditions, and the lack of hygiene infrastructure during birth in contrast with other Western and Northern European countries that were experiencing low birth rates (Theodorou & Karakatsani, 2021).

The LNHO’s experts saw a country with poor access to basic sanitation. These factors resulted in the experts’ classification of the Greek health system at the lowest level compared to other European countries. Moreover, it was characterised as “non-system” (Liakos, 1993), while the type, the quality, and the extent of coverage of health services were described as “entirely inadequate” and the level of health personnel’s training as “dangerously low” (League of Nations Health Organisation, 1929a).

Table 2. Annual death & birth rate in selected countries per 1,000 inhabitants (1928-1930).

<table>
<thead>
<tr>
<th>Country</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Death Rate</td>
<td>Birth Rate</td>
<td>Death Rate</td>
</tr>
<tr>
<td>Greece</td>
<td>17</td>
<td>30.5</td>
<td>18.4</td>
</tr>
<tr>
<td>Germany</td>
<td>11.6</td>
<td>18.6</td>
<td>12.6</td>
</tr>
<tr>
<td>Austria</td>
<td>14.4</td>
<td>17.5</td>
<td>14.5</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>17.5</td>
<td>32.8</td>
<td>18</td>
</tr>
<tr>
<td>France</td>
<td>16.5</td>
<td>18.2</td>
<td>18</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>11.9</td>
<td>17.2</td>
<td>13.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>12</td>
<td>16</td>
<td>12.2</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>15.1</td>
<td>23.3</td>
<td>15.5</td>
</tr>
<tr>
<td>United States of America</td>
<td>12.1</td>
<td>19.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>
The disappointing findings of the League of Nations’ research team were further processed and analysed by the Health Committee. Based on the research outcomes, the Committee then prepared and submitted to the Greek government the final report on the reform proposals for the reorganisation of the health system. The respective report entitled “Collaboration with the Greek government for the sanitary reorganisation of Greece” included reliable, budgeted, cost-effective, and time-bound policy proposals. Emphasis was given to restructuring the administration, which according to the director of the Ministry of Hygiene Costis Charitakis (1929) was characterised as “critical for the further development of the health system”.

Of high priority was the establishment of a Permanent Public Health Service, with a central coordinating role (both in public and the private sector) and the power of direct intervention throughout the country and for all cases of health issues (Dafnis, 1974). The Health Service would incorporate and unify all the fragmented health services, not only those already existing but also the newly established. It would also operate as an advisory service to the Prime Minister on all matters of public health as well as an executive body for the coordination, organisation, and administration of the health system, according to the current health legislation. The transition period was expected to last 5-6 years, and the reform plan was to be fully implemented between 1934 and 1935 (League of Nations Health Organisation, 1929b).

The functional core of this new “hyper-ministry” would be the Health Centre of Athens, which would be composed of the School of Hygiene and the new Technical Services. The School of Hygiene was planned to operate in five divisions and would train young scientists to overcome public health-related impediments in Greece: a) the Division of Malariology, b) the Division of Hygiene and Preventive Medicine, c) the Division of Hygiene Engineering, d) the Division of Pharmacology and Biochemistry, and e) the Division of Research.

Each division would carry out research, compile statistics, and plan campaigns to counteract problems falling within its jurisdiction. Great emphasis was placed upon field research and laboratory tests. Each division would be directed by an eminent medical doctor, who would undertake the task of training the School of Hygiene medical personnel. The experts underscored the importance of the qualifications of doctors and officials of the central service; it was evident that they wanted to train the public health officials who would later staff the health services (Theodorou & Karakatsani, 2008).
The Health Committee also proposed the establishment of a “Consultative Board”, which would not only work as an advisory body but also as a policy-making institution. In order to improve the organisation and coordination of the health services in the cities of Athens and Piraeus, the LNHO experts proposed the establishment of a special department called ‘Metropolitan Health Service of Athens-Piraeus’, with a wide range of responsibilities. The same service was to be established in the area of Thessaloniki (League of Nations Health Organisation, 1929a).

