International Conference on Computing, Artificial Intelligence and Information Systems
Hosted Online from Warsaw, Poland
Date: 11th May, 2026
Website: https://econferencia.com

THE FIGHT AGAINST INFECTIOUS DISEASES IN THE SURKHANDARYA REGION, 1940–1960

Mamatraimov Urol Mamatmurodovich,
Researcher of Termiz University of Economics and Service

Abstract
This thesis analyzes the state of rural healthcare institutions in the Surkhandarya region between 1940 and 1960, focusing on their material-technical base and staffing levels. It is shown that due to the extensive development of the healthcare system during the Soviet era—prioritizing quantitative indicators over qualitative ones—70% of medical facilities in the region were housed in adapted buildings and lacked modern medical equipment. Furthermore, the study highlights that physicians with higher education worked primarily in urban and district centers, while the rural population was largely served by secondary medical personnel, resulting in a low quality of care.

Keywords: rural healthcare, feldsher-midwife station (FMS), hospital beds, physician shortage, outpatient services, rural district hospital, medical personnel.

During the Soviet era, the healthcare system was managed in an administrative-command manner, with the interests of the center as a priority. This led to insufficient consideration of the climatic and geographical features of the southern regions of the republic, in particular, the Surkhandarya region, in medical planning. Although certain measures were taken to prevent and combat infectious diseases in the region during the 1940s–1960s, the expected results were not fully achieved due to the lack of a systematic approach, weak material

and technical base, and shortage of personnel. This thesis analyzes the organizational foundations of the fight against infectious diseases in the Surkhandarya region in the 1940s–1960s, the measures taken, and their practical results.

Natural and climatic conditions play an important role in the prevention of infectious diseases. Studies have shown that 17–20 percent of human health depends on the environment. The problem of clean drinking water has always been urgent in the Surkhandarya region. While the norm for each person per day was 200–250 liters of water, this figure did not exceed 50 liters for the population of the region. In 1967, only 60 percent of the funds allocated for the construction of water pipelines in the region were utilized. The population of the Zharkurgan district was forced to drink ditch water until the end of the 60s. When laboratory tests were conducted on water bodies where the population lives, only 14.1 percent of water in Uzbekistan and 4 percent in Surkhandarya met sanitary and hygienic requirements.

The underdeveloped sewage system also exacerbated the problem. Until the 1970s, there was no central sewage network in the regional cities. Only 18 percent of the population of Termez used the city's municipal sewage system.

Another major factor in the negative socio-ecological conditions in Surkhandarya region was the excessive use of toxic chemicals in agriculture. In 1963-1964, the Central Committee of the Communist Party of Uzbekistan and the Council of Ministers adopted a number of resolutions on the use of toxic chemicals. In 1967, an inspection by the Republican People's Committee of Supervision revealed a number of shortcomings in this regard by administrative and local authorities. Out of 993 storage facilities in Uzbekistan, only 336 (40 percent) met sanitary requirements. In 1950, 0.9 million tons of mineral fertilizers were allocated in

Uzbekistan, but in subsequent years this amount was sharply increased. During the defoliation of cotton fields, serious harm was caused to the health of thousands of people, especially children.

The organization of sanitary and epidemiological service played an important role in the prevention and elimination of infectious diseases. In 1948, the II Congress of Sanitary and Epidemiological Specialists of Uzbekistan was held, which demanded the organization of SES as a separate branch. By the resolution of the Government of Uzbekistan dated May 13, 1952, the Republican Sanitary and Epidemiological Station (SES) was established. Based on this resolution, SES activities were launched in Surkhandarya region in 1956.

However, the regional SES began to work in conditions of extreme shortage of transport, laboratory equipment and personnel. In 1951, the full-time employment of doctors in the regional sanitary and epidemiological institutions was only 45 (out of 73.5 positions), and 1 out of 7 positions of bacteriologists was full-time. All district SES were not fully staffed with specialists, and none of them had their own building and transport.

Surkhandarya region became one of the regions with the highest incidence of infectious diseases during the Soviet era. In 1949, the main infectious diseases recorded in the region were malaria (9,031 cases), influenza (5,009 cases), acute gastroenterocolitis (968 cases), measles (404 cases), and brucellosis (362 cases). In 1949, 86 cases of typhus, 25 cases of typhoid, and 239 cases of dysentery were recorded.

Measles was recorded in 4,320 people in the region in 1955, 5,000 in the southern regions in 1962, and 11,650 by 1963. During this period, the population of Surkhandarya region was at the forefront of the republic in terms of measles incidence.

