# THE BEGINNINGS OF WATER TREATMENT – HYDROTHERAPY IN POLAND SINCE XVIII CENTURY TO EARLY XX CENTURY

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- Poland.
- water treatment,
- hydrotherapy,
- History of Medicine,
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## **Abstract**

Using thermal water in Polish medical treatments according to historical sources reach XI centaury. Hydrotherapy treatments were mainly use by Polish kings and their entourage.

About the fact of benefits from water treatments testify high use of natural medicine (including hydrotherapy) for wellbeing and improving health condition. In process of time, organization and higher popularity of bathhouses, which performed function health-promoting and social, started to be more available for medium class.

Article presents historical draw, development and most important hydrotherapy centers in Poland up to XX century.

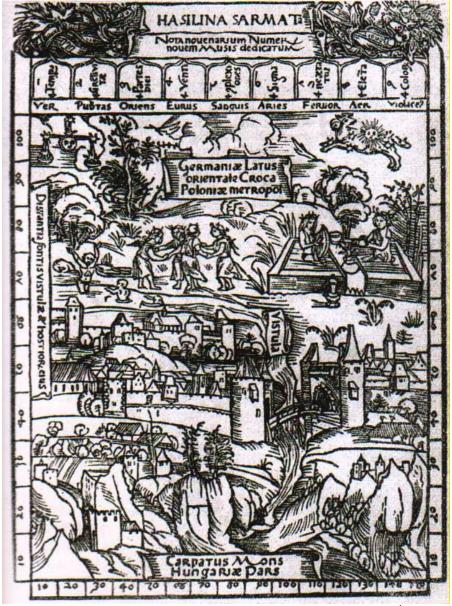
### Introduction

People since their early presence on Earth sought effective means, which could help them eliminate troublesome conditions of both body and soul. One of first means used for medicinal purposes was water, which was generally available and comfortable in use. Due to its effective influence water became widely known in the therapeutic and nursing treatment. The significance of life-givng water was emphasized by Greek philosopher and poet Pindara in the title of his work *Ariston men hydor* (Eng. *Nothing better than water*). The ancient Romans improved their health in generally available, almost universal, water baths, where in addition to the healing effects of hot water and whipping, social conversations and heated political discussions played a big role. Particularly popular among the Romans in the bathing areas were water reservoirs with cold water called *frigidarium* and with warm water called *aldarium* but also dry baths *laconicum* and steam baths *sudationes*.

Due to the Roman legions, at the turn of the ancient and modern centuries Roman methodology for the application of healing treatments that used water became widespread everywhere where the troops of the Roman army reached, including territory of England, Dacia, Spain, France, Romania and other conquered countries. Roman health resorts were created, among others in: Baiae, Aquae Herculi (Romania), Aque Calidae (Vichy), Aque Helvelicae (Baden), Aque Solis (Bath).

Travel descriptions of Greeks and Romans to ancient health resort were written, including those by Herodotus, Solon, Plato, Pythagoras, Heraclitus, Tucydides, Xenophon and others. There were also short guidebooks on roads and stations, called "Itinerari".

Greeks and Romans created legal framework and initiated recreational and leisure type of travel, which was based on active learning about the visited environment. They ensured the safety of travelers through *jus gentium* - the oldest international documents that protected travelers. They were concluded in Roman times by rulers in individual European countries. Currently used term *balneology* for water treatment, dates back to the domination of ancient Greece and Rome and is derived from the Latin word *balneum* - the bathhouse and the Greek word *logos* - science. Hence its birth is said to take place in ancient times.



Scenes of "Sarmatians" participation in bathing in Wisła (Vistula) on a 15<sup>th</sup> century woodcut (from the book of the humanist C. Celtis).

At the beginning of Polish statehood, our kings, for example Bolesław the Brave, used water treatments in the form of bathing in bathhouses. At that time, huts with stone stoves were established, where people poured hot and cold water on themselves and then went outside as a method to toughen up. According to a tidbit from the 11<sup>th</sup> century, Princess Judyta, wife of Władysław I Herman, thanks to bathing in the waters of Inowłódz near Pilica on 2<sup>nd</sup> September 1085 gave birth to the son, Bolesław III Wrymouth, who later became king of Poland. In return, the grateful married couple funded the church of St. Giles. As early as the

12<sup>th</sup> century, people began exploration of healing properties of natural waters in many places in Poland. The first mention of hydrotherapy is related to the discovery and exploitation of waters with miraculous properties, which were found in Cieplice Zdrój, since about 1132. Information about these healing qualities spreaded quickly among the Slavs and people from many places arrived to find release from pain. The oldest traces of functioning resorts in Poland, in a form of remains of 4 old wells and fore-shafts and water buckets made in the prehistoric era, were found in 1892 in the town of Solice (now Szczawno)[Sabatowski A. 1947]. The first place to use the treatment of warm waters on the territory of today's Poland is said to be Ladek Zdrój, where treatment with the help of warm baths is mentioned before 1241. In Cieplice Śląskie monks of Strzegom of the Order of Saint John began balneological healing activities in 1281.

