PETTENKOFER- FATHER OF EXPERIMENTAL HYGIENE

Max Von Pettenkoffer (1818-1901) studied at the University of Munich and obtained his M.D. He undertook postgraduate studies in chemistry at Wurzberg, where he identified hippuric acid in the urine and described a qualitative test for bile salts- the Pettenkoffer’s test. In 1847, he was called to Munich, as Professor of medical chemistry, a newly created post, but Pettenkoffer gradually moved into experimental hygiene. In the first part of 19th century, progress in public hygiene had faltered in Germany, in comparison with England. Like Virchow, he labored to push through public health measures.

Pettenkoffer’s first objective was achieved in 1865, when Bavarian government sanctioned a Department of Hygiene, in Munich. The second objective, facilities for instruction to students and research, was fulfilled in 1879, by the construction of Institute of Hygiene. The lectures given by him at the institute, disclosed his breadth and length of knowledge in hygiene. They included diet, sanitary regulations, handling of food, sewage disposal, ventilation, water supply, lighting, heating, burial of dead and botanicals. Pettenkoffer was a thoroughly practical administrator, and in furthering his programme, his use of statistics was valuable. A need for active support from the citizens, in implementing his programme was recognized, sought and subsequently exploited upon, by the approval of the community. An example was construction of sewers in Munich, with virtual elimination of typhoid fever.

His concept of multiple factors in etiology, led him against a direct conflict with Robert Koch, who attributed cholera to the vibrio comma. Pettenkoffer gave less significance to “germs”, and considered that decaying toxic material in the soil, in a susceptible environment, was the culprit. A famous episode occurred on November 1892. Despite warning by Koch, he and some friends, with his strong belief, drank cultured cholera bacilli, to prove himself right. He was very fortunate to survive.

Pettenkoffer was given personal nobility. In 1896, the title “Excellency” was conferred upon him, along with gold Harben Medal, of the British institute of Public Health.

It seems a paradox, for the one who valued health and hygiene so highly, to kill himself with a shot from a revolver, at the age of 83. Apparently, this was in accordance with his belief that those who did not work, should not live!

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