Regarding rural areas, the health plan proposed the establishment of regional Health Centres, initially in selected representative areas of the country and later in the whole territory, as an attempt to provide medical and pharmaceutical care to the permanent residents and to develop programmes for the prevention and treatment of infectious diseases. Each Health Centre would consist of an interdisciplinary team of health professionals, including a medical director, visiting nurses, visiting doctors, and hygiene inspectors. The standard equipment would include a) one or more dispensaries for malaria, tuberculosis, maternity, and childhood protection, b) a pharmacy and public baths, and c) an educational and recreational room. Additionally, paediatric clinics, as well as laboratories for the diagnosis of infectious diseases and research departments, were to be established in the Health Centres of each prefecture’s major cities (The League of Nations Assembly, 1929).

Regarding the rural clinics operating in the region of Macedonia by the Greek Refugee Settlement Commission (RSC), the LNHO experts suggested their placement under the Ministry of Hygiene jurisdiction in order to be upgraded into regional Health Centres. Moreover, the improvement of dysfunctional operation of public hospitals was recognised as a prerequisite to the health system’s reorganisation, which according to LNHO’s guidelines, could be achieved through numerous policy initiatives. The most important proposals included the modernisation of the hospital personnel training system, particularly for the doctors, wage increases for the health workforce, and the improvement of their working conditions. Other proposals encompassed the transfer of the public hospitals’ organisational, administrative, and operational responsibility to the local government, the closure of malfunctioning hospitals, and the establishment of an ambulance service. Finally, the reform plan incorporated actions on the eradication of malaria and tuberculosis as well as the reorganisation of quarantine and port health services in Greece.
The total amount of credits that would be required through the state budget for the implementation of the reform plan was estimated at 405 million drachmas (Table 3).

Table 3. Budgetary estimations for carrying out the LHNO’s reform plan (1929–1936).

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (in Drachma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929-1930</td>
<td>21.000.000</td>
</tr>
<tr>
<td>1930-1931</td>
<td>35.000.000</td>
</tr>
<tr>
<td>1931-1932</td>
<td>47.000.000</td>
</tr>
<tr>
<td>1932-1933</td>
<td>59.000.000</td>
</tr>
<tr>
<td>1933-1934</td>
<td>77.000.000</td>
</tr>
<tr>
<td>1934-1935</td>
<td>98.000.000</td>
</tr>
<tr>
<td>1935-1936</td>
<td>68.000.000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>405.000.000</strong></td>
</tr>
</tbody>
</table>

**THE IMPLEMENTATION OF HEALTH REFORM PLAN (1928–1933)**

The separation of health from the Ministry of Hygiene, Welfare and Assistance by establishing a State Secretary of Hygiene (Decree 25/08/1928) initially and an independent Ministry of Hygiene (Law 4172, 1929) later, were the primary interventions that the Venizelos government implemented in the field of health system administration in collaboration with the LNHO. Also, the unification of all public health services under the Ministry of Hygiene was instituted by Law 4333 (1929).

Further institutional interventions were the establishment of the School of Hygiene (Law 4069, 1929) and the Health Centre of Athens (Law 4333, 1929). The decision to establish a national School of Hygiene in Greece was in accordance with the dominant view of the international committee members that the public health sector workforce should be trained in a School of Hygiene in their country to be given a chance to study the health problems without delay. At the same time, the Health Centre of Athens, which operated under the Direction of the hygienist Norman White, a representative of the League of Nations in Greece, aimed toward the gradual organisation of the regional health services as well as the education of technical staff through training. With the Decree of 22/01/1930, the School of Visiting Nurses was
established as a branch of the School of Hygiene, designated to train nursing personnel. Moreover, the Greek government legislated the establishment of Health Care Centres, which functioned under the direct supervision of the Ministry of Hygiene, initially in the cities of Corfu, Arta, Alexandroupolis, and Chania and then in Athens, Piraeus, Thessaloniki, Drama, and Chios. In addition, four rabies stations in the cities of Patras, Preveza, Rethymnon, and Alexandroupolis were established (Law 4739, 1930), and 58 rural clinics of the RSC were transferred to the jurisdiction of the Ministry of Hygiene (Law 4735, 1930).

A great effort was also made by the Venizelos government to improve the hospital infrastructure during the period 1928-1934, over which the available hospital beds increased by 33.5%, from 9,782 beds in 1928 to 13,063 beds in 1934 (Table 4). However, it is noteworthy that despite that increase, the shortage of hospital beds remained; in 1934, there was an estimated need for 28,500 hospital beds compared to the 13,000 beds available in the country (Charitakis, 1936).

