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Physicians' portraits defining medical progress in Europe

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Abstract. Over four centuries painted portraits of European doctors gave insights into our medical past. Throughout the 20th century European Nations extended this tradition to the general public through their Postal Administrations. This paper collates philatelic medical portraiture for nineteen European states since 1927, when the first such stamps were issued. The aim was to collate and identify the criteria for selecting medical doctors for national representation. A systematic search identified portrait stamps of 270 doctors either born or graduating in medicine from those countries, representing early Greek to modern medicine. Most portrait stamps featured doctors practicing in the 19th century. France released the highest number of portrait stamps (n=42) and Turkey the lowest (n=7). The issue rate per million population was highest for Austria (2.52) and lowest for Turkey (0.08), and Great Britain (0.10), which was surprising given its distinguished medical record. In comparing countries, the stature of individuals was assessed by the number of times they were celebrated by the home country or featured on stamps from other European countries. Personal honours, including Nobel prizes, were noted, and short biographies of some notable individuals are described. Only ten female physicians were assigned portrait stamps and while some doctors were revered rather for non-medical achievements such as literature and politics, many distinguished doctors were ignored. Medical knowledge was pioneered and publicized in the past by individual's portraits on stamps. Fewer portrait stamps are now issued, with current emphasis mostly on illustrating scientific teams. Arguably medicine, science and society still need portrayal of their famous physicians.

Key words: postal, stamp, Europe, medicine, doctor, practitioner, portrait, Nobel

Introduction

Very few doctors are instantly recognized by the public, despite so many having contributed greatly to knowledge and human health over hundreds of years. For the public to appreciate the value of their medical activities, a means is required to make these individuals known, and to capture the identities of doctors meriting wider acknowledgment (1). While the public accords the medical profession a collective identity, it is often less aware of the intellectual achievement, genius, pioneering science, and heroism of individual doctors. One avenue for the public to confront distinguished individuals is to view their portraits in galleries and medical institutions. While drawing attention to their physical attributes, the small accompanying description is easily overlooked. Significantly artistic portraits and photographs of doctors have been captured in the last 100 years in postal stamps, focusing attention on meritorious individuals, giving them prominence and acclaim, and bringing them to a wider audience, often beyond their own country of origin. All European nations throughout the 20th century have chosen to honor important physicians in stamps, often accompanied by colorful background information in special editions. Some of these doctors lived several centuries ago and to be understood such stamps need to be contextualized. For example, a stamp portrait of the

16th century physician and author Francois Rabelais is best appreciated from a historical and cultural perspective, which differs greatly from one illustrating a modern physician.

Medical practitioner portraits in stamps have been issued only during the last 100 years and the purpose of this analysis was to examine these by country of origin across 19 European countries. Medical systems vary and some have long medical traditions that will influence who is featured. The aim of this research was to identify doctors considered worthy of this honor and the frequency of their national selection, the medical specialties they represented according to clinical or research distinction, or other criteria such as political stature or literary achievements. This collation accords further recognition of the men, and women, who have advanced medicine to the present day.

Methods

Of the 44 designated European countries by the United Nations, 19 were selected with populations above nine million (range, 9 to 145 million). The remaining countries with smaller populations were excluded, as were the overseas territories of selected countries. Physicians who were born in, or who graduated in medicine from these 19 countries, and for whom stamps were issued, were identified from the six volume Stanley Gibbons World Stamp catalogue (2). Online listings of postal administrations were checked to 2024 to identify recent non-catalogued issues. Web search engines and PubMed were searched for references in English or French using the terms: medical or scientific portrait, picture, physician, doctor, country, stamp, and postage. The definition of physician was based on attaining university graduation as a Doctor of Medicine and licensure. Louis Pasteur (1822-1895) was excluded as he did not satisfy this definition. For very early practitioners who could not have a medical degree but worked as doctors, the term 'medical practitioner' was used. The term 'doctor' is used to refer to either category. Nobel laureates in Medicine and Physiology were identified. Recurrent issues honoring the same physician are identified in Table listings and were prioritized for figures and biography, as their contributions were more often acknowledged outside their country's borders, enlarging their influence on international clinical practice. The issue rate of doctor's portrait stamps per million population was calculated for comparison between countries, as well as the number of issues per decennial period. Based on their primary activity or category of achievement, physicians were grouped. as: scientists, clinicians, surgeons, pathologists (including anatomists), microbiologists, hygienists (including public health), politicians, writers (literary authors), missionaries, or other (explorers, educationalists). Recurrent issues portraying the same doctor are documented in the country tables below.

Results

The first two physician portraits to be depicted on stamp issues by their own Postal Administrations were from Russia and Poland in 1927: respectively Ludwig Zamenhof, the creator of the international auxiliary language Esperanto, and Karol Kaczkowski, the chief physician of the Polish army. Since then, the estimated number of issues from the 19 European countries is 270, with only ten featuring female doctors (3.7%). Of all doctors, most were born during the 19th century (71.8%) with only 8.1% in the 20th, compared with 12.6% in the 18th and 10.0% before the 18th century The largest number was from France (n=42), and the smallest from Greece (n=5). Ukraine and Belarus had even fewer issues, but prior to 1990 used Russian stamps. Nearly all stamps were released after the person's death, though the latency period varied greatly. The ten-yearly intervals for issues are shown in Figure 1, with the peak in the decade 1955-1964. There was an average period between a doctor's death and release of a commemorative stamp of around 50 years.

Only five countries issued portrait commemorative stamps of medical doctors prior to their death: Russia, Boris Yegorov, the first physician in space; Romania, George Emil Palade, Nobel Laureate in 1974 in Medicine and Physiology; Spain, Ramón y Cajal, an early Laureate in 1906; Sweden, Sune Bergstrom and Bengt Samuelsson, both 1996 Laureates in Medicine; Turkey, Gazi Yasargil and Aziz Sancar, the latter a Laureate in chemistry in 2015 and who