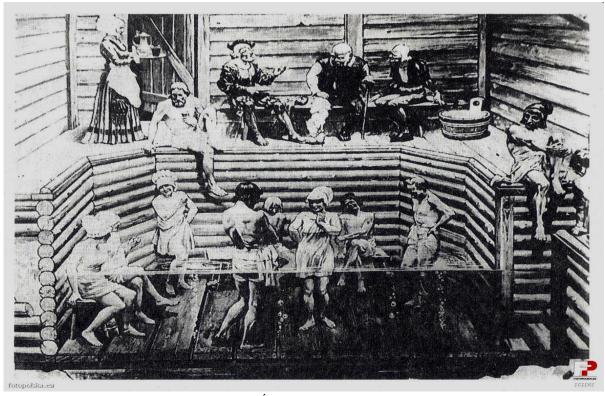


Image of the medieval bathhouse in Cieplice Śląskie, public domain, photopolska collection of fotopolska.

In the 11<sup>th</sup> and 12<sup>th</sup> centuries water and steam baths connected with willow whipping were popular among the Polish people. Over time, spontaneous baths transformed into more organized forms of treatments chosen for respective ailments. The use of mineral waters by the Slavs is mentioned in a document from 1221, their benefits were known in the 4<sup>th</sup> and 5<sup>th</sup> centuries AD.

Bathhouses available for a wider public for hygiene and health purposes existed, among others in: Legnica (1252), Łęczyca (1301), Kraków (1301), Poznań (1301) and a little later in Kazimierz and Płock. The enjoyment of the benefits of alkaline sorrel in the early years of the Middle Ages is evidenced by traces discovered in the cities of Cieplice Śląskie (Cheplowode, Ciepłowody, Warmbad), Bolków and Lądek (Landek) [Jankowiak J. 1971, pp. 15–32].

Louis I of Hungary (1326–1382), King of Hungary and Poland, was known to use natural healing treatments. He was ill with tuberculosis and was treated in the Smokovec climate in the Spiš Mountains. King of Poland, Casimir IV Jagiellon, in a document from 1450 mentions a bathhouse in Inowłódz, in which warm baths in salt water were used. In the 15<sup>th</sup> century, towns such as Cieplice Śląskie, Drużbaki, Iwonicz, Lądek, Lubień and

Swoszowice were known as resorts in which, after bathing in their warm waters, people experienced relief from rheumatic pains [Ciszewski F. 1988, pp. 11–12; pp. 1-3; Jankowiak J. 1971; Madeyski A. 1999; ; Ponikowska I., 1996; . Kochański W. 2006].

The recognition of the healing value of waters in Poland and its wider use occurred in the 16<sup>th</sup> and 17<sup>th</sup> centuries. In 1522, a physician and historian Maciej from Miechów, a professor at the Krakow Academy, described the healing effects of waters located in Poland in the work *Conservatio Sanitatis*. Maciej from Miechów also described phenomena caused by participation in balneological procedures that affected the cardiovascular system in his publication: *Tractatum de aquis tam naturalibus guam artefactis medicatis*.



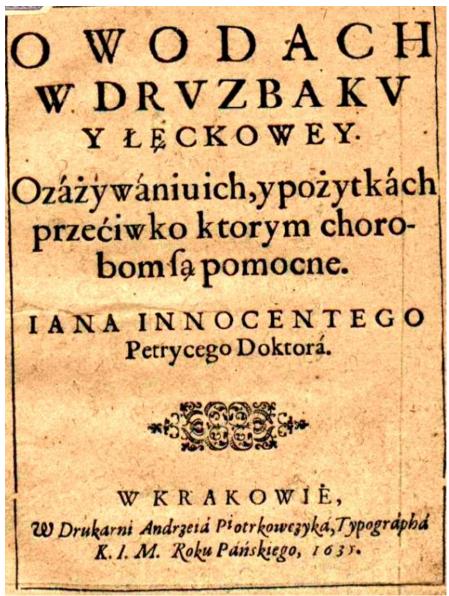
Józef Struś (Poznań 1510–1568), precursor of balneology in Poland, a public domain.

