

# Report on the Typhus Epidemic in Upper Silesia

Excerpted from Virchow RC. *Archiv für pathologische Anatomie und Physiologie und für klinische Medicin*. Vol 2. Berlin, Germany: George Reimer; 1848;143–332. For an English translation, see Virchow RC. *Collected Essays on Public Health and Epidemiology*. Vol 1. Rather LJ, ed. Boston, Mass: Science History Publications; 1985:204–319.



**Rudolf Carl Virchow, MD, as a young man.**  
**Source.** Prints and Photographs Collection, History of Medicine Division, National Library of Medicine, Bethesda, Md.

**AT THE BEGINNING OF THIS** year reports on the outbreak of a disastrous disease in Upper Silesia . . . increased in frequency and urgency. . . . [W]hen the press published increasingly horrible details on this so-called hunger-typhus . . . and when finally even the Ministry of the Interior was forced to emerge from the apathy with which it had so far met the demands of the civil authorities, the Minister of Education finally ordered . . . Dr. Barez “to travel to Upper Silesia

so as to obtain detailed information regarding the outbreak of the typhus epidemic, and the measures taken against it, and to assist the authorities concerned in word and deed whenever necessary.” On the 18th of February the writer of this report was also commissioned by the Minister of Education to visit the area ravaged by typhus.

The present report will have provided the reader with a fairly comprehensive though not altogether complete picture of conditions in Upper Silesia. A devastating epidemic and a terrible famine simultaneously ravaged a poor, ignorant and apathetic population. In a single year 10% of the population died in the Pless district, 6.48% of starvation combined with the epidemic, and, according to official figures, 1.3% solely of starvation. In 8 months, in the district of Rybnik, 14.3% of the population were affected by typhus, of whom 20.46% died. . . . At the beginning of the year, 3% of the population of both districts were orphans. . . .

Never during the 33 years of peace in Germany had even remotely similar conditions been seen. No one would have thought such a state of affairs possible in a state such as Prussia, which took so much pride in the excellence of its institutions . . . these enormous compilations of misery cannot be disavowed and we must not hesitate to draw all those conclusions that

can be drawn. . . . I myself had drawn the consequences when I returned from Upper Silesia, and was determined, in view of the new French Republic, to help in the demolition of the old edifice of our state. I later had no qualms in making known these conclusions. . . . They can be summarized briefly in three words: *Full and unlimited democracy*.

Prussia was proud of its laws and its civil servants. . . . According to law the proletarian was entitled to demand every means that would preserve him from death by starvation; the law guaranteed work, so that he should earn the wherewithal; the schools, those so much glorified Prussian schools, had been created in order to secure for him the education necessary to his standing; the sanitary police, finally, had the worthy task of watching over his housing and his way of life. And what an army of well-trained civil servants was ready to enforce these regulations! . . . The law existed, the civil servants were there—and the people died in their thousands from starvation and disease. The law did not help, as it was only paper with writing; the civil servants did no good, for the result of their activity again was only writing on paper. The whole country had gradually become a structure of paper, a huge house of cards, to be toppled in a confused heap when the people touched it. . . .

The bureaucracy would not, or could not, help the people. The feudal aristocracy used its money to indulge in the luxury and the follies of the court, the army and the cities. The plutocracy, which draw very large amounts from the Upper Silesian mines, did not recognize the Upper Silesians as human beings, but only as tools or, as the expression has it, "hands." The clerical hierarchy endorsed the wretched neediness of the people as a ticket to heaven.

Any nation that still possessed inner strength and an urge to liberty would have risen up and thrown from its temples all the rubbish of hierarchy, bureaucracy and aristocracy, so that only the sacred will of the people should reign there. In Upper Silesia it was not so. Accustomed for centuries to extreme mental and corporal deprivation, poor and ignorant to a degree rarely found in any other nation of the world . . . the Upper Silesian had lost all energy and all self-determination and exchanged for them indolence, even indifference to the point of death. In Ireland the people rose in arms, and even with the unarmed hand, once its misery had exceeded the limits of tolerance, the proletariat appeared on the battlefield, rebellious against law and property, threatening, in great masses. In Upper Silesia the people silently died of starvation. . . .