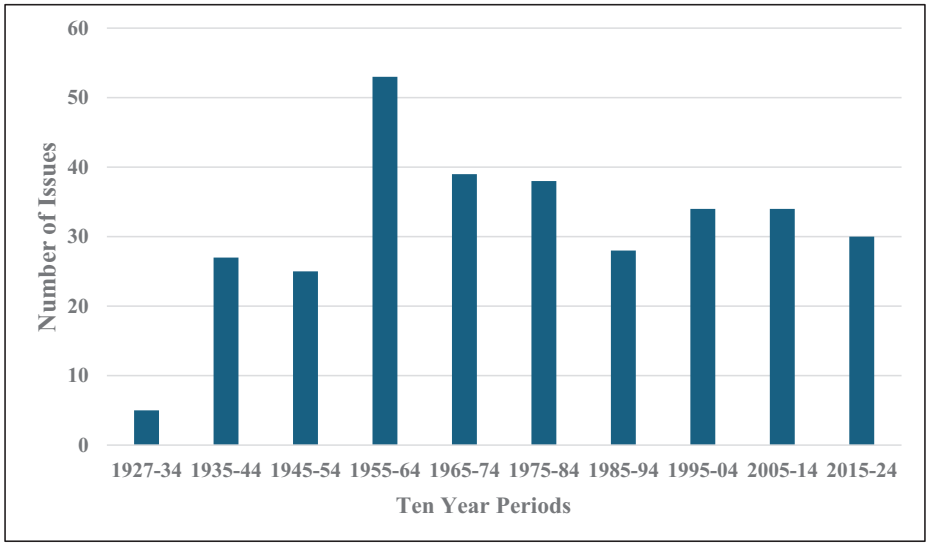

Figure 1. Numbers of European stamp portrait issues of doctors by ten-year periods.

is still living. Two countries issued stamps in the year following the individual's death: Germany's Albert Schweitzer, Nobel Laureate for Peace in 1953, and Great Britain's James Black, the Scottish pharmacologist and Laureate for Medicine in 1988, although his stamp named him but did not show his portrait. Thirty doctors (11.2%) of all portrait issues were awarded Nobel Laureates in Medicine.

Doctors esteemed across Europe were portrayed on stamps released by more than one European country: Robert Koch by Germany and ten others; Albert Schweitzer by Germany and seven others; William Harvey, Ivan Pavlov, Ignaz Semmelweis, Sigmund Freud and Alexander Fleming by their own and three other countries. For several, a single second country issued a commemorative stamp: Geraard van Swieten; Philip Franz von Siebold; Ludwig Zamenhof and Jan Jesenius. Sweden issued portrait stamps after the 1960s for many European Nobel Laureates in Medicine.

This celebrated gallery of doctors displayed a range of diversity and specializations, summarized in Table 1. Most (37.4%) were recognized for their clinical skills which covered fields as varied as bedside teaching, new diagnostic methods, publication of seminal textbooks, or identification of new diseases. Recognition was accorded for scientific contributions (20.4%), surgical expertise (18.9%), microbiology (7.4%) and pathology (4.4%). Rather than clinical excellence, some doctors were influential in politics (4.1%) or were missionaries, explorers, or literary authors. Some were honored by their country with several issues. Robert Koch, for example, was portrayed in seven different German stamps issued between 1944 and 2005; António Egas Moniz in five from Portugal between 1974 and 1999; Victor Babes from Romania in five between 1954 and 2004.

Country specific tables

Tables 2 to 7 collate countries with similar numbers of portrait stamps.

Austrian, German and Polish Medical Practitioners (Table 2, Figures 2 - 5)

Austria has issued 23 portrait stamps of doctors. The first, in 1937, were nine portrait stamps celebrating their country's most famous nineteenth century doctors (3). Later portrait issues commemorated three Nobel Laureates, Julius Wagner-Juaregg, a neuropsychiatrist who discovered the therapeutic value of malaria inoculation in the treatment of dementia paralytica, Robert Bárány, an otologist who worked on the physiology and pathology of the vestibular apparatus (4), and

Table 1. Categories of Achievement of Medical Practitioners honoured in their country's postal stamps issued between 1927-2024

Country	Category of Achievement [1]										ALL
	Scientific	Clinical	Surgery	Pathology	Microbiology	Hygiene	Politics	Missionary	Writer	Other [2]	
France	5	13	12	2	5	1	2	1	1	-	42
Germany	5	9	3	2	2	1	1	1	-	-	24
Austria	3	11	6	1	-	-	-	1	-	1	23
Poland	1	16	2	1	3	-	-	-	-	-	23
Russia	6	4	6	-	2	1	-	-	1	-	20
Romania	4	7	2	-	3	-	2	-	-	1	19
Belgium	5	5	1	1	1	1	-	-	1	-	15
Netherlands	7	4	2	-	-	-	-	-	-	-	13
Hungary	4	4	2	1	-	-	1	-	-	-	12
Italy	3	5	1	1	-	-	1	-	-	1	12
Great Britain	2	4	3	-	1	-	-	1	1	-	12
Czech Republic	1	5	-	1	-	-	1	-	1	2	11
Spain	1	3	3	1	1	-	1	-	-	-	10
Portugal	-	2	4	1	1	1	-	-	-	-	9
Sweden	6	1	-	-	-	-	-	-	-	1	8
Turkey	1	4	1	-	-	-	1	-	-	-	7
Greece	1	3	-	-	-	-	1	-	-	-	5
Ukraine	-	1	2	-	1	-	-	-	-	-	4
Belarus	-	-	1	-	-	-	-	-	-	-	1
ALL (%)	55 (20.4)	101 (37.4)	51 (18.9)	12 (4.4)	20 (7.4)	5 (1.9)	11 (4.1)	4 (1.5)	5 (1.9)	6 (2.2)	270 (100)

[1] See Methods for definition of specific categories; recurrent issues for same individual are tallied as one.
[2] Two were geographic explorers; two educationalists; two medical students, one who died as an undergraduate, one never graduated.

