

**PRACTICAL ACTIVITIES IN PUBLIC HEALTH FIELD
IN A MODEL RURAL CENTER BEFORE THE 2nd WORLD WAR**

Cristina Ionescu

“Gr. T. Popa” University of Medicine and Pharmacy Iasi

Inspired by the progressive ideas of preventive medicine, the model health rural units, although able to solve the public health problems only in restricted areas, were like true light spots on the country map, demonstrating that an appropriate health care organization eventually lead to a significant decrease of morbidity and mortality rates.

The Health Center from Tomești was one of the three model rural units of preventive medicine organized by the Ministry of Health to be affiliated to one of the existing Institutes of Public Health: Iași, Cluj and București respectively.

The center was coordinated by Prof. Al. Slătineanu as Director of the Iasi Institute of Hygiene and Public Health and Prof. Dr. Alexa, departmental supervisor.

A group of physicians of the Iași Institute of Hygiene and Public Health: I. Rugină, I. Stetcu, C. Gheorghiu, A. Rusu, R. Bălțeanu, I. Arteni, I. Nitzulescu, A. Radianov, I. Urzică participated in the activities of Tomești Model Health Center. Three general practitioners, five nurses, six sanitary agents, and five midwives were added to the former medical staff. Moreover, additional staff was

temporarily hired for various activities (1).

Among the activities of Tomești Health Center was a study of general morbidity on a seven year-period (1930-1936) in four surrounding villages: Tomești, Prisăceni, Costuleni and Poieni.

The researches were carried out in agreement with the health law issued on July 14, 1930, considered one of the most remarkable until 1944. This law specified the measures to be taken for the improvement of the health care (2), health organization and health education of the population helping the preventive hygiene to gain ground, and health care to become more effective in the territory. Thus, the counties had to be divided into small administrative health rural districts. Both the hygienist of such a small health rural district and the physician of the rural health center had to be involved in activities of prophylaxis and participate in all actions aimed at spreading a hygienic-sanitary culture among peasants. Unfortunately, no provisions have been made to ensure the financial and material resources, as well as the medical staff required for an effective law.

The goals of those researches were:

- **vital statistics and demography**, data related to births, marriages, divorces, collected from the register of births, deaths and marriages were correlated with those of morbidity and mortality based on statistic health reports.

- the **control of infectious disease** was done by the detection and periodical reporting (weekly, monthly or annual report). The contagious patients were admitted to Iasi Hospital of Infectious Diseases (“Izolarea”), and samples from contacts were collected and examined at the laboratory of Iasi Institute of Hygiene and Public Health. Epidemiological records for every case were followed by patients’ home disinfections, and preventive immunization.

Typhoid fever was another research carried on by a team under the supervision of professors I. Bălteanu, I. Alexa and E. Alexa.

During 1930-1936 typhoid fever cases were recorded in 50% of the villages affiliated to Tomesti health center (5).

Knowing the ways of infection spreading, some prevention measures such as hygienic-dietary advice, could be taken. Also, prophylactic typhoid vaccination was initiated. The efficacy of these measures was high, vaccination proving to be an ideal method of prevention in rural areas. Thus, in Costuleni village, where the entire population was vaccinated, the epidemics were absent for three consecutive years (5).

Of the chronic diseases, venereal disease, tuberculosis, malaria and pellagra were the target of researches.

- **venereal diseases** were diagnosed by clinical symptoms and serology, each case being reported. The treatment of these diseases was free of charge.

- **tuberculosis** - Beside clinical examinations carried out at rural Health Center, the tuberculosis cases were diagnosed by radiology and bacteriology - examinations performed by in Iasi Hygiene and Public Health Institute. The patients with active tuberculosis were isolated in the Iasi antituberculosis center, Bârnova or Bisericani sanatorium, and Stînca Hospital. While the patients with inactive tuberculosis were treated in the rural health center. Each patient had a medical file, and tuberculin reaction in children was tested (4). Professors Al. Slătineanu and I. Alexa carried out at this experimental center some studies of tuberculous infection detected by Mantoux reaction (4). This study, covering a 5 year interval, surprisingly showed a constant increase in the number of new tuberculosis cases, increase that could be related to an improved diagnosis. Since the same interval an increase in the number of deaths due to this disease was also recorded, the both professors, aware of the fact that early treatment leads to a drop in mortality, developed the early detection of tuberculosis, especially in schoolchildren. Thus, the tuberculin skin test have been found positive at 40.34% of children. This high figures prompted professors Slătineanu and Alexa to use, as professors I. Cantacuzino and M. Ciuca earlier recommended the BCG vaccine for

PRACTICAL ACTIVITIES IN PUBLIC HEALTH FIELD IN A MODEL RURAL CENTER

immunization against tuberculosis. Thus, during a 5 year interval, 3444 children received the vaccine, and 2357 were revaccinated. As an example, only in 1934 out of 1209 new born children 981 received BCG vaccine. Following this immunization program, infantile mortality dropped significantly (2).