Just as the English worker, in the depths to which he had sunk,

in the extreme deprivation of the spirit, ultimately knew only two sources of enjoyment, drunkenness and cohabitation, the Upper Silesian population likewise, until a few years ago, had concentrated all its desires and all its striving on these same two things. The consumption of hard liquor and the satisfaction of the sexual impulse reigned supreme, and this explains why the population increased in numbers as rapidly as it lost its physical power and moral content. . . . But now there occurred the unheard of phenomenon that one of these two sources of pleasure yet remaining open to them was blocked by the church when it forbade the consumption of spirits. The people suffered it and accepted this blow in silence also. Its consequence was as strange as it was psychologically important. While one might have thought that now the last source of material enjoyment, i.e., sexual gratification would be more artfully exploited, the opposite occurred; the number of births steadily decreased. In their own way the people had become transcendental, like the Christian ascetics of the first centuries; but they did not neglect the body because of spiritual elevation but due to spiritual depression. The bonds which link man, that bodily lump of matter, to the earth, were loosened in the consciousness of the people; they had become listless to the point of death, by starvation.

This population had no idea that the mental and material impoverishment to which it had been allowed to sink, were largely the cause of its hunger and disease, and that the adverse climatic conditions which contributed to the failure of its crops and to the sickness of its bodies, would not have caused such terrible ravages, if it had been free, educated and well-to-do. For there can now no longer be any doubt that such an epidemic dissemination of typhus had only been possible under the wretched conditions of life that poverty and lack of culture had created in Upper Silesia. If these conditions were removed, I am sure that epidemic typhus would not recur. Whosoever wishes to learn from history will find many examples.

The logical answer to the question as to how conditions similar to those that have unfolded before our eyes in Upper Silesia can be prevented in the future is, therefore, very easy and simple: education, with its daughters, liberty and prosperity. . . . Medicine has imperceptibly led us into the social field and placed us in a position of confronting directly the great problems of our time. Let it be well understood, it is no longer a question of treating one typhus patient or another by drugs or by the regulation of food, housing and clothing. Our task now consists in the culture of 1 1/2 millions of our fellow citizens who are at the lowest level of moral and

# Rudolf Carl Virchow

## Medical Scientist, Social Reformer, Role Model

**GENERALLY REGARDED AS** one of the most brilliant and influential biomedical scientists of the 19th century, Rudolf Carl Virchow was, remarkably, also one of the most courageous and inspiring proponents of social medicine.<sup>1</sup> He was born on October 13, 1821, in Schivelbein, Pomerania, then in eastern Prussia, but since 1945, part of northwestern Poland. Rebellious and intellectually gifted, in 1839 Virchow won a scholarship in 1839 to the Friedrich-Wilhelms Institut in Berlin, Germany, where he received his medical education.<sup>2</sup> After obtaining his MD in 1843, he was appointed to an internship at Berlin's Charite Hospital where he began his clinical career.

He also initiated chemical and microscopic research,

which led to his first publications and bold proclamations of the need for a drastic overhaul of medical research. In 1847, the 26-year-old Virchow co-founded a new journal, *Archives for Pathological Anatomy and Physiology and Clinical Medicine* (later *Virchow's Archives*), which became a major force in the modernization of medical science. In 1849 he left Berlin for Würzburg to accept Germany's first chair in pathological anatomy. Soon after launching a comprehensive, 6-volume *Handbook on Special Pathology and Therapeutics* in 1854, Virchow returned to Berlin to head a new pathological institute and in 1858 published his classic *Cellular Pathology*. In the 1870s, while remaining a prolific biomedical scientist, Virchow also turned his attention increasingly to anthropology and

archaeology. He died on September 5, 1902, much honored worldwide as one of the towering scientists of his era.

Virchow's career in social medicine was equally remarkable. His most famous contribution was his "Report on the Typhus Epidemic in Upper Silesia" excerpted here. The report originated when Virchow was asked by the Minister of Education to help investigate scandalous conditions in this poor rural area under Prussian control, with a large population of "ethnic Poles." Although he studied many dimensions of the epidemic, his 190-page report is best remembered for its final 30 pages.<sup>3,4</sup> Here Virchow applied ideas on the social causation of disease, derived from French and English sources, to conditions in Silesia and showed a close and sympathetic familiarity with Friedrich

Engels' stirring indictment, *Condition of the Working Class in England* (1844). Caught up in the heady atmosphere of his revolutionary times, Virchow enthusiastically endorsed what he proudly labeled "radical" political recommendations: introduction of Polish as an official language, democratic self-government, separation of church and state, and the creation of grassroots agricultural cooperatives.