Table 2. Austrian, German and Polish medical practitioners commemorated by their own Postal Administrations

Austria		**Germany**		**Poland**	
Name	**Lifespan**	**Name**	**Lifespan**	**Name**	**Lifespan**
Gerard van Swieten	1700-1772	Hildegard von Bingen (x2)	1098-1179	Wojciech Oczko	1537-1599
Leopold van Auenbrugger	1722-1809	*Leonhardt Fuchs*	1501-1566	Sebastian Petrycy	1554-1626
Karl von Rokitansky (x2)	1804-1878	Johann Eisenbarth	1663-1727	Michael Sendivogius	1566-1636
Joseph Skoda	1805-1887	Johan Senckenberg (x2)	1707-1772	Rafal Józef Czerwiakowski	1743-1816
Joseph Hyrtl	1810-1894	Carl Linnaeus	1707-1778	Jędrzej Śniadecki (x2)	1768-1838
Ferdinand von Arlt	1812-1887	Dorothea Erxleben	1715-1762	Karol Maciej Kaczkowski	1797-1867
Ferdinand von Hebra (x2)	1816-1880	Ernst Ludwig Heim	1747-1834	Karol Marcinkowski	1800-1846
Ignaz Semmelweis	1818-1865	Samuel Hanneman	1755-1853	Józef Dietl	1804-1878
Theodor Billroth	1829-1894	Philipp Franz von Siebold	1796-1866	Tytus Aureliusz Chałubiński	1820-1889
Theodor Meynert	1833-1892	*Julius Robert von Mayer*	1814-1878	Benedykt Dybowski	1833-1930
Ádám Politzer	1835-1920	Max von Pettenkoffer	1818-1901	Henryk Jordan	1842-1907
Adolf Lorenz	1854-1946	Rudolf Virchow (x5)	1821-1902	Ludwik Antoni Rydygier	1850-1920
Sigmund Freud (x2)	1856-1939	Herman von Helmhotz (x3)	1821-1894	Antoni Wladyslaw Gluzinski	1856-1935
Julius Wagner-Jauregg *	1857-1940	Robert Koch (x7) *	1843-1910	Władysław Biegański	1857-1917
Anton Freiherr von Eiselsberg (x2)	1860-1939	Friedrich Loeffler	1852-1915	Odo Feliks Bujwid	1857-1942
Karl Landsteiner *	1868-1943	Paul Erhlich (x2) *	1854-1915	Ludwik Lejzer Zamenhof (x2)	1859-1917
Otto Lowei	1873-1961	Emil Behring (x3) *	1854-1917	Edmund Faustyn Biernacki	1866-1911
Constantin von Economo	1876-1931	*Magnus Hirschfeld*	1868-1935	Witold Eugeniusz Orłowski	1874-1966
Robert Bárány *	1876-1936	Rahel Hirsch	1870-1953	Janusz Korczak (x2)	1878-1942
Lorenz Böhler	1885-1973	Ferdinand Sauerbach	1875-1951	Rudolf Stefan Jan Weigl	1883-1957
Leopold Schonbauer	1888-1963	Cecile Vogt	1875-1962	Edward Szczeklik	1898-1985
Jacob Levy Moreno	1889-1971	Albert Schweitzer (x4) *	1875-1965	Władysław Kunicki-Goldfinger	1916-1995
Anna Maria Dengel	1892-1980	Theodor Brugsch	1878-1963	Hilary Koprowski	1916-2013
		Werner Forssmann *	1904-1979		

Asterisk: Medicine Nobel Laureates (Schweitzer's was for Peace); brackets: number if more than one issue; italics: doctors named without a portrait.

Karl Landsteiner, who discovered the ABO blood group system, laying the foundation for safe blood transfusion (5). Subsequently, three renowned Austrian doctors were featured: Karl von Rokitansky, the founder of modern pathology and investigative medicine (6); Ferdinand von Hebra, a dermatologist (7); Anton Freiherr von Eiselsberg, a founder of neurosurgery (8). The most recent issues in 1992 and 2024 commemorated the Founder of the Medical Mission Sisters, Anna Maria Dengel, the only female doctor honored by Austrian postage (9), and Jacob Levy Moreno, a psychiatrist and social scientist (10) (Figure 2).

Figure 2. Austrian issues of Rokitansky (1954), Landsteiner (1968), Dengel (1992), Moreno (2024).

Figure 3. German issues of Bering (1940), Koch (1943), Virchow (1953) and Schweitzer (1975); brackets: issue date.

Figure 4. German women doctors honored: von Bingen (1979), Erxleben (1988), Vogt (1989), Hirsch (2013); brackets: issue date.

Germany released 24 portrait stamps, seven with repeat issues, notably: Robert Koch, with stamps from the Third Reich, both East and West Germany, and West Berlin (11); Rudolf Virchow, was commemorated only after the fall of the Third Reich, as his name was demonized by the Nazis due to his research debunking their racist Aryan ideologies (6); Emil Bering, who discovered diphtheria antitoxin (12); and Albert Schweitzer, famous for his medical missionary activities in French Equatorial Africa, (13) (Figure 3). Four German women doctors were honored, the most for any European country: Hildegard von Bingen who wrote two medical texts, on her 800th death Anniversary (14); Dorothea Erxleben, the first female Doctor of Medicine in Germany (15); Rahel Hirsch, the first female awarded the title of Professor of Medicine in Germany (16); and Cecile Vogt, a neuroanatomist, who founded an Institute for Brain Research (17), and co-investigated Vladamir Lenin's (1870-1924) brain at autopsy (18) (Figure 4).

Figure 5. Polish portraits of Kaczkowski (1927), Zamenhof (1987), Kozak (1962), Kiprowski (2016); brackets: issue date.

Poland had 23 issues with the first set of portrait stamps released in 1927 commemorating Karol Maciej Kaczkowski, the chief physician of the Polish army and a pioneer of emergency medicine (19). There were recurrent issues of Ludwik Zamenhof, the inventor of the language Esperanto (20), and Janusz Korzak, a paediatrician, and children's author and rights activist (21). Odo Bujwid, the father of Polish bacteriology, was commemorated in 1982 (22), and Hilary Koprowski in 2016, a virologist and immunologist who demonstrated the world's first effective live polio vaccine (23) (Figure 5).

French Medical Practitioners (Table 3, Figure 6)

France issued 42 portrait stamps of doctors, more than any other European Nation, with the earliest in 1936 of Emile Roux, the immunologist and co-worker with Louis Pasteur in developing a rabies vaccine (24). Pasteur had precedence with his first portrait issues in 1922, but these are not considered as he was not a medical doctor. During the 1950's, 12 issues were released which covered a period from 1483 with Francois Rabelais, the physician, renaissance humanist and prose author (25), to 1939 with Antoine Béclère who created the first laboratory of radiology in Paris (26). The list of French doctors outlined in Table 3 and their accompanying portrait stamps paint in words and pictures a medical history of the renaissance (1494-1610), enlightenment (1685-1815), and Pasteurian periods (1822-1895), as well as the 20th century (Figure 6) (27).