While diphtheria (pertussis) was eradicated nationwide, outbreaks of the disease persisted in some districts of the region. In 1955, the USSR Ministry of Health issued a decree on mass vaccination against pertussis.

In 1957, 1,446 people were infected with dysentery in Surkhandarya region, while in 1963 this figure reached 3,885. In 1962, 3,885 people were registered with viral hepatitis (jaundice), and in 1963, 4,657 people were registered, with the number of patients increasing by 20–25 percent compared to the previous year.

An anti-malaria station was established in Surkhandarya region in 1947. In the first quarter of 1940, 1,605 cases of primary malaria were recorded in the region, while in the first quarter of 1941, it decreased to 132. However, in 1949, malaria cases amounted to 9,031 cases. In 1952–1954, anti-malaria hydraulic works (drainage of small swamps, cleaning of water bodies, restoration of collectors) were carried out. In 1953, malaria cases decreased by 28.5 percent. In 1960–1966, 32 people in the region were infected with malaria, while in 1967, 50 people were registered in the Boysun district. As a result of the measures taken in the Boysun district, 13,380 sq. m. of area was disinfected and the disease was prevented.

In 1945, house-to-house visits were organized in the region for the early detection of diseases. An average of 166 medical workers and 55 public activists were involved in this. An average of 9,346 apartments and 58 dormitories were visited in cities and districts. In rural areas, 388 collective farms and 37,822 households were visited per month. As a result, 4,448 patients with elevated body temperature were identified, and 2,778 were hospitalized. 1 regional and 19 district desepidotriads were organized, consisting of 10 doctors and 72 paramedical workers, to conduct epidemiological and disinfection work in disease outbreaks.

Based on the above information and analysis, we can conclude that the fight against infectious diseases in Surkhandarya region in the 1940s-1960s was accompanied by a number of serious problems. The center's extensive development policy, the sacrifice of quality indicators for quantitative indicators, and the neglect of the climatic and geographical features of the region had a negative impact on the level of medical services. The lack of high-quality drinking water, the underdevelopment of the sewage system, the excessive use of toxic chemicals in agriculture, the weakness of the material and technical base and personnel of the sanitary and epidemiological service were the main reasons for the widespread spread of infectious diseases. Although some infectious diseases such as malaria, dysentery, and whooping cough were eliminated in the region, the level of diseases such as dysentery, viral hepatitis, and measles remained dangerously high. Only in the 1960s did separate hospitals for infectious diseases begin to be established. Historical experience shows that comprehensive measures were necessary to equip rural medical institutions in the region with material and technical equipment, provide them with personnel, develop sanitary and hygienic infrastructure, and strengthen environmental protection.

REFERENCES:

1. Soatov R.S. Development of public health care in Uzbekistan. – T.: Uzdavnashr, 1958.
2. Zohidov H.Z. 25th anniversary of healthcare in Uzbekistan. – T.: Uzdavnashr, 1949.
3. Tulyaganov K.S. Zdravoochranenie Surkhandaryn region of the Uzbek SSR. - T.: Medicine, 1972.

4. Khaliyarov H., Bychkov D., Blinnikov A. Surkhandarinskaya oblast. -T., Uzbekistan, 1974.
5. Хужаназаров А.З., Алламуратов Ш.А. Реформы в системе здоровья Узбекистана в последние годы //Наука, техника и образование. – 2021. – №. 1 (76). – С. 19-23.
6. Ismoilov N., Gaziyeva F. The lamp of healing (photographs from the history of the Denov district central hospital). – Tashkent: A. Kadiriy, 1997.
7. Tursunov S., Kabilov E., Murtazoev B., Pardaev T. History of Surkhandarya - T.: Sharq, 2004.
8. Muminova G. History of the healthcare system in Uzbekistan: achievements and problems (1917-1991). – T: Yangi asr avlodi, 2015.
9. Хужаназаров А.З., Алламуратов Ш.А. Система здравоохранения в Узбекистане: проблемы и реформы //Бюллетень науки и практики. – 2021. – Т. 7. – №. 2.
10. Muminova G. Toshtemirova N. History of medicine and healthcare in the southern regions of Uzbekistan. – Karshi: Intellect, 2021.
11. Khuzhanazarov A. Z., Allamuratov S. A. Look at medicine attention: problems and solutions //Ўтмишга назар журнали. – 2019. – Т. 24. – №. 2.