Table 4. The hospital infrastructure in Greece (1928-1934).

<table>
<thead>
<tr>
<th>HOSPITALS</th>
<th>1928</th>
<th>1934</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Beds</td>
<td>Number</td>
</tr>
<tr>
<td>General</td>
<td>71</td>
<td>4,767</td>
</tr>
<tr>
<td>a. Public</td>
<td>22</td>
<td>2,084</td>
</tr>
<tr>
<td>b. Municipal</td>
<td>36</td>
<td>1,635</td>
</tr>
<tr>
<td>c. Other</td>
<td>13</td>
<td>1,148</td>
</tr>
<tr>
<td>Special</td>
<td>41</td>
<td>5,015</td>
</tr>
<tr>
<td>a. Tuberculosis</td>
<td>8</td>
<td>1,315</td>
</tr>
<tr>
<td>b. Psychiatric</td>
<td>10</td>
<td>1,775</td>
</tr>
<tr>
<td>c. Maternity</td>
<td>8</td>
<td>620</td>
</tr>
<tr>
<td>d. Other</td>
<td>15</td>
<td>1,305</td>
</tr>
<tr>
<td>TOTAL</td>
<td>112</td>
<td>9,782</td>
</tr>
</tbody>
</table>

In addition to the above, the Greek government undertook initiatives to protect public health and fight infectious diseases that afflicted the country (Ministry of Presidency, 1932). In particular:

(a) In the fight against malaria, the Venizelos government allocated 24 million drachmas from the state budget towards the enhancement of the an-
ti-malaria campaign. In addition, 60 anti-malaria stations were established during the year 1930, while the government instituted a state monopoly of quinine for reasons of public health, so as to control the price and production of a drug desperately needed by millions of people.

(b) In the fight against tuberculosis, the Ministry of Hygiene established new sanatoriums throughout the country and increased the number of available beds in tuberculosis hospitals and clinics. At the same time, the Greek government proceeded with the reorganisation of the “Sotiria” hospital of Athens (Law 4649, 1930) by establishing within it a Scientific Department for the clinical and laboratory investigation of tuberculosis and for the training of medical school students, as well as three Pavilions for tuberculosis patients (Law 4742, 1930).

(c) In the fight against venereal diseases, the Ministry of Hygiene established permanent anti-venereal clinics in various cities of Greece and mobile services for the diagnosis and treatment of hereditary syphilis in Macedonia, Thrace, and Epirus, while it issued several decrees for the monitoring and treatment of venereal diseases.

(d) In the fight against trachoma, the Ministry of Hygiene launched 12 anti-trachoma dispensaries during the year 1930, in which 549,884 patients were examined. Moreover, an extra grant of 1 million drachmas was given to the anti-trachoma campaign from the regular State Budget, while the same amount of money was given to the campaign against leprosy.

(e) In the fight against plague and smallpox, the government initiated preventive vaccination programmes for the population, while it also brought into effect a number of irrigation and drainage projects (water sterilisation, maintenance of the aqueducts, etc.) to address typhoid fever in conjunction with the anti-tuberculosis vaccination programme.

Regarding mental health policy, the responsible agency issued legislative interventions for the organisation of public psychiatric hospitals of Athens, Thessaloniki, Corfu and Chania, while it proceeded to the construction of new psychiatric pavilions in the public psychiatric hospital of Athens. Moreover, in addition to the League of Nations, the Greek government received extra technical assistance and funding from other international organisations, such as the RF (Giannuli, 1998). The aforementioned organisations, in collaboration with the central services of the Ministry of Hygiene, the School of Hygiene and the Athens Health Centre, developed a generalised activity
on issues such as the training of health personnel and the organisation of the fight against the spread of infectious diseases.

Despite the measures and institutional initiatives adopted by the Greek government, the final reform outcome did not meet the initial goals. According to the final report that was delivered by the League of Nations Health Committee to the Greek government, basic programme goals were not achieved (Makrides, 1933) since the reorganisation of the health care system's administration and financing was not implemented. Little effort was made to decentralise the organisation and planning of the health system, and the operation of the public health services that would form the basis of the new health system was not achieved, with very few exceptions (e.g., the School of Hygiene).

