

a history of medicine in pictures

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Paracelsus—Stormy Petrel of Medicine

NO FIGURE in the long history of medicine bequeathed it a greater heritage of controversy than Paracelsus. To this day, more than 400 years after his death, he is praised, and condemned; revered, and vilified; raised to the pedestal of sainthood, and damned as quack of quacks. By some persons, his mystical writings are regarded as evidence of an advanced mind, far ahead of its time, capable of thoughts and of insights lofty beyond interpretation by minds of ordinary contemporaries; according to others, his crabbed phrases, written as with a pen dipped in vitriol, are but a fabric of crudity and of vanity cloaking ignorance and superstition. In fact, our very word, bombast, is said to stem from Paracelsus' name, Phillipus Aureolus Theophrastus Bombastus von Hohenheim. His pen name, Paracelsus, defiantly flung in the faces of the academicians—meaning “better than Celsus”—is typical of his boastful attitude. Pachter wrote that he was either king or beggar, never a gentleman.

Paracelsus without doubt reflected the violent and confused aspirations of the common man of the early sixteenth century. Ackerknecht says of him: “He was more modern than most of his contemporaries in his relentless and uncompromising drive for the new and in his opposition to blind obedience to authoritarianism and books. On the other hand, he was more medieval



than most of his contemporaries in his all-pervading mystic religiosity." He is remembered, not so much for his achievements, but for his fight against orthodoxy.

Paracelsus was born in Einsiedeln, Switzerland, in 1493, the son of an illegitimate offspring of the noble German Hohenheim family. His father, Wilhelm, practiced medicine. His mother was a local serf who apparently was inclined toward mental depression and committed suicide when the boy was but nine years old. The father then moved with his rachitic child to Villach in Carinthia, where the elder von Hohenheim cared for the personnel at mines owned by the famous banking family of Fugger. A great deal of alchemical work was being done at the mines (alchemy was the chemistry of the time). Impressions gained there by youthful Paracelsus were to dominate his entire life.

His interest shaped by his father's instruction, Paracelsus in 1507 became a traveling scholar. Along with his taste for medicine he seems also to have acquired an appetite for alcoholic beverages—an appetite often to bring him reproach in later life. Paracelsus' studies took him to the universities of Heidelberg, Freiburg, Cologne, Tuebingen, Vienna, Erfurt, and across the Alps in 1513, to Ferrara, Italy.

Greatly disappointed with the Galenical, old-bookish knowledge then offered by the universities he attended, Paracelsus soon scorned venerated volumes and proceeded to invent his own particular brand of medical practice.

From this point on, Paracelsus became a traveling doctor, going from town to town, sometimes in dirty rags, and at other times in flamboyant finery. Constant companion was his large sword, in the handle of which he hid his most precious medicines. Up and down southern Europe he went, applying his new science. Despite his unorthodoxy, his results appear to have been excellent. In wayside hostels and in palaces his art won fame and acclaim. He was asked to see patients whom other doctors had given up. His cures were called miraculous. His successes made him suspect of black magic—a reputation that was to cling to his name for centuries.

Yet through it all, despite his successes, Paracelsus managed to antagonize persons of authority, in medicine, in education, and in politics. Community after community found his presence intolerable. He was forced to move on, again and again. Though sometimes the guest of kings, he kept faith with the commoners and serfs. Though a religious man, he was more at home in the local taproom than in cloistered halls. Not infrequently, his unkempt dress more closely resembled that of a teamster than of a renowned physician.

Numerous wars of the early 1500's provided Paracelsus with opportunities to practice surgery. Though modern readers find his works a collection of superstitious and repellent folk remedies, nevertheless out of his surgical experience came certain principles (strongly opposed by his contemporaries) far in advance of his time. Among these were insistence that wounds be kept clean. "If you prevent infection, Nature will heal the wound by herself," he wrote. Paracelsus also was among the first to have tried to determine dosage scientifically.

the picture Paracelsus, most controversial figure in medical history, is shown in one of his many "chemical kitchens," about to embark upon one of his mystical and frequently vitriolically abusive writings. His laboratory, desk, and manuscript piles reflect his habitual disorderliness. Alchemical experimentation, mystical speculation, prolific writing, and empirical practice of medicine were equally confused facets of his life. Though a restless soul who stayed only briefly in any one place, he advanced the use of chemicals in medical practice and helped turn Renaissance medicine away from Galen.

Following active service in Italian wars, Paracelsus visited Spain, Paris, and England, only to return to wars in Holland and in Sweden. After their conclusion, he traveled through Russia to Constantinople, to Egypt, and back through the Greek islands and the Balkans, visiting mines and alchemists associated with them. To alchemists, whom he considered to be kindred souls, he often urged: "Stop looking for gold; instead, find medicines."

In 1524, Paracelsus, rich in experience but poor in cash, returned for a time to his father's house and to the valley of mines, again to work in mines and in smelters. Lung affections common there gave Paracelsus abundant opportunities to help patients and to study disease. The fruit of these experiences was the first book ever written on an occupational disease: *On Miners' Consumption*.

Paracelsus tried to settle in nearby Salzburg. Unfortunately, he became involved on the side of the peasants in a local uprising, and had to leave town abruptly. In 1526, he traveled in Bavaria, in Württemberg, in Badenia, and tried to settle in Strassburg. Then his hour of triumph seemed to have come.