From 1790 onwards hospital medicine, in Paris in particular, would be celebrated throughout Europe in the birth of the 'clinic' (28). The founder of the Paris school of medicine is usually held to be Xavier Bichat (Figure 6), who paradoxically was neither a University Professor, nor an academically trained physician, but who turned French anatomy into a science rather than a piece of casual theatre (29). His stamp portrait was issued in 1959. Notable physicians portrayed were René Laënnec, who in 1816 invented the stethoscope (30);

Table 3. French medical practitioners commemorated by their Postal Administration

Name	Lifespan	Name	Lifespan
Francois Rabelais	1483/94-1553	Octave Roch Terrillon	1844-1895
Ambroise Pare	1517-1590	Charles Richet *	1850-1935
Threophraste Renaudot	1586-1653/57	André Chantemesse	1851-1919
Pierre Fauchard	1678-1761	Emile Roux	1853-1933
Jacques Daviel	1696-1762	Antoine Béclère	1856-1939
Antoine Portal	1742-1832	Georges Widal	1862-1929
Philippe Pinel	1745-1826	Hyacinthe Vincent	1862-1950
Jean-Nicolas Corvisart	1755-1821	Albert Calmette	1863-1933
Nicoles Desgenettes	1762-1837	Alexandre Yersin (x2)	1863-1943
Dominique Larrey	1766-1842	Charles Nicolle *	1866-1936
Xavier Bichat	1771-1802	Albert Schweitzer *	1875-1965
Francois Broussais (x2)	1772-1838	Robert Picque	1877-1927
Pierre Bretonneau	1778-1862	Edmond Locard	1877-1966
Rene Laennec	1781-1826	Suzanne Noel	1878-1954
Louis Auguste Blanqui	1805-1881	Eugène Jamot	1879-1937
Claude Bernard (x2)	1813-1878	René Leriche	1879-1955
Jean-Martin Charcot	1825-1893	Robert Debré	1882-1978
Jean-Antoine Villemin (x2)	1827-1892	Henri Mondor	1885-1962
Felix Guyon	1831-1920	Bernard Halpern	1904-1978
Alfred Fournier	1832-1914	FranÇois Dolto	1908-1988
Georges Clemenceau	1841-1929	Emile Letournal	1927-1992

Asterisk: Medicine and Physiology Nobel Laureate (Schweitzer Laurate was for Peace) Brackets: number if more than one issue.

Jean Villemin who proved in 1867 that tuberculosis was an infectious disease, transmitted by contact from humans to animals and from one animal to another (31); Octave Terrillon, a pioneer of Joseph Lister's surgical asepsis in France (32), and Léon Calmette, who in 1921 used BCG to successfully vaccinate newborn infants in the Hôpital de la Charité in Paris (33). Globally the first stamp to promote vaccination showed Calmette and was issued in France in 1948 (34). By contrast, George Clemenceau, the French Prime Minister in World War One, although medically qualified, practised little medicine (35).

In addition to Nobel laureates, the French 20th century portrait stamps honoured Edmond Locard, who established the first scientific police laboratory of forensic medicine (36); Suzanne Noel, the first female plastic surgeon in the world (37); Françoise Dolto, a paediatrician specialising in child psychology (38); and Henri Mondor, a Professor of Clinical Surgery, author and historian of French literature and medicine (39). Perhaps surprising is the omission of renowned French physicians, such as Alexis Carrel (1873-1944), Nobel Laureate, whose role with the Vichy regime in the second world war stained his reputation (40), and Alphonse Laveran (1845-1922), the military physician who discovered the cause of malaria while working in Algeria (41).

Russian, Belgian and Romanian Medical Practitioners (Table 4, Figures 7 - 9)

Russia issued 20 portrait stamps of doctors. The earliest, in 1927 was for Ludwik Lejzer Zamenhof, a member of a remarkable medical family (42). Ludwik was an ophthalmologist but also the creator of Esperanto, invented to promote human communication.

Figure 6. French issues of Clemenceau and Villemin (both 1951), Laennec (1952), Rabelais ((1953), Roux (1954), Béclère and Terrillon (both 1957), Bichat (1959), Mondor (1982), Locard (2016), Noel and Dalto (both 2018); brackets: issue date.

Adam, Leon, Alexander, and Julian Zamenhof were medical doctors and noted surgeons, while Sophia Zamenhof was a paediatrician. The next issue, in 1952, was of Vladimir Mikhailovich Bekhterev, a psychiatrist and neurologist, considered the father of objective psychology, who may have died on the order of Joseph Stalin (1878-1953) as he made a diagnosis of Stalin's health considered politically damaging to the Soviet Union (43). Bekhterev and Ivan Pavlov sharply disagreed on the physiology of the salivary secretory reflex (44). Sergey Petrovich Botkin was commemorated in both 1982 and 2007, as physician to the Tsars and a founder of Russian medical science and education. His son, Yevgeny Botkin (1865-1918), was also court physician to Tsar Nicholas II, and was murdered with the Imperial family in Siberia by the Bolsheviks (45).

In 2010 a stamp was released honoring Nikolay Ivanovich Pirogov, considered the founder of field surgery and the first to use anesthetics, including ether, in a field operation in 1847 (46). Two celebrities, featured mainly for other achievements, were the writer and playwright Anton Chekhov, who qualified as a physician in 1884. Although medicine was his principal profession he made little money from it, treating the poor free of charge. Despite literary success, he did not turn away from medicine until 1897, at age 37, when his tuberculosis became too serious (47). Boris Borisovich Yegorov was the first physician in manned spaceflight and was bestowed the title 'Hero of the Soviet Union.' His stamp issue, released in 1964, has the distinction that it was 30 years before his death – a period unequalled by any other European doctor (Figure 7).

Belgium issued 15 portrait stamps, the first in 1942 as a series of three Flemish physicians: Andreas van Wezel (Vesalius) the founder of modern human anatomy (48), Rembert Doedens, botanist and court physician to Austrian Emperor Maximilian II, and Jean-Baptiste van Helmont, a founder of chemical analysis (Figure 8) (49). In 1968, Antoine Depage, the surgeon, founder of the Belgian Red Cross and boy scouting pioneer, was depicted with Queen Elizabeth of Belgium (1876-1965) (50). Jules Bordet received

Table 4. Russian, Belgian and Romanian medical practitioners commemorated by their own Postal Administrations