After returning to Berlin in March 1848 to participate in "revolutionary" political action on the streets, in July, Virchow helped found *Medical Reform*, a weekly newspaper that promoted the cause of social medicine under the banners "medicine is a social science" and "the physician is the natural attorney of the poor." He continued until June 1849, when increasingly reactionary political pressures forced

physical degradation. With 1½ million people, palliatives will no longer do. If we wish to take remedial action, we must be radical. . . . If we therefore wish to intervene in Upper Silesia, we must begin to promote the advancement of the entire population, and to stimulate a common general effort. A population will never achieve full education, freedom and prosperity in the form of a gift from the outside. The people must acquire what they need by their own efforts. . . .

The people must be taught on the broadest basis, on the one hand by means of adequate

primary trade and agricultural schools, by popular books and popular journals, and on the other hand there must be freedom to the greatest extent, especially complete liberty of communal life. . . . The absolute separation of the schools from the church, necessary as it is everywhere, nonetheless is nowhere more urgent than in Upper Silesia. . . .

. . . The earth brings forth much more food than the people consume. The interests of the human race are not served when, by an absurd concentration of capital and landed property in

the hands of single individuals, production is directed into channels that always guide back the flow of the profits into the same hands.

Constitutionalism will never wipe out these abuses, since it is itself a lie . . . [which] can never truly draw the conclusions to be drawn from the principles of general equality before the law. Therefore, I abide by the doctrine which I have placed at the head of this discussion: *Free and unlimited democracy*. . . .

The next task will be the improvement of agriculture, horticulture and animal husbandry. . . .

These men [small landholders] can only be assisted by popular instruction, by the introduction of better plant strains and better breeds of domestic animals. . . . The people must be made to understand that, when exclusively cultivating potatoes, they will always be exposed to the threat of similar crop failure and that only a certain variety of crops can protect them from a total failure. The more widespread cultivation of maize, legumes, pot-herbs and fruit could give them a better chance of yield. . . .

While the state as such should never be a permanent employer,

him to suspend publication. He became politically quiet in the early 1850s (as did many European radicals). When he returned to Berlin later in the decade, he again became active, although now in more moderate ways. In 1859 he was appointed to Berlin's City Council, a position he held until his death, and there worked on sanitary and other public health reforms.<sup>5</sup> In 1861 he helped found the German Progressive Party and was elected to the Prussian diet as a leader of the constitutional forces opposed to Otto von Bismarck. Virchow later continued that fight as a member of the German Reichstag from 1880 to 1893.

Virchow's dual career has been widely inspirational. He is often credited for being one of the first to make the case for the social origins of illness and the multifactorial etiology of epidemics.<sup>6,7</sup> But

beyond that he has also served as a powerful icon, hero, and role model because he was both a leading scientist and an insistent proponent of the social grounding of medicine, public health reform, and political engagement.<sup>8,9</sup> ■

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since this would gradually lead to a new despotism . . . what is necessary and desirable is above all the association of the unpropertied, so that through these associations they can join the ranks of those citizens who are enjoying the bounties of life and thereby at last cease being mere machines for others. . . . People only count as hands! Is this the purpose of machines in the cultural history of nations? Shall the triumphs of human genius serve no other aim than making the human race miserable? Certainly not. . . . Man should work only as much as is required to wrest

from the soil, from that crude substance, as much as is needed for the comfortable existence of the whole race, but he should not squander his best powers to amass capital. . . .

Capital and labor must at least have equal rights and the living force must not be subservient to non-living capital. . . . In every case the worker must have part in the yield of the whole, and as, moreover, with reduced taxation and with better education, his will be a happier lot. . . .

These are the radical methods I am suggesting as a remedy against the recurrence of famine

and of great typhus epidemics in Upper Silesia. Let those who are unable to rise to the more elevated standpoint of cultural history smile; serious and clear-thinking persons capable of appraising the times in which they live will agree with me. . . . ■