Furthermore, other main objectives that were not actualised were the following: a) the development of human resources encountered numerous obstacles and difficulties, including the lack of progress in the training system and infrastructure, b) the unification of the fragmented public health services faced strong reactions, which in turn prevented its implementation, c) the health system’s political disengagement was not achieved, and d) the Health Ministry’s attempt to build social alliances, convergence and consensus on reform programme ran into corporate interests and stereotypic perceptions that consequently led to the cancellation of every related effort.

**Discussion**

Despite the progress recorded in the health sector during 1928–1933 and the involvement of LHNO in the restructuring of the Greek health system, the final result did not fulfil the expectations set for the successful implementation of that project. The reasons behind the failure of implementation of this health reform plan in Greece could be based on numerous internal and external factors correlated with the health system’s performance and function. The core factors were the following:

The insufficient funding of the Greek health system

A necessary and sufficient condition for the reorganisation of the health system in Greece was the commitment by the state to adequate and sustained funding. Despite the Greek government’s commitment to fund the improvement of the public health system, this was not deemed possible due to the economic crisis and the need to save additional financial resources (Ministry of Presidency, 1932). Indicative of the insufficient financing of public sanitary
services from the state budget was the fact that in 1934 only 9 million drachmas were spent for public health needs, while the Committee’s plan proposed 77 million (Theodorou & Karakatsani, 2008).

The difficulties that existed in the health financing policy were also reflected in documents of government officials of that period. On May 11, 1930, a confidential letter was sent by the General Secretary of Hygiene A. Pallis (1930) to Deputy Minister A. Pappas in which were described the serious operational problems faced by the 58 rural clinics of RSC after they were placed under state supervision and funding. While, a few months later, on August 13, 1932, in another letter, the Minister of Health, E. Emmanuilidis (1932), pointed out to Prime Minister El. Venizelos that the budget of the Ministry of Health was very insufficient, and the cutbacks made by the Ministry of Finance would lead to the suspension of the refugee housing program.

As a result, public health expenditure in Greece remained at extremely low levels compared to other European countries, despite the increase of the state budget (from 1.2% to 2.0%) that was recorded during the period 1928–1933. This prevented the establishment and operation of the new health services, which would play a central role in the health system’s reorganisation, and in addition, it caused serious problems in the functioning of the existing health services, such as public hospitals and rural clinics (Vardopoulos, 1932).

The harsh opposition from health interest groups

The international scientific literature has shown the importance of the medical profession for the implementation of health care reform (Immergut 1991; Freidson 1994; Tuohy 1999), while it is widely accepted that the medical profession is uniquely well positioned as a powerful political lobby group (Immergut 1992). In the case of Greece, this could not be an exception (Mossialos, & Allin, 2005; Davaki & Mossialos, 2005). The fierce opposition from powerful health interest groups, such as the medical association, to the proposed changes in the organisation and structure of the Greek health system suspended the implementation of the health experts’ reform plan (Makrides, 1933) but also of other reform initiatives of that period, such as the establishment of a general social security scheme (Liakos, 1993). However, according to Empros newspaper (“The doctors’ insurgency against the Government”, 1929), the resistance from the doctors, who were perceived as the most powerful health interest group, did not originate only from their disagreement with the proposed policy measures but also from the government’s refusal to meet their demands about labour and insurance issues. In the aftermath of such events, the medical community, spearheaded by the Athens Medical Asso-
ciation, tried to demean the work of the LNHO’s experts and, consequently, the reform programme of the Ministry of Hygiene through allegations about the needless waste of public money, inefficient management, and lack of trust in the Greek medical workforce. The criticism was so intense that the Greek government was accused of a deplorable lack of patriotism and a decline in terms of national dignity and prestige of the state (“The Medical Association accuse Ministry of Hygiene”, 1932).

The lack of a national uniform health policy

Another main reason for the unsuccessful implementation of the health reform measures during the Interwar period was the failure to formulate a uniform and coherent public health policy by the Greek governments. This was closely interlinked with the successive changes of Ministers of Hygiene that followed the continuous alternations of Prime Ministers and governments and finally led to a fragmentary health planning process, taking as a fact the low administrative capacity and weak coordination mechanisms of public health services (Mountokalakis, 2008).