Russia		Belgium		Romania	
Name	**Lifespan**	**Name**	**Lifespan**	**Name**	**Lifespan**
Nikolay Ivanovich Pirogov (x2)	1810-1881	Andreas van Wezel (x2)	1514-1564	Nicolae Kretzulescu (x2)	1812-1900
Ivan Mikhaylovich Sechenov	1829-1905	Rembert Dodoens	1517-1585	Gheorghe A. Polizu	1819-1886
Sergey Petrovich Botkin (x2)	1832-1889	Jean-Baptiste van Helmont	1577-1644	Nicolae Turnescu	1819-1890
G.H.Minkh	1836-1896	Ferdinand Snellaert	1809-1872	Georges de Bellio	1826-1894
Nikolai Vasilyevich Sklifosovsky	1836-1904	Antoine Depage	1862-1925	Carol Davila (x4)	1828-1884
Ivan Petrovich Pavlov (x3) *	1849-1936	Ernest Malvoz	1862-1938	Victor Babes (x5)	1854-1927
Vladimir Mikhailovich Bekhterev (x2)	1857-1927	Albin Lambotte	1866-1955	Thoma Ionescu	1860-1926
Ludwik Lejzer Zamenhof	1859-1917	Jules Jean-Baptiste Bordet (x2) *	1870-1961	Ion Cantalescu	1863-1934
V Nikolay Fyodorovich Gamaleya	1859-1949	Ovide Decroly	1871-1932	Gheorghe Marinescu (x2)	1863-1938
Georgy Norbertovich Gabrichevsky	1860-1907	Albert Hustin (x2)	1882-1967	Nicolae Minovici	1868-1941
Nikolai Pavlovich Kravkov	1865-1924	Corneille Jean Heymans (x2) *	1892-1968	Nicolae Constantin Paulescu (x2)	1869-1931
Anton Pavlovich Chekhov (x2)	1869-1904	Albert Claude (x2) *	1899-1983	Constantin Ion Parhon (x2)	1874-1969
Nikolai Aleksandrovich Semashko	1874-1949	Frans Hemerijckx	1902-1969 1917-2013	Mihai Ciucă	1883-1969
Maxim Petrovich Konchalovsky	1875-1942	Christian de Duve *	1918-1998	Daniel Danielopolu	1884-1955
Vladimir Petrovich Filatov	1875-1956	Ferdinand Peeters		Iuliu Hațieganu	1885-1959
Nikolay Nilovich Burdenko (x2)	1876-1946			Victor Anastasiu	1886-1972
Oleksandr Oleksandrovych Bogomolets	1881-1946			Dumitru Bagdasar	1893-1946
Alexander Alexandrovich Vishnevsky (x2)	1874-1948			Ana Aslan (x2)	1897-1988
Vasili Ivanovich Petrovsky	1908-2004			George Emil Palade (x4) *	1912-2008
Boris Borisovich Yegorov	1937-1994				

Asterisk: Medicine and Physiology Nobel Laureate; brackets: number if more than one issue.

the Nobel Prize in 1919 for discoveries relating to immunity, and three further Laureates, in 1938 Corneille Heymans, and in 1974 Albert Claude and Christian de Duve, were later commemorated in a 2016 issue for their work on cell structures and physiology (4, 51, 52). The following year Albin Lambotte was celebrated for pioneering work on bone fixation, although not a Nobel Laureate (53).

Romania issued 19 portrait stamps with recurrent issues for several doctors: Nicolae Kretzulescu (54), Carol Davila (55), Victor Babes (56), Nicolae Paulescu (57), Constantin Parhon (58), Ana Aslan a Nobel Laureate

Figure 7. Russian issues of Chekov (1949); Pavlov (1949); Bekhterev (1952); Yegorov (1964); Botkin (1982); Pirigov (2010); brackets: issue date.

Figure 8. Belgian issues of Vesalius, Van Doedens, Van Helmont (all 1942), Depage (1968), Albert Claude (1987), Lambotte (2017); brackets: issue date.

for cell biology and the only female doctor featured (59), and George Palade (60) (Figure 9). Most honored was Victor Babes, (five times between 1962 and 2018), author of one of the first treatises of bacteriology. Paulescu was considered to have preceded Frederick Banting (1891-1941) and John Macleod (1876-1935) in the co-discovery and use of insulin (57).

Hungarian, Portuguese and Spanish Medical Practitioners (Table 5, Figures 10 - 12)

These countries issued fewer portrait stamps despite their large populations: Hungary (n=12), Spain (n=10), Portugal, (n=9) (Table 5). None issued a portrait stamp of a female doctor. The famous Hungarian obstetrician, Ignaz Philipp Semmelweis (61), and the less well-known Portuguese neurologist, António Egas Moniz, each were commemorated with five postal issues (Figure 10). Semmelweis was one of the first doctors shown in a portrait stamp in 1932. Moniz, who developed cerebral angiography and surgical leucotomy in the 1930s, was awarded a Nobel Laureate in 1949, and recognized philatelically in 1966 (4). He was shot in 1939 by a former patient, and his legacy was later criticized by experts since, by then, leucotomies were no longer approved.

Figure 9. Romanian issues of Nicolae Kretzulescu and Carol Davila (1957), George Palade (2001), Victor Babes (2012), Ana Aslan (2023, joint issue with Armenia), Constantin Parhon (2024); brackets: issue date.

Table 5. Hungarian, Spanish and Portuguese medical practitioners commemorated by their own Postal Administrations

Hungary		Spain		Portugal	
Name	**Lifespan**	**Name**	**Lifespan**	**Name**	**Lifespan**
Jan Jesenius	1566-1621	Miguel Servet (x2)	1511-1553	Bernardino António Gomes	1768-1823
Ignaz Philipp Semmelweis (x5)	1818-1865	Federico Rubio y Gali	1827-1902	José António Serrano	1851-1904
Frigyes Korányi de Tolcsva (x2)	1828-1913	Jaime Ferran y Clua	1851-1929	Ricardo Jorge (x3)	1858-1939
Endre Hőgyes (x2)	1847-1921	Luis Simarro Lacabra	1851-1921	Maximiano de Lemos	1860-1923
Emil Moises Avigdor Grosz	1865-1941	Ramón y Cajal (x3) *	1852-1934	Luís da Câmara Pestana (x2)	1863-1899
Sándor Korányi de Tolcsva	1866-1944	Ignacio Barraquer	1884-1965	António Egas Moniz (x5) *	1874-1955
Blaskovics László	1869-1938	Gregorio Marañón y Posadillo (x2)	1887-1960	Francisco Soares Branco Gentil (x2)	1878-1964
Robert Bárány *	1876-1936	Josep Trueta i Raspall	1897-1977	Reynaldo dos Santos	1880-1970
Jenő Hamburger	1883-1936	Carlos Jiménez Díaz	1898-1967	João Alfonso Cid dos Santos	1907-1975
Joseph Imre	1884-1945	Severo Ochoa de Albornoz (x2)*	1905-1993		
János Hugo Bruno Hans Selye	1907-1982 1912-1994				
János Szentágothai					

Asterisk: Medicine and Physiology Nobel Laureate; brackets: number if more than one issue.