A significant part in promoting the healing properties of balneology in Poland had prof. Józef Struś (1510–1568), physician, born in Poznań, professor at the University of Padua, mayor of Poznań, medical consultant of the Turkish Sultan Suleiman II, who called him *the most perfect of Lechistan's doctors* also the doctor of King Sigismund II Augustus. Balneological activity of J. Struś was based on recommending various baths and observing the cardiovascular system, especially the heart rate of bathers. He described the results of his observations in a study entitled: *Sphygmicae artis iam mille ducentos annos perditae et desideratae Libri V*, (*Doctrine on the pulse of five books*) published in Basel in 1555 [Struś J. 1968]. In the following years he was the author of other scientific studies on the effects of baths.

Works on the healing possibilities of mineral waters were continued by Wojciech Oczko - the court doctor of kings Sigismund II Augustus, Stephen Báthory and Sigismund III Vasa. In 1587 he described his insights into the effects of hydrotherapy treatments in a treatise entitled: *Cieplice*. This work, together with studies by Maciej from Miechów, are among the first that started describing the evolution of balneology in Poland.

Jan Innocenty Petrycy continued this interest in the healing possibilities of waters. He was in 1635 a professor at the Krakow Academy as well as the court physician of the Lubomirski family. In the study: *O wodach w Drużbaku i Łęckowej. O zażywaniu ich i* 

pożytkach, przeciwko którym chorobom są pomocne (Eng. On waters in Drużbak and Łęckowa. On their use and benefits, which diseases they help with) he described the properties of waters in Drużbaki (To this day, Drużbaki is a spa town with numerous thermal water deposits. Currently located in Slovakia and called Vyšné Ružbachy).



Title page of the study by J. I. Petryka: O wodach w Drużbakach y Łęckowey.

O zażywaniu ich, y pożytkach przeciwko, chorobom fa pomocna, (Eng. On waters in Drużbaki and Łęckowey. On their use and benefits, which diseases they help with) Kraków, 1635.

Interest in balneological medicine in the 16th century was demonstrated by professors of the Zamość Academy, in particular Erazm Syxt - doctor of philosophy and professor of medicine. The aforementioned supporter of the use of hydrotherapy in 1617 in Zamość published a work entitled: *O cieplicach w Szkle ksiąg troje* (Eng. *On thermal baths in Szkło, three books*). In addition to examination of the value of the waters found in the village, he also contributed to popularization of the resort in Szkło. In the 17<sup>th</sup> century, King John III Sobieski and his wife Marysieńka participated in baths in sulfur springs in Szkło.

The title page of Erazm Sykst: *O cieplicach we Szkle – ksiąg troje* (Eng. *On thermal baths in Szklo - three books*), Zamość 1617.

Stanisław II Augustus, King of Poland, received care from the court physician Jakub Monet who in 1776 presented a work on the treatment of the upper respiratory tract with cold water.



Allegory of the partitions of the First Polish Republic, visible here are, among others, Russian Tsarina, Austrian and Prussian emperors, after: www.polityka.pl

In 1772 the Republic of Poland was divided into three partitions: Austrian, Prussian and Russian. Due to this division the towns with medicinal values were under the administrations of three partitioning powers. Although, Poles could take the offers of treatment the borders between partitions hindered the free movement of people. Thus, the participation of the Polish people in health tourism as well as in the organization of treatment in health resorts was limited.

Stanisław Staszic (1755-1826) had considerable knowledge related to the distribution of waters and merits of climate. While visiting health and bathing resorts he described their health values, including balneological and climatological ones. He published his observations in 1815 in the article: *O ziemiorództwie Karpatów i innych gór i równin Polski*. (Eng. *On the geology of Carpathians and other mountains and flatlands of Poland*).

Significant contribution to the development of theoretical and practical balneology was made by prof. Józef Dietl (born on January 24, 1804 in Podbuż, died on January 18, 1878 in Krakow) - Polish-Austrian physician, politician, professor and rector of the Jagiellonian University. During the Partitions of Poland he created a new field of medicine - balneology. Thanks to him, on 9 March 1858, the activities of the Balneological Commission at the Krakowskie Towarzystwo Naukowe (Eng. Krakow Scientific Society) were inaugurated. In the years 1866–1874 he was the president of Kraków [*Encyklopedia PWN* 2020; Dietl J. 1865; Rajchel L., Kuliński W., Rajchel J.2005; M. Starczyńska, J. Karwacińska, B. Stepanek-Finda, W. Kiebzak: 2011 p. 74.; Mazur E. 2016, pp. 197-203: gazetakrakowska.pl 2014].