Undoubtedly, this political pathogenesis became one of the major structural weaknesses of Greek health policy during the Interwar period that could not be rectified even at times of political stability. What paints a black picture of the period 1928–1933, is the fact that seven different individuals served as Ministers of Hygiene in Greece, with an average tenure of about 8.5 months, while the average tenure of the four deputy Ministers was 5.5 months (Dardavesis, 2008). As a result, the suggested measures of the LNHO’s plan were either not implemented at all or were implemented partially, given the fact that their effective full implementation required a long-term timetable exceeding by far the average of a ministerial tenure. Moreover, what contributed to the lack of a national uniform health policy was the fragmentation of the health services that were scattered in other ministries (Makrides, 1933).

The extreme shortages of qualified health care professionals

It is widely accepted that the quality of human resources is a critical component in health policy implementation (Dussault & Dubois, 2003; Dubois, McKee & Rechel, 2006). This point of view was fully shared by the Health Committee members, who considered that hygiene is primarily a matter of education and that the training of health personnel was a prerequisite for the improvement of the health status of the entire population (League of Nations, 1931).
However, the lack of know-how and skills among health professionals and the absence of a supportive medical and nursing education system in Greece impeded the effective promotion of the measures envisaged in the health reform programme (League of Nations Health Organisation, 1929a). Apart from the insufficiency of health personnel, other critical problems that the Greek government failed to address were: a) the significant shortage of health personnel, particularly in rural areas, and their uneven distribution (Anogiatis-Pel & Marselou, 2007) and b) the small number of health professionals who finally received the scheduled training and retraining in public health according to LNHO’s plan funded by the LN and the RF (only 17 people in Europe and the USA during the period 1930-1931) (Ministry of Hygiene, n.d).

The lack of cooperation and coordination between public health services

Among the key proposals of the LNHO’s plan was the establishment of new health services (i.e., Health Centre of Athens, School of Hygiene, etc.), which would, together with the Ministry of Hygiene, constitute the basis of the country’s new health system and would also play a crucial role in the re-organisational process (Liakos, 1993).

Notwithstanding, the failure of cooperation and coordination among the new health agencies stemmed from their inability to share responsibility on the authority regarding the planning and implementation of health policy. It is indicative that according to N. Makrides, Director of the Ministry of Health, after the establishment and operation of the new health services such as the Health Centre of Athens, a hostile relationship was formed between them and the central services of the Ministry of Health, which included accusations on both sides of inadequacy and inefficiency as well as a gap of cooperation. The lack of coordination and adoption of a unified health policy was also confirmed by the letters of N. White (1930a, 1930b), Director of the Health Centre of Athens, to the Prime Minister, in which he asked him to transfer the overall administrative authority for health policy issues to the Health Centre. This situation inevitably resulted in a dualistic system that was not beneficial to public health and set obstacles to the smooth implementation of the health reform programme (Makrides, 1933).

Public sector bureaucracy and centralised decision-making process

The centralised decision-making process, along with the established bureaucratic culture and the dysfunctional organisation that characterised the structure and operation of public administration in Greece (Makrydemetres & Michalopoulos, 2000), impeded the efforts for implementing an effective
health reform programme. As a result, basic administrative actions which were deemed necessary for the effective organisation and operation of new health services, such as personnel recruitment or budgets approval, required lengthy and complicated procedures (Exarhakis, 1930).

These time-consuming procedures undermined not only the health reform plan per se but also the government’s credibility and ability to guarantee its full implementation. It is notable that, due to the severity of the problem, the Prime Minister had been forced numerous times to personally intervene and appeal to the competent authorities and agencies in order to overcome bureaucratic obstacles and accelerate procedures on organisation, management, staffing, and finance of the new health services (Pallis, 1930).

In summary, what could be derived from the above is that the Greek government failed to support the full implementation of LNHO’s plan despite its positive attitude to health reform and the brave efforts to promote the necessary changes by enacting a number of important legislative acts. This was due to external and internal factors such as the political turmoil of the country, the adverse international economic conditions, but also the poor state structures. It is no coincidence that serious problems emerged after the second year (1930) of the five-year health reform programme. These problems (i.e., failures and deficiencies in health policy design) caused considerable delays in health reform implementation, intense reactions against the suitability of the proposed measures and ultimately raised doubts about the credibility, the political sustainability, and the consistency of the reform programme.

