STAGES OF DEVELOPMENT OF MEDICAL STATISTICS

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The first steps in the field of statistical observations were made in ancient times, when governments of various states began to collect data about their countries. In Egypt, Persia, Greece and Rome, population censuses, birth and death records were conducted, and lists of the adult population were compiled. In the Middle Ages, the main source of statistical information was church records, which were used to study demographic processes. With the development of trade in the late Middle Ages in Italy, Belgium and Holland, information began to appear about the countries with which trade was carried out. In medieval collections, including the first half of the 17th century, one can find scattered notes of a historical, state and ethnographic nature.

However, statistics as a science was formed only in the second half of the 17th century in England and Germany. This was due to the development of government and accounting practices. In Germany, a descriptive school emerged, founded by Hermann Conring , which studied the territory, population and economy of states. In England, the direction of political arithmetic developed, representatives of which, such as William Petit and John Graunt , studied patterns based on big data. In Russia, statistics began to develop in the middle of the 18th century, paying attention to issues of morbidity, birth rate and mortality.

Since the beginning of the 19th century, the program of sanitary statistical research has gradually expanded, and a significant place has been given to the sanitary-statistical characteristics of population health. However, a significant rise in sanitary statistics was associated with the development of zemstvo medicine - this occurred in the last quarter of the 19th century. The presence of zemstvo medical

institutions in the countryside contributed to the development of general morbidity statistics, which became the main area of research for zemstvo doctors. The founder of zemstvo sanitary statistics was E.A. Osipov, who headed the work of the Moscow Provincial Sanitary Bureau (1875-1895). A major role in zemstvo sanitary statistics was played by F.F. Erisman, a professor of hygiene at Moscow University, who worked with E.A. Osipov in the zemstvo sanitary bureau, as well as one of the best organizers and leaders of zemstvo sanitary statistics, P.I. Kurkin, the successor of E.A. Osipov. 7 At the beginning of the 20th century, S.A. Novoselsky and his students published a number of works devoted to the analysis of sanitary and demographic materials, among which the book "Mortality and Life Expectancy in Russia" (Petrograd, 1916) deserves special attention. It was awarded the prize of the Russian Academy of Sciences. It contained the first complete mortality tables of the population of European Russia, which were built on the basis of the only population census of 1897 and the mortality data associated with them. After 1917, statistics in medicine began to develop in two directions - public health statistics and health care statistics. These two directions were closely related in content, organization, and methodology. V. Yu. Urbach noted that when studying the methods of mathematical statistics, special attention must be paid to the limits of applicability of each method, since the incorrect application of statistical methods leads to erroneous conclusions.

Currently, teaching methods of statistical analysis of indicators is of great importance in modern medical education. Knowledge of medical statistics allows one to objectively assess the problems of population morbidity, the activities of medical organizations and health care institutions, correctly understand and rationally use specialized and scientific medical literature, which is necessary for improving professional qualifications, as well as for the optimal solution of planning, economics, marketing and management issues in health care.

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