In Poland, resort activity in subsequent years was undertaken in the following cities:

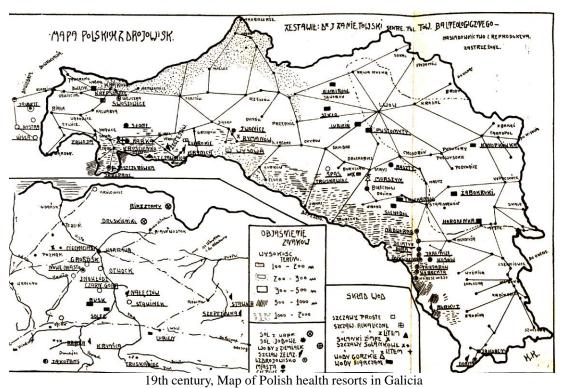
1636 Kudowa (Chudoba), 1670 Iwonicz Zdrój, 1688 Połczyn Zdrój (Polzin),

- 1723 Krynica Zdrój,
- 1723 Muszyna Zdrój,
- 1760 Wysowa, the first noted bath was of the owner of the town, Maciej Lanckoroński, who himself wrote this about their effectiveness: (...) *I attribute my good health and vigor to bathing in Wysowa waters* (...), in 1808 bathhouses began operating in the town,
- 1769 Duszniki Zdrój, (aka Dusniki or Bad Reinz), water sources were known at the beginning of the 15th century, the town was officially granted the status of a resort in 1769,
- 1780 Krzeszowice Zdrój,
- 1811 Swoszowice Zdrój,
- 1815 Szczawno Zdrój (aka Bad Salzburg),
- 1828 Stara Polanica Zdrój (aka Altheide), in 1557, the chronicler Georgius Aelurius in his Glaciographia (description of the Kłodzko land) informed about the existence of mineral springs in the vicinity of the village of Polanica, the first bath were built in 1828,
- 1828 Szczawnica Zdrój (aka Bad Salzbrunn),
- 1830 Kołobrzeg (aka Kolberg), the first bathing establishments were founed in 1830, they were made available in wooden baths by the mason master Gottlieb Keutel, in 1872 Kołobrzeg officially obtained the status of a resort,
- 1830 Solec Zdrój,
- 1836 Busko Zdrój,
- 1836 Ciechocinek,
- 1846 Żegiestów Zdrój,
- 1849 Jastrzębie Zdrój and Żegiestów Zdrój [Dietl J. 1858; *Rocznik c.k. Towarzystwa Naukowego Krakowskiego*, 1860],
- 1862 Goczałkowice Zdrój and "Kiselka" near Lviv,
- 1864 Rabka Zdrój, first official opening and first organized baths,
- 1876 Inowrocław Zdrój,
- 1880 Nałęczów Zdrój,
- 1881 Rymanów Zdrój,
- 1882 Kamień Pomorski, (Cammin), the first bathrooms were founded,
- 1882 Wysowa Zdrój,
- 1885 Piwniczna Zdrój, where the high value of mineral water was examined by dr Juliusz Korwin Gasiorowski,
- 1885 Wisła Zdrój, the first villa built in the village gave rise to the resort,
- 1909 Wieniec Zdrój, near Włocławek, beginning of exploitation of sulphide waters and therapeutic mud [Dietl J. 1860].

Out of the three partitions, the administrative and political autonomy in the Austrian Partition since 1867 and the situation of its inhabitants` both legal and administrative was most opportune for the development of enterprises by Polish people.

Dr. Juliusz Bandrowski, an expert and promoter of development of balneology, operating in the Citizens' Committee in Krynica, took advantage of this situation and proposed the initiative (...) to create his own union in Galicia (...) [Wiadomości Turystyczne 1936 pp. 1–3]. This initiative was implemented on 29, 30 and 31 of October 1910 during the 1st National Industrial and Balneological Congress in Krynica organized by the Cracow Medical Society. A specially appointed congressional committee operated on behalf of the said Society. The committee was attended by delegates representing Polish spas and health resorts from the area of then Galicia, including professors dr Ludomił Korczyński, dr Roman Rencki, dr Antoni Sabatowski, as well as many other spa experts who represented resorts in