The famed Renaissance publisher, Froben, was ill with a persistent infection of his leg. Local doctors had proposed amputation—at that time a dangerous, likely fatal, procedure. Mutual friends suggested that the famous doctor see the famous patient. Froben sent for Paracelsus and gave him living quarters in his house in Basel, Switzerland (now preserved as a museum of pharmaceutical history). With his lucky star shining its brightest, Paracelsus

rapidly succeeded in curing his patient's infection. The doctor's success, it seemed, was at last established. The publisher influenced Basel's city council to offer Paracelsus the office of municipal doctor and professor at the University. He promptly accepted.

The faculty of the University, however, was in no mood to accept this rebel who failed to produce evidence of an earned medical degree and who lectured in Swiss vernacular rather than in learned Latin. His lectures were well attended, but the faculty was outraged. Paracelsus immediately set about adding fuel to the flame of his own destruction: he upset local physicians, pharmacists, and civic leaders with his rough, dictatorial authority; and he promptly and publicly insulted fellow professors. He caused Avicenna's *Canon* to be thrown into a students' holiday bonfire.

Though loved by those whom he had healed, by act after act and with pamphlet after pamphlet Paracelsus tore from himself the shreds of respectability. The city council's patience was exhausted. Police were sent to fetch the culprit. Alerted by a friendly warning, Paracelsus fled Basel in the night. No authority—professional, ecclesiastical, or civil—was too powerful to be immune to attack from Paracelsus' tongue or pen; however, his prestige never had a chance to rise to a level that would protect him from retaliation. His only alternative was to move on, time after time.

At last, in 1540, the Prince Bishop of Salzburg offered asylum to Paracelsus, and, exhausted, he spent his remaining days in relative quiet in the town that had once expelled

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him. His years, though not great in number, had not treated him well physically. He wrote his will, probably on his forty-eighth birthday; and three days later, on September 24, 1541, he died, likely victim of fatigues and stresses of his restless and wretched life.

It is difficult to arrive at fair judgment of a personality so contradictory. Paracelsus undoubtedly was one of the most arrogant and irregular individuals in medical history. Though often called a quack, he does not fit that category. Paracelsus in many ways was far ahead of the medical men of his day. Had he been willing to conform, he might have been wealthy. His extraordinary success as a physician cannot be attributed to his personality, but must have been due to real ability as a healer.

Wherever he went, Paracelsus left a trail of "chemical kitchens." When his patrons were generous, he built them to suit his alchemical taste; when in poor circumstances, he brewed his drugs on the charcoal beside his hostess' soup. In his experiments and in their medical applications, Paracelsus inaugurated an era of iatrochemistry—forerunner of twentieth-century chemotherapy.

It was Paracelsus who introduced powdered tin as an anthelmintic; brought antimony into vogue; introduced zinc and zinc salts to medicine; used mercury compounds instead of metallic mercury for syphilis, and sought to establish definite dosages therefor. He employed lead, arsenic, copper, and iron compounds; he was familiar with sulfuric acid. His advocacy of the use of pure chemicals for specific diseases was perhaps one of his greater contributions to medicine. Characteristically, his contemporaries bitterly fought these revolutionary suggestions; but succeeding generations of medical men profited by them and carried forward experiments with chemicals in medicine.

Paracelsus' theory that diseases sprang from seeds was an early version of the germ theory; and his "tartaric" diseases the first inkling of metabolic disorders. His sympathetic attitude

toward patients with mental disease reveals an insight into psychiatry and psychosomatics.

Another difficulty in evaluating Paracelsus' contributions is the distortion to which they have been subjected both by detractors and by disciples. As medical men, his disciples contributed little credit to Paracelsus. Their surgery was crude. Their use of strong chemicals was not tempered by dosage precautions, an essential of Paracelsus' methods. To his name, however, went the blame for their errors.

To bring Paracelsus into proper perspective, it must be kept in mind that a personality as strange as his was by no means unique in the early Renaissance period. There were many irregulars, all exponents of profound revolutionary ideas, in religion, in economics, in politics, in science, and in medicine. But revolutions do not tend to proceed in orderly or reasonable ways. Foundations for the future, which such revolutions often create, frequently are obscured by rubbish and ruins of older structures destroyed in the process.

Paracelsus himself perhaps put his finger on the key to the success he enjoyed, despite his handicaps, when he wrote: "They drove me out of Lithuania, and Prussia, and Poland... The Dutch did not like me either, nor the schools... but thank God, the patients liked me!"

REFERENCES

- Ackerknecht, E. H., unpublished monograph.
Ackerknecht, E. H., *A Short History of Medicine*. New York, Ronald Press Company, 1955.
Major, Ralph H., *A History of Medicine*. Springfield, Illinois, Charles C Thomas, 1954.
Multhauf, Robert, *Medical Chemistry and "The Paracelsians."* Bulletin of the History of Medicine, Vol. 28, No. 2, 1954.
Multhauf, Robert, *The Significance of Distillation in Renaissance Medical Chemistry*. Bulletin of the History of Medicine, Vol. 30, No. 4, 1956.
Pachter, Henry M., *Paracelsus, Magic into Science*. New York, Henry Schuman, 1951.
Riesman, David, *The Story of Medicine in the Middle Ages*. New York, Paul B. Hoeber, 1936.
Robinson, V., *Pathfinders in Medicine*. New York, Medical Life Press, 1929.

