

GUSTAV KABRHEL: THE FOUNDER OF THE CZECH PUBLIC HEALTH SCIENCE AND HIS CONTRIBUTION TO THE “SCHOOL AND HEALTH” ISSUES

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Abstract: *This contribution outlines the professional career of Professor Gustav Kabrhel (1857-1939), founder of the Czech public health school and the first professor of public health at the Czech Medical Faculty of Charles University. After studies at the Viennese university, he moved to Prague in 1883 to pursue his specialty – public health – in practice. In 1897, he founded Institute of Hygiene at the Medical Faculty of Charles University. As the editor-in-chief of Public Health Magazine, he facilitated discussions about the state of hygiene at primary and secondary schools in Bohemia and Moravia, always comparing theoretical considerations with practical viewpoints of teachers. The main areas of interest were: (1) Mission and duties of the newly established position of school physician. (2) Health-oriented supervision of school buildings and equipment. (3) Compliance with health policies in the classroom. (4) Monitoring the students' state of health. (5) Questions of alcoholism and sexual education. Many of these issues were in fact starting points that Prof. Kabrhel developed in detail when preparing the first Czech textbook of public health entitled “Health Science” (1922).*

Key words: *public health care, school physician, student's position in the family, psychology of health, teachers and health*

The year 2009 marked the 70th anniversary of passing of Gustav Kabrhel (1857-1939), founder of the Czech school of public health and the first professor of public health science at the Czech Medical Faculty of Charles University.

Gustav Kabrhel was born on November 23, 1857 in Dražkovice near Pardubice, into a small farmer's family. After a high school graduation in Chrudim, he departed, at the age of 20, to continue his education at the University of Vienna. He initially studied mathematics at the Faculty of Arts but, after three semesters, transferred to the Faculty of Medicine. In the course of the studies he worked as a demonstrator with Prof. Stricker at the Institute for General and Experimental Pathology in Vienna, and later as an assistant to Prof. Arnold Spina. Following the graduation in 1883, he moved with the latter to the medical faculty of the newly established Czech Charles-Ferdinand Univer-

sity in Prague (1882), to commence the academic year 1883-1884 as an assistant in the identically named Institute for General and Experimental Pathology.

The years 1886-1887 brought about some turning points in his life: the first foreign stays (notably in Munich and in Silesian Breslau/Wroclaw), habilitation in experimental pathology, and, on a personal level, marriage. At that time, public health was not treated as a self-standing scientific discipline on a par with other medical specialties by the Habsburg monarchy's academia. It was literally in its infancy, combining what today are individual disciplines such as epidemiology, microbiology, and public health. The term „hygiene“ gradually came to encompass subjects like general hygiene, communal and environmental hygiene, hygiene of nutrition, hygiene of commonly used articles, hygiene of work, hygiene of school children and adolescents. The German school of public health was becoming the model to emulate, which attracted Kabrhel's professional interests and brought him, in 1888, to the Institute of Prof. Max von Pettenkofer in Munich, and two years later (in 1890) to Berlin, to the Institute of Prof. Robert Koch, the future Nobel Prize winner (1905). After studying with Prof. Pettenkofer, who practically created the specialty and who was the first to objectively investigate environmental factors in order to assess their impact on health, Kabrhel, having had completed the study of chemical engineering at the Technical University with subsequent habilitation in the field of technical hygiene, broadened his *Venia Legendi* at the University of Prague with a new, previously undefined, subject: public health. In 1891, he was appointed associate professor and, in 1899, regular professor of Hygiene Science at the Czech Medical Faculty in Prague. In that memorable year, Kabrhel was elected, at the age of 34, to the Czech Academy of Sciences, Literature and Art (founded in January 1890) as a corresponding member. At that time he already published routinely in *Archiv für Hygiene*, then the most prominent international journal of its kind.

In 1897, he founded Institute of Hygiene at the Medical Faculty (now Institute of Hygiene and Epidemiology at the First Medical Faculty of Charles University), which he headed until his retirement in 1927. At the same time, he also directed the National Institute for Study of Drugs. In both of these institutions, he trained a number of outstanding experts in the field of public health, who worked successfully at academic institutions as well as in microbiology, in epidemiology and in the food industry.

In Austria-Hungary, public health care used to be administered by the Ministry of Interior until 1917, then by a newly created Ministry of Health (until the monarchy's end), with the professional expertise provided by institutions attached to medical schools. Upon gaining independence, Czechoslovakia also established a Ministry of Health, which it renamed, in August 1920, Ministry of Public Health and Physical Education. The founding of Masaryk University in Brno (1919) was likewise followed by the establishment of Institute of Hygiene at its Medical Faculty. After 1918, Prof. Kabrhel served as member of the National Health Council, drawing on his earlier experience from the Provincial Health Council (1906-1909) and the Supreme Health Council in Vienna. From 1924, he chaired the National Health Care Board as its president. In addition to the Medical Faculty (where he served as dean in the years 1900-1901, 1907-1908, and 1914-1915), he also lectured at the Philosophical Faculty of Charles University and at the Czech Technical University in Prague. In his professional publications, which total nearly one hundred, and in hundreds of

other scientific papers he intensely studied the subjects of hygiene and sanitation, industrial and scholastic hygiene, and especially the hygiene of water. Many of these works were translated into foreign languages, primarily German. An example may be “*Essay on Directing Intellectual Activities in Schools*” reprinted in his memoirs “*After Fifty Years*” (1933). Kabrhel’s greatest work is a textbook of public health entitled “*Health Science*” and released in installments in the period of 1904-1922. His last major work dealing with water sanitation is a four-hundred-page volume bearing the title “*Water Hygiene*”.