Delatyn, Iwonicz, Jaworze, Kosów, Krościenko, Krynica, Lubień Wielki, Niemirów, Ojców (then the area of Kingdom of Poland), Rabka, Rymanów, Szczawnica, Tuskawiec and Zakopane[ibid.]. During the first meeting of the committee, within three days, 23 papers were presented. They discussed, among others, ...all areas of resort life, and many topics discussed at that time, have not lost their relevance...[ibid.]. People gathered at the aforementioned first congressional committee [...], established Krajowy Związek Zdrojowisk i Uzdrowisk (Eng. the National Association of Health Resorts and Spas) by resolution. Its quarter-century existence was celebrated on 25 and 26 of April 1936 simultaneously with the celebration of the decade of operation of Zwigzek Uzdrowisk Polskich (Eng. the Association of Polish Resorts)...[ibid.]. Initially, the Association in 1910 occupied the place in Lviv at 3 Maj Street, and then moved to the place at 9 Romanowicz Street. At this last address, the Association organized ... a model collection of of domestic mineral waters in the store and an information office for the public ... [Ibid.]. At the end of 1910, in the first year of operation of the Polish Association of Health Resorts and Spas, 62 members joined. In 1911, three committees were appointed in the structures of the Association, including: the balneo-medical commission, chaired by prof. dr Gluziński, a balneo-technical commission chaired by prof. Nadolski, an industrial commission chaired by dr Wacław Łobaczewski. Also in 1911, the Association began publishing the press body 'Nasze Zdroje' (Eng. "Our Resorts") whose editor was J. Bandrowski. Until the outbreak of World War I, this press body appeared in careful and graphically interesting layout. A tourist section was created in the structures of the Association under the leadership of Dr. M. Orłowicz. The Association, from the very beginning of its propaganda activity, covered not only Galician resorts, but also those located on Polish territories under Prussian and Russian partitions, including Busko, Ciechocinek, Druskieniki, Nowe Miasto, Ojców, Otwock, Połaga, Solec, Sławuta and others.



prepared by dr J. Frączkiewicz, dr J. Zanietowski, dr M. Cerch and prof. dr S. Pareński

In 1912, thanks to the efforts of the Association, an extensive guide was published by dr Lewicki, dr Praschil and dr M. Orłowicz. In 1913, during the exhibition in Kiev, the Association organized a propaganda stand about Polish resorts, and also obtained permission

to open "Galicyjski Zakład Kredytowy dla zdrojowisk i uzdrowisk" (Eng. "Galician Credit Facility for resorts and spas"). The National Association of Resorts and Spas in the Russian Partition in Warsaw, under the leadership of Dr. Jan Jaworski, promoted the spa industry. This activity was also conducted by the Balneological and Climatological Section [Ibid.].

## **Summary**

Until World War I, spa tourism in Poland was of an elitist nature, its participants were wealthy people, including landed classes and rich burghers. The destination of spa tourism were towns and villages, where the Council dealt with the organization of tourist traffic. Before 1914, professional tourist staff took care of handling the spa movement. The elitism of spa tourists before the outbreak of World War I is confirmed by the number of participants, which accounted for 2-3% of the Polish population of that time, i.e. about 100,000 people a year. Regardless of the era, economic or political situation, resorts are experiencing a renaissance. They are no longer associated only with the sick and elderly. There are increasingly more often visited by young people who want intensive regeneration. Spas are becoming a sort of centers of biological regeneration and recreation. They combine tradition with a modern idea, which ensures them great success. In addition to favorable climatic and balneological conditions, they offer a wide range of rejuvenating and regenerating treatments based on modern cosmetics. What's more, they also have an offer related to physical activity. Along with the development of spa tourism, resorts grew. In the 19th century, the spa tourism movement was initiated in Poland, which developed so well in later times. In the years preceding the outbreak of the First World War in Poland, despite unfavorable economic and political situation, health resorts were in a stage of development. Exercise of power by the three partitioning powers was the biggest disadvantage for the progress of the Polish spa movement. In particular the implementation of borders, which significantly reduced the number of patients, and also reduced the investment of money in the construction of hotels, guesthouses and natural medicine facilities. Borders not only maintained the fashion among Poles for trips to foreign spas, but also caused difficulties for Poles from some partitions to receive permission to cross borders. Hence, residents of Wielkopolska most often traveled to Lower Silesian health resorts, giving up trips to resorts located in the areas under the Austrian Partition. Along with the outbreak of World War I in 1914, all health resort and spa activities ceased [Jarosz R. 1936 pp. 1–3].

The operations of the First World War (1914–1917) in some ways devastated almost completely Polish health resorts. After Poland regained independence in 1918, actions were started to restore the functionality of the resorts.

## Materials and methods

Analysis and synthesis of documents attached in form of notes, the press folded in Museum of Sport and Tourism in Warsaw, photo documents from National Digital Archive (NAC) in Warsaw.

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### **Disclosure statement**

No potential conflict of interest was reported by the authors.