Figure 10. Semmelweis (Hungary, 1932) and Moniz (Portugal, 1983) portrait issues; brackets: issue date.

Figure 11. Hungarian 16th century practitioner Jan Jesenius (2016); brackets: issue date.

The earliest medical practitioners commemorated by these countries were the 16th century physicians Jan Jesenius from Hungary and Michael Servetus from Spain, and the 18th century Bernardino António Gomes from Portugal. Jesenius was recognized at the 450th anniversary of his birth (2016) with stamps jointly issued by Hungary, the Czech Republic, Poland, and Slovakia (Figure 11). A singular achievement was his challenging the prejudice that performing surgery degraded physicians (62). Servetus was an outspoken renaissance polymath, humanist, physician and cartographer, whose defiance of religious authority led to his execution as a heretic (63). He was the first scholar to have provided a written description of the pulmonary circulation.

Spanish issues celebrated two Nobel Laureates: Ramón y Cajal, the neuro-histologist whose first issue preceded his death by three years (64); and Severo Ochoa de Albornoz, whose Nobel Prize in 1959 was awarded for the discovery of RNA polymerase. Controversially, it excluded nomination for Marianne Grunberg-Manago, his female post-doctoral co-investigator who initially identified the enzyme in 1955 (51). The experimental neurologist, Luis Simarro Lacabra, who developed silver bromide techniques to stain nerve tissue, and influenced Cajal to focus on neuro-histology, is commemorated in a 2022 issue showing him as the central subject on a stamp which is incorporated within the painting by Joaquin Sorolla y Bastida (1863-1923) titled 'The Investigation' and which was painted in 1897 (65) (Figure 12).

Italian, British and Dutch Medical Practitioners (Table 6, Figures 13, 14)

A similar number of issues were released by these three countries, although for Great Britain, five of the issues showed the doctor's name as text but without a portrait. This was unusual, especially as Alexander Fleming, who discovered the inhibiting effects on bacteria of penicillin fungus (66), was portrayed in the European stamps of Hungary and Romania, as well as of many other non-European countries, yet not in the three separate British issues commemorating

Figure 12. Luis Simarro Lacabra preparing material for microscopy in a 2022 Spanish issue released as a miniature sheet. His pupils in the picture include Eusebio Gayarre, Pio del Rio Hortega (1882±1945) and Nicolas Achu Âcarro Lund (1880±1918).

his achievement. In contrast, Joseph Lister, who introduced aseptic surgery (67), was portrayed on two British issues, although in one his image was much smaller than the accompanying Queen's portrait. Other issues from Britain featured a famous missionary David Livingstone (68), an eminent poet, John Keats (69), and a war hero, Noel Chevasse (70), who won two Victoria Crosses for bravery in the First World War. Three British Nobel Laureates in Medicine were honored: Fleming; Ross, who discovered mosquito transmission of malaria (71); Black, who developed cardiac beta-blocking drugs (72).

Italy celebrated two Nobel Laureates: Rita Levi-Montalcini, who discovered nerve growth factor (73), and Camillo Golgi, for work on the structure of the nervous system (74). Sylvano Arieti was commemorated in 2014 as an illustrious scholar of schizophrenia (75), and in 2012 Luigi Carlo Farini, the physician, statesman and historian (76) (Figure 13). In the Netherlands its two Nobel recipients were celebrated: Einthoven, who developed electrocardiography (77), and Eijkmen, who discovered thiamine (78). Defenders of the theory of blood circulation are represented: Franciscus Sylvius, the Dutch anatomist and early supporter of the theory, and William Harvey, its British discoverer (Figure 14) (79). Herman Boerhaave, the reputed 18th century botanist, chemist and Christian humanist is the only Dutch doctor with two portrait issues, both released before 1939 (80).

There are two female doctors portrayed in Italian issues, Maria Montessori, the child educationalist (81), and Rita Levi-Montalcini (82), and one in British issues, Elizabeth Garrett Anderson, the first women in Britain appointed to a medical post (83). No female doctors were commemorated by the Netherlands.

Swedish, Czech and Greek Medical Practitioners (Table 7, Figures 15, 16)

Five of the eight portrait stamps of doctors from Sweden recognized their Nobel laureates in Medicine, two of which were issued in 1996 during the Laureates' lifetimes (Figure 15). Four related to biochemical research (4, 51, 84). One, Alvar Gullstrand, later blocked Albert Einstein's (1879-1955) Nobel nomination, which was retroactively awarded in 1921 after Gullstrand was replaced on the Nobel Committee (85). Of the earlier Swedish practitioners Du Rietz was the personal doctor to the Swedish royal family, and Linnaeus, after studying medicine in the Netherlands, restricted his work to botany (86).

Table 6. Italian, British and Dutch medical practitioners commemorated by their own Postal Administrations

Italy		Great Britain		Netherlands	
Name	**Lifespan**	**Name**	**Lifespan**	**Name**	**Lifespan**
Girolamo Fracastoro	1478-1553	William Harvey	1578-1657	Johannes Wier	1515-1588
Marcello Malpighi	1628-1694	Edward Jenner	1749-1823	Franciscus Sylvius	1614-1672
Bernardino Ramazzini	1633-1714	John Keats	1795-1821	Hendrik van Deventer	1651-1724
Luigi Carlo Farini	1812-1866	David Livingstone	1813-1873	Herman Boerhaave (x2)	1668-1738
Camillo Golgi (x2) *	1843-1926	Joseph Lister (x2)	1827-1912	Gerard van Swieten	1700-1772
Edoardo Bassini	1844-1924	Elizabeth Garrett Anderson	1836-1917	Petrus Camper	1722-1789
Giovanni Battista Grassi	1854-1925	*Ronald Ross* *	1857-1932	Jan Ingenhousz	1730-1799
Maria Montessori (x2)	1870-1952	*Alexander Fleming* (x3) *	1881-1955	Jacobus van der Kolk	1797-1862
Carlo Besta	1876-1940	Noel Chevasse	1884-1917	Philipp Franz von Siebold	1796-1866
Gaetano Perusini	1879-1915	*Harold Ridley*	1906-2001	Antonius Mathijsen	1805-1878
Rita Levi-Montalcini *	1909-2012	*John Charnley*	1911-1982	Franciscus Donders	1818-1889
Silvano Arieti	1914-1981	*James Black* *	1924-2010	Christiaan Eijkman *	1858-1930
				Willem Einthoven *	1860-1927

Asterisk: Medicine and Physiology Nobel Laureate; brackets: number if more than one issue; italics: doctors named without a portrait.