In addition to professional papers and publications, Kabrhel was concerned about the education of general public, as exemplified by his founding of *Provincial Anti-Alcoholism Association*. He also devoted numerous studies to this problem, one of them being a pamphlet called *Abstinentisms: Its Importance to Individuals and Society* (1906) where alcoholism is identified as a destructive force in human society and a serious impediment in child rearing: „Most deplorable victims of family breakdowns caused by alcohol are the children. A blunted sense of parental responsibility and the attendant material shortcomings are the reasons why in such circumstances both physical and mental upbringing withers”.

It should be pointed out that Prof. Kabrhel not only diligently and regularly published, but also edited. In the years 1891-1898, it was the *Health Bulletin*, and then especially the *Public Health Magazine*, published in the period of 1899-1908, that he founded and directed. As its „editor-in-chief“, he provided a forum for discussions on timely issues touching directly upon the state of hygiene in the schools of Bohemia and Moravia. A closer look at the content of all ten volumes of the magazine reveals that the attention centered on four key issues:

1. A phased introduction of a school physician system, in which a systematic professional supervision by a doctor would cover the following areas:
 - a) Health-oriented supervision of the physical condition of school buildings and facilities (per Ministry of Culture & Education Decree from March 3, 1888, No. 40 of Imperial Laws, mandating „how the building of primary and secondary public schools are to be furnished and how health is to be protected in said schools”). The school should not be built in a „noisy place“, it should be a „community showcase“ standing in an “open space” with plenty of light, adequate ventilation and sufficient heating. Also covered were the questions of cleaning. Prof. Kabrhel devoted a separate lecture, published in 1903, to the subject of proper heating and ventilation of schools.
 - b) Monitoring teachers’ compliance with health principles in the educational process.
 - c) Checking the state of students’ health (given the high incidence of tuberculosis averaging about 20 % in new students and being as high as 38 % for girls, and around 10 % for boys). Awareness of issues related to sex education.
2. Appropriate scheduling of instruction (mornings, afternoons), with more emphasis on physical education. Also, the problem of teachers’ health due to a relatively high incidence of tuberculosis in their ranks.

3. A variety of measures to improve the precepts of scholastic hygiene was voiced in this context. For example, one interesting essay suggested that the “delight of school hygiene“ is a significant stimulant for students to take interest in their own hygiene. The idea, presented in Volume VIII (1906) of the excerpted magazine, was probably a reaction to the new *Rules of Operation and Instruction for Primary and Secondary Schools* from September 1905. The strict scholastic discipline of the day, based on „silence and immobility“ in the classroom, was supposed to be partially relaxed and replaced with a more liberal approach, hopefully increasing the students’ personal interest in their own hygiene.
4. Students’ social situation and the problem of alcoholism: the questions discussed in this area dealt with student’s place in the family, his or her homework load, space for schoolwork, student’s nutrition, sanitary conditions, financial standing of the family, parents’ concern about the child’s school attendance. Each of these aspects was presented from two perspectives: A more or less theoretical introduction of the subject matter, followed by opinions and experiences from the field. An initially narrow topic had a tendency to snowball as new and unconventional insights came to light. Positions presented in this manner usually found resonance in both pedagogical and health-oriented communities.

The conclusion of this brief reflection on the personality of Prof. Gustav Kabrhel is clear. He personifies a brilliant scientist who is rightly called the founder of the Czech public health science. This ardent promoter of school hygiene greatly advanced rational health education for the entire student population.

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GUSTAV KABRHEL - ZAKLADATEL ČESKÉ HYGIENICKÉ ŠKOLY A JEHO PŘÍNOS K PROBLEMATICE ŠKOLA A ZDRAVÍ

Anotace: Příspěvek přibližuje profesní dráhu zakladatele české hygienické školy a prvního profesora hygieny na české lékařské fakultě Univerzity Karlovy, profesora

Gustava Kabrhela (1857-1939). Po univerzitních studiích ve Vídni odešel v roce 1883 do Prahy, kde rozvinul svou specializaci – hygienu – do praktické roviny: roku 1897 založil na lékařské fakultě Univerzity Karlovy Hygienický ústav. Jako šéfredaktor Časopisu pro veřejné zdravotnictví vytvořil prostor k prosazování aktuálních otázek souvisejících se stavem hygieny na obecných a měšťanských školách v českých zemích. Teoretické úvahy byly zde konfrontovány s názory učitelů z praxe. Pozornost se soustředila do několika oblastí: 1. poslání a úkoly nově zaváděného „institutu“ školního lékaře; 2. zdravotní dozor nad stavem školní budovy a jejího zařízení; 3. dodržování zdravotních zásad při vyučování; 4. sledování zdravotního stavu žáků; 5. problematika alkoholismu a sexuální výchovy u žáků. Mnohé tyto otázky se staly pro prof. Kabrhela východiskem k hlubšímu rozpracování při formulování první české učebnice hygieny zvané Zdravověda (1922).

Klíčová slova: veřejné zdravotnictví, školní lékař, postavení žáka v rodině, psychologie zdraví, učitelé a zdraví