A Note from History:
Persecution of Noted Physicians and Medical Scientists

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Most high school graduates are familiar with the trial and conviction of the Italian astronomer and physicist, Galileo (1564-1642), in 1633 for publishing a treatise on his observation that the earth revolves around the sun. The Inquisition banned his writings and Galileo spent the remainder of his life under house arrest.

Similarly, many mathematicians know that the Greek mathematician and philosopher, Pythagoras (582-500 BC), was kidnapped from Egypt by the invading Persians and imprisoned in Persia (present day Iran). But few physicians are aware that some of the most illustrious medical scientists and physicians have been persecuted and even executed or murdered for their professional, religious, or political beliefs. In this review, 12 appalling stories are recounted.

Rhazes (860-932 AD) devoted most of his efforts as a physician to the practice of surgery and to teaching at the medical school in Baghdad. He introduced the works of Hippocrates and Galen to the Arabic world. His “western” teachings, rational thinking, and fame as a medical writer and practicing physician brought Rhazes into conflict with the local hierarchy. He lost his teaching position, he was arrested, and his books were outlawed. His torturers hit his head with his books until he was blind. He died in extreme poverty [1].

Abumeron Avenzoar (1093-1162) of Cordova was the greatest Spanish Moslem physician and thinker. Because he and his pupils dared to express opinions contrary to Galen, a favorite of every organized religion, and because they promulgated doctrines of a self-renewing world (emergent evolution and virtual denial of creation), Avenzoar was persecuted and forbidden to write or teach. In his later years he earned his living by manual labor [2].

Guido Lanfranchi (1252-1315), also known as Lanfranc, was an Italian physician and surgeon who initially practiced in Milan. He was persecuted for political reasons and ultimately was driven out of Italy. He sought asylum in France and settled in Paris in 1295. He rapidly became known as the best surgeon in France. His published texts and high position in surgical circles earned him his reputation as the founder of French surgery [3].

Andreas Vesalius (1514-1564) is remembered as a great anatomist and as a founder of modern medical science that is based on facts rather than traditions. He had a turbulent life. As a student he was expelled from the University of Louvain, Belgium. He sought temporary refuge in Paris and at last found his place in Padua, Italy. After his epoch-making work, the Fabrica, was published, his fame as an anatomist became greater with every passing year. After his name became known around the world he was appointed as a court physician in Spain. By dissecting the body of a Spanish nobleman who had died in his care, Vesalius found, when he

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opened the man’s chest, that the heart was still beating. He was accused of murder and was brought before the Inquisition. The King commuted Vesalius’s death sentence to a pilgrimage of penitence to the Holy Land. While on the passage back to Spain after his pilgrimage, he died in a shipwreck [4].

**Michael Servetus** (1511-1553), a Spanish physician, discovered in 1545 the lesser circulation (the pulmonary circulation). Because he wrote a book in which he included certain remarks on the reform of Christianity, the book was regarded as heretical. He escaped from Spain and the Catholic Inquisition, but in Switzerland the Protestant Inquisition caught up with him. By order of John Calvin, Servetus was arrested, tortured, and burned at the stake on the shores of Lake Geneva together with copies of his book [5].

**Johann G. Wirsung** (1600-1643), a Bavarian monk and physician, discovered the excretory duct of the pancreas in 1642. Wirsung was envied by University professors and was subjected to incessant verbal insults. Jealousy led to a quarrel at the conclusion of a meeting, and he was shot to death by an assistant physician [6].

**Marcello Malpighi** of Bologna (1628-1694) is remembered as a founding father of anatomic pathology because of his pioneering studies on the liver, kidney, and spleen. His investigations received favorable comments outside the borders of Italy but on his home turf Malpighi was subjected to vitriolic attacks by his fellow professors. On more than one occasion, Malpighi was threatened and physically assaulted by his enemies. Ultimately, his attackers burned down his house and destroyed his library [7].

**Henry Oldenburg** (1615-1677) was a founder and the first secretary of the Royal Society, which was chartered in London in 1662. He vigorously solicited first-rate scientific papers for publication in the Society’s journal. He was instrumental in publishing many writings by the Dutch scientists, Leeuwenhoek and Swammerdan, as well as by the Italian, Malpighi. Oldenburg’s frequent and voluminous correspondence with foreigners attracted the attention of the authorities and he was arrested as a spy. He was jailed in the Tower of London for several months. Ultimately, he was released after Royal intercession [8].

**Antoine-Laurent Lavoisier** (1743-1794), a pioneer French respiratory physiologist, became a leading member in the pre-revolutionary French Academy of Science after his discovery that oxygen in inspired air is converted to carbon dioxide. Lavoisier opposed the election of Jean-Paul Marat to membership in the Academy. Years later, when Marat was a prominent leader of the French Revolution, he remembered Lavoisier. Lavoisier was arrested on trumped-up charges of financial irregularities and was tried by a revolutionary tribunal chaired by Marat. Lavoisier was guillotined on the day his trial ended and his body was buried in an unmarked grave [9].

**James Wardrop** (1782-1869), a prominent Edinburgh surgeon, is renowned for his aggressive operative procedures and for his introduction of the term “soft cancer” (soft tissue sarcoma). He learned about soft cancers in Vienna, Austria, having fled from France in 1803, when Napoleon ordered that English residents in France be arrested and imprisoned [10].

**Rudolph Virchow** (1821-1902), the most celebrated German pathologist, was throughout his life an outspoken champion of social and democratic reforms. In 1848, when he was an assistant pathologist, Virchow was a leader of an armed revolution in Berlin, demanding constitutional government, freedom of the press, and universal healthcare. The short-lived revolution failed. Virchow lost his job, was investigated by the police, and was banished from Berlin. To avoid formal prosecution and imprisonment, Virchow went to Würzburg in Bavaria, where he found an academic position, but had to promise that he would stay out of politics. He kept his pledge, but upon his return to Berlin in 1858, Virchow resumed his political activities and was elected a member of the German Reichstag [11].
Gerhard Domagk (1895-1964) was awarded the Nobel Prize in Medicine in 1939 for his 1935 discovery of the antibacterial effect of sulphonamide. Domagk was officially notified by the Nobel Committee in November 1939 (two months after the Second World War began) that he would receive the Prize. He instantly wrote a letter to the chairman of the Nobel Committee and expressed his thanks for the honor. Two weeks after he mailed the letter to Stockholm, he was arrested by the German secret police and taken to Gestapo headquarters. During his interrogation and incarceration he refused to eat. After his release, a week later, he was forced to sign a prepared letter that, because he was a loyal German citizen, he was not accepting the Nobel Prize, since by law Germans could not accept such awards or recognition from foreign nations.

During the Second World War, Domagk and his family were constantly watched by the police and occasionally he was brought to the police headquarters for questioning. Despite the fact that he was not permitted any contact with foreigners, sulphonamide was introduced in the late 1930s in many countries as an antibacterial drug. In Germany, however, Domagk and sulphonamide remained black-listed until the end of the war in 1945. The epilogue to Domagk’s story is that in 1947 he was invited to attend the Nobel celebration in Stockholm. He received the tokens of his 1939 prize, the diploma and the gold medal, but no Prize money. This was because in his will Alfred Nobel prohibited distribution of money if the Prize remained unclaimed beyond 10 months [12].

The preceding tally of individual tragedies of noted physicians and medical scientists is far from complete. As time and space permit, additional narratives will be presented.

References