Figure 13. Italian doctors Maria Montessori (1970), Camillo Golgi (1994), Luigi Farini (2012), Silvano Arieti (2014); Rita Levi-Montalcini (2013), brackets: issue date.

Figure 14. The British discoverer and Dutch defender of the theory of the blood circulation: William Harvey (2010) and Franciscus Sylvius (1937); brackets: issue date.

Table 7. Swedish, Czech and Greek medical practitioners commemorated by their own Postal Administrations

Sweden		Czech Republic		Greece	
Name	**Lifespan**	**Name**	**Lifespan**	**Name**	**Lifespan**
Grégoire Francois Du Rietz	1607-1682	Jan Jesenius	1566-1621	Hippocrates (x2)	C c460BC-c370BC
Carl Linnaeus	1707-1778	Jan Marek Marci	1595-1667	Galen	129AD -c216AD
Anders Sparrman	1748-1820	Jan Evangelista Purkyně (x2)	1787-1869	Apostolos Arsakis	1792-1874
Allvar Gullstrand *	1862-1930	Karel Slavoj Amerling	1807-1884	George Papanicolaou (x2)	1883-1962
Ragnar Granit *	1900-1991	Emil Holub	1847-1902	Georgios Kotzias	1918-1977
Hugo Theorell *	1903-1982	Josef Thomayer	1853-1927		
Sune K. Bergström *	1916-2004	František Hamza	1868-1930		
Bengt I. Samuelsson *	1934-2024	Rudolf Tomáš Jedlička	1869-1926		
		Jan Janský	1873-1921		
		Jan Opletal (medical student) (x2)	1914-1939		
		Karel Styblo	1921-1998		

Asterisk: Medicine and Physiology Nobel Laureate; brackets: number if more than one issue.

The Czech Republic, previously part of Czechoslovakia, came into being in 1993. Jan Opletal from Czechoslovakia was a third-year medical student when shot during an anti-Nazi Independence Day rally in 1939 (87). Jan Janský, a neuropsychiatrist, was seminal in defining blood groups while seeking an association between mental illness and haematology (88) (Figure 16). Karel Styblo showed that tuberculosis could be controlled (89), and Emil Holub was a 19th century scientific explorer inspired to visit Africa by David Livingstone's diaries (90).

Figure 15. Swedish doctors and Nobel Laureates in Medicine and Physiology: Granit, Theorell, Bergstrom, Samuelsson (all 1996).

The Greek portrait stamps span the centuries from c460BC to 1977 and include the two great founders of medical principles – Hippocrates and Galen (Figure 16) (91). More recently, George Papanicolaou's cytological work enabled the use of cervical smears for detection of cervical cancer (92).

Ukrainian, Belarus and Turkish Medical Practitioners (Table 8, Figure 17)

These countries had the fewest issues, as before 1991 both Belarus and Ukraine used stamps of the Soviet Union. Ukraine had a low number (n=4). The Ukrainian Selman Waksman, working in the United States, received a Nobel Laureate in 1952 for the discovery of the antibiotic streptomycin (51). This became controversial as it was contested by Albert Schatz (1920-2005) and went to litigation in 1950. The Lancet claimed the Nobel committee had failed to recognize Schatz's contribution (93). Turkish stamps honored: Hulusi Behçet, the dermatologist and international expert on syphilis (94); Marko Pasha, the founder of the Red Crescent; İbrahim Refik Saydam, a Prime Minister of Turkey, who developed a cure for typhus (95); Gazi Yasargil, a neurosurgeon; and Aziz Sancar, Nobel Laureate (Chemistry) and molecular biologist (Figure 17).

Summary of portrait stamp production by country

Table 9 estimates issue rates, by country, of doctors' portrait stamps in descending order of magnitude between 1927 and 2024. Austria has half the number of issues to France, but its issue rate per 10^6 population (2.52) is four times higher than France (0.65). Russia, with the largest population has one of the lowest rates (0.14), and Great Britain, the country which first introduced the postage stamp in 1840, and a large population, records a rate of 0.10, with only seven doctors' portrait stamps. Overall, production rates are higher for countries with smaller populations. The ten portrait stamps of women doctors were issued by five countries: Germany (4), France (2), Italy (2), Romania (1), Great Britain (1). The total number of European portrait issues from 1965 onwards were between 30-40 per decade (Figure 1), despite total issues by all countries for all themes increasing almost tenfold during this time.

Figure 16. Czech and Greek issues: Jan Janský (2023) and Hippocrates and Galen (1996).

Table 8. Belarusian, Ukrainian and Turkish medical practitioners commemorated by their own Postal Administrations

Belarus		Ukraine		Turkey	
Name	**Lifespan**	**Name**	**Lifespan**	**Name**	**Lifespan**
Evgeny V. Klumov	1876-1944	St Agapit of Pechersk	? -1095	Marko Pasha	1824-1888
		Selman Abraham Waksman*	1888-1973	Besim Ömer Akalın	1862-1940
		Nikolai Mikhailovich Amosov	1913-2002	İbrahim Refik Saydam (x2)	1881-1942
		Alexander Alekseyevich Shalimov	1918-2006	Ali Tevfik Salim Sağlam	1882-1963
				Hulusi Behçet	1889-1948
				Gazi Yasargil	1925-2025
				Aziz Sancar *	1946-present

Asterisk: Medicine and Physiology Nobel Laureate, Sancar award in Chemistry; brackets: number if more than one issue.

Discussion

This collation describes for the first time the number of European doctors' portrait stamps issued from 1927 until 2024. Significant aspects that emerge from this research include the differential emphasis given to clinical, rather than non-clinical specialists, the sparsity of portrayals of public health physicians, pathologists, and female doctors, and the omission of some universally recognized European doctors.