**Conclusion**

To conclude, it is evident that the health reform plan, which had been compiled by the LNHO Committee and executed by the Venizelos government during the period 1928–1933, was not implemented in its entirety. Moreover, it failed to fulfil its main goal, which was the health system’s reorganisation and the response to citizens’ health needs and expectations. The unstable external economic environment, as well as the social and political barriers combined with a number of unresolved weaknesses of the Greek

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1 It is worth noting that between 1923 and 1939, and despite political and economic instability and the “Great Depression” of the 1930s, the average growth rate of Greece’s GDP per capita remained positive, at around 2% per year (Alogoskoufis, 2021) and therefore it can be stated that the failure of the health reform programme was linked to multiple factors and not only with the economic restrictions that had been imposed by external conditions.
health system, hampered the effective implementation of the initiatives issued for the institutional and operational restructuring of the public health system and ultimately led to their complete cancellation.

Given the fact that health reforms should be evaluated in relation to not only political intentions or the ideological aspects of a reform plan but also to the results that induce the health system’s improvements and the protection of public health (Frenk, 1994; Cassels, 1995), it can be concluded that the failed implementation of LNHO’s plan during the Interwar period reflects the inefficacy of the Greek state to impose – in conditions of uncertainty – the necessary radical changes of the Greek health system. In an attempt to interpret the reasons that led to the plan’s failure, the following conclusion is reached; this negative outcome is interconnected by the intense social and political conflicts about the institutional measures regarding the problems of public health and the inadequate funding of the proposed sanitary measures.

Nevertheless, it is worth noting that the Greek health reform paradigm of the Interwar period, despite its unsuccessful outcome and its differentiation from other country’s reform patterns (Immergut, 1992; Hacker, 1998, 2002; Tuohy, 1999; Guillén, 2002; Oliver & Mossialos, 2005; Marmor et al., 2006), highlighted the general characteristics and the factors that determine the necessities of a successful health reform policy and the perils of its failure in a changing international health landscape. Furthermore, it called attention to the high correlation of health reform attempts with the existence of major periods of crises in both the social and economic fields, such as the period that followed the Asia Minor catastrophe. Moreover, it underlined the need for a political and social consensus in Greece around the objectives, policies, and methods that should be realised in order to achieve the improvement of the health system’s function and performance (Kouris, Souliotis & Philaitakos, 2007). Even though this consensus was set as a critical prerequisite by the LNHO’s experts for the successful implementation of the reform plan, it was not handled with diligence by the Greek government, thus eventually becoming the ‘Achilles heel’ of the health reform undertaking.

Finally, this case study confirmed the difficulty in adapting international guidelines or norms into a particular national context, especially when considering the political instability and the existence of powerful professional interest groups consistently opposed to the content, aims, and methods of health reform.
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Conflicts of interest

The authors have no conflicts of interest to declare.

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SAŽETAK

U međuratnom razdoblju (1918. – 1939.) Zdravstvena organizacija Lige naroda (ZOLN) pružala je financijsku pomoć i tehničku podršku zemljama širom svijeta u njihovu pokušaju reforme sustava javnog zdravstva, rješavanja zdravstvenih problema stanovništva i kontrole zaraznih bolesti. Grčka je bila jedna od zemalja koje su primile tu pomoć, a 1928. započela je suradnja sa ZOLN-om. Cilj je ovog saveza bio integrirani plan zdravstvene reforme pod nazivom „Suradnja s grčkom vladom za sanitarnu reorganizaciju Grčke“ i imao je dvostruku zadaću koja je pružala sveobuhvatnu zdravstvenu zaštitu za sve građane: a) reorganizaciju zdravstvenih usluga i b) uspostavu jedinstvenoga javnog zdravstvenog sustava.

U članku se govori o suradnji između Grčke i ZOLN-a te njihovu nastojanju da reorganiziraju zdravstveni sustav u međuratnom razdoblju. Preciznije rečeno, istražuju se značajne zakonodavne i političke inicijative i njihov utjecaj na razvoj zdravstvenog sustava. Osim toga, cilj je istražiti čimbenike koji su utjecali na ishod plana reforme ZOLN-a. U članku se također tvrdi da predloženi plan reforme zdravstva nije u potpunosti proveden zbog intenzivnih političkih i društvenih sukoba koji su proizašli iz institucionalnih mjera poduzetih za rješavanje problema javnog zdravstva, kao i financijskih i tehničkih ograničenja.

Ključne riječi: zdravstveni sustav, zdravstvena politika, javno zdravstvo, reforma, Liga naroda, Grčka, međuratno razdoblje