There is a lack of clarity on procedures followed by Postal Administrations on selection criteria, and almost an embargo on portrayal of living doctors, except for a few Nobel Laureates. Few portrait issues were released which illustrated how doctors within a country furthered a field of medical science collectively. Most were single issues, and Nobel Laureates in Physiology and Medicine featured for most countries. Many were produced as popular reminders of historically significant individuals. Some of these doctors remain national heroes, as reflected in the number with recurrent issues. For others, the tables provide a comprehensive list of doctors, some of whose achievements may be overlooked. Few doctors were publicized beyond their own borders – except when they settled in another country. Robert Koch is exceptional, with ten European countries issuing commemorative portrait stamps, in addition to the seven from his home

Figure 17. Turkey's portraits of Marko Pasha (1968), Hulusi Behçet (1980) and Gazi Yasargil (2022).

country. This was undoubtedly a mark of great esteem, both nationally and internationally.

Compilation of these images provides a historically significant reminder of the challenges that dominated medical practice over more than 300 years (96). History is defined by a series of biographies, as stated by Dries (9). The philatelic portraits represent this as stages in a social process and are not simply static objects or frozen moments, because they communicate the past to the public through an unfolding of individual achievements. Collectively the nexus of portraits covers many medical occupations that were shaped from their earliest beginnings to the present day. The Tables trace a period of profound medical change - particularly during the 19th century. The pictorial profile of French stamps provides an account of a medical system which characterized the French medical world intellectually and culturally. It did not mirror the wider European model as French physicians, surgeons and apothecaries achieved a good deal of State independence from as early as the 17th century. They later outranked others because of their superior understanding of the canonical medical texts on which their authority rested (27). Medical progress was a touchstone of the French enlightenment with physicians becoming physician scientists. These doctors were driving science, more than science was driving medicine. The establishment of the 'Paris School' in the 1790s is widely accredited as the birth of modern medicine with its orientation around the hospital as a training ground for new physicians and not just a site for creation of knowledge (97).

After 1850 the main site of medical science moved from France to Germany. There are, nonetheless, notable doctors - well recognized throughout Europe - who were not so acclaimed. The small number of British portrait stamps (n=7, Table 6) is remarkable. Great Britain has 33 Nobel Laureates in Physiology and Medicine, but only three of these featured, by name alone, on a British stamp, in contrast to other European countries (Table 7). Yet historically Great Britain was progressive in its medical progress, due

Table 9. Medical portrait stamp issue rates per million population across nineteen European countries

Country	Population size[1]	Stamp issues		Rate per 10^6
		Portrait	Name[2]	
Austria	9120813	23	0	2.52
Belgium	11738763	15	0	1.28
Hungary	9676135	12	0	1.24
Czech Republic	10735859	11	0	1.02
Romania	19015088	19	0	1.00
Portugal	10425292	9	0	0.86
Sweden	10606999	8	0	0.75
Netherlands	18228742	13	0	0.71
France	66548530	42	0	0.63
Poland	38539201	23	0	0.60
Greece	10047817	5	0	0.50
Germany	84552242	21	3	0.25 (0.28)
Spain	47910526	10	0	0.21
Italy	59342867	12	0	0.20
Russia	144820423	20	0	0.14
Ukraine	37860221	4	0	0.11
Belarus	9056696	1	0	0.11
Great Britain	69138192	7	5	0.10 (0.17)
Turkey	87473805	7	0	0.08

[1]Based on 2024 United Nations official statistics.
[2]Doctor's name alone without portrait; brackets: rate including stamps with name alone.

to early physicians such as Thomas Sydenham (1624-1689) (98), Sir Thomas Browne (1605-1682) (99) and Sir Theodore De Mayerne (1573-1635) (100). In the 19th century obstetric anesthesia was introduced by Sir James Simpson (1811-1870) (101), and basic epidemiology established by John Snow (1813-1858) (102). An issue rate 25 times lower than Germany (Table 9), is not easy to explain. British Royal Mail Policy only allowed the Royal Family to be portrayed on stamps as living persons before 2005. Since then, most British issues illustrated neither deceased nor living medical innovators, with design emphasis on science or medical teams. It remains unclear how priorities and choices are determined when it comes to selection of worthy individuals. It may simply be due to the bias, or ignorance of postal committees in some countries, or the view that there are more contemporary and exciting non-medical individuals to captivate the public's interest.

Female doctors were poorly represented with only ten featured across 18 European countries - clear evidence of the reluctance to accept women into the profession on equal terms with men. In part, this reflects a low number of female medical graduates during the late 19th and 20th centuries. In Czarist Russia women physicians were more accepted and their service honored during the Russo-Turkish War of 1877, but this did little to sway male opposition in Germany (103). Female doctors during the 19th century remained obscure and of those who first qualified in medicine, most remained unrecognized by philatelic portraits during the 20th and 21st centuries [see Footnote]. Exceptions are Maria Montessori from Italy, Elizabeth Garrett Anderson from Great Britain (Table 6), and four from

Germany including Dorothea Erxleben, the first European woman to be granted a decree to practice as a physician in 1754 (Table 2) (104).

Medical philately in most countries today is concerned with health information or newsworthy breakthroughs. The appeal of the individuals illustrated in the figures in this paper relies to a considerable extent on historical knowledge, i.e. knowing why a particular individual was famous (105). They are images of national icons, no better illustrated than in the large number of French stamps (106). In this sense they excite interest, rather than providing some form of health message. As such, fewer portrait stamps are now produced by most countries, and perhaps there is less competition in national prestige between countries in promoting individuals. The modern collective notion of teams in scientific discovery discourages portrayal of individual doctors, who probably will not be celebrated in quite the same way as the doctors featured in this analysis. Arguably medicine, science and society still need portrayals of their celebrities and heroes. The importance of this research highlights the contributions of European doctors to progress in medicine and science over the last 100 years. The stamps provide a permanent record that extends beyond national borders, also bringing attention to figures who were not Nobel Laureates.

Footnote: For example, first graduating European female doctors: France 1875, Madeleine Brès (1842-1921); Spain in 1882, Dolors Aleu I Riera (1857–1913); Poland in 1877, Anna Tomaszewicz (1854-1918); Russia in 1868, Varvara Kashevarova-Rudneva (c.1841 – 1899); Belgium in 1879, Isla van Diest (1842-1916); Romania in 1907, Maria Cuțarida-Crătunescu (1857-1919); Hungary in 1879, Vilma Hugonnai de Szentgyörgy (1847-1922); the Netherlands in 1879, Aletta Henriette Jacobs (1854-1929); Sweden in 1888, Karolina Widerström (1856 - 1949).

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