- **malaria** control consisted in the detection and report of the cases, systematic blood tests of the entire population in the malarious areas, twice a year. Different drug treatments have been checked, and the most severe cases were hospitalized.

- **pellagra** was diagnosed clinically, the patients being advised on convenient foods. Local and general treatments were administered, and the severe cases were hospitalized.

- as to **health education and hygiene**, the main goal was to prevent diseases in children, especially of small age. Hygiene measures of prenatal, infant, preschool and school children were taken in this respect:

- **prenatal hygiene**. Pregnant women were visited by the doctor at regular time intervals, delivery was assisted by a trained midwife and recommendations for postdelivery care, according to the possibilities, were made. All deliveries, stillbirths included, have been recorded.

- **infant, preschool and school child hygiene** have been assured by social nurse's home visit twice a month, organization of kindergarden for preschool children and summer camps for school children. These measures accompanied extended tuberculin skin tests, and smallpox revaccination.

- **sanitation** was done by regular inspections of the improper spaces of those who manufactured alcoholic drinks and food stores. Meantime, foods, drinks and drinking water were analyzed bacteriologically and chemically, wells were disinfected, and the slaughtering of animals for food consumption was under control.

- **the health and social education** included detailed statements and documentary films twice a year, as well as the conferences of preventive medicine at the cultural centers of the teaching staff.

The conclusions of the studies carried on by Iasi Institute of Hygiene and Public Health were the following:

1. Rural health is a complex problem, being also an economic one, a higher life standard contributing to better health.

2. The guiding principles to control the health problem in the rural area were:

- a. improvement of health care and health promotion

- b. development of hygiene and preventive medicine

3. Effective health restoration requires that the area covered by a rural health center must be smaller, provided with an adequate trained medical and auxiliary staff.

4. A closer cooperation between hygienist and general practitioner, as well as between them and the teachers, priests, rural administrative and social authorities is necessary. Health being a problem of general interest, all state authorities have to spare neither trouble nor expense in view of improving it.

Finally, the mortality rate decrease from 25-28 to 16-19 deaths per 1000 inhabitants was suggestive in the assessment of the effectiveness of the system of care, prevention and organization realized during seven years by the Iasi Institute of Hygiene and Public Health under the leadership of professor Al. Slătineanu (6).

This study, performed over seven decades ago, remains as a proof of devoted and laborious work. Even today it is a model for those interested in promoting “primary” health care, both in rural and urban areas. We find out that their problems are still our current problems: inadequate health care, increase in the incidence of new tuberculosis and syphilis cases, appearance of new diseases, such as AIDS, in an impoverished population lacking health education.

In this context, this paper is not of purely historical interest alone; it is also a starting point based on an accomplished experience for the future organization, more complex and responsible of health care, where “family doctor” is the true key of a

vast mechanism of factors that contribute to population health.

REFERENCES

1. Bologa V. – *Istoria medicinei românești*. Ed. Medicală, București, 1972.
2. Slătineanu A. și colab. - *Plasa sanitară Tomești, doi ani de activitate*. Iași, Ed. Brawo, 1932.
3. Slătineanu A., Alexa I. - *Starea sanitară a Circ. Sanitare de Demonstrație Tomești, jud. Iași*. Rev. Medico-Chirurgicală, XLI, 1930, 2, 167-207.
4. Slătineanu A., Alexa I. – *Studiul infecției tuberculoase prin intradermoreacție Mantoux la vârsta școlară în centrul de demonstrație rurală Tomești jud. Iași*. Rev. Medico-Chirurgicală, XLVI, 1935, 1-2, 15-22.
5. Bălțeanu I., Alexa I., Alexa E. – *La fièvre typhoïde dans le centre sanitaire rural de démonstration Tomești 1030-36*. Rev. Medico-Chirurgicală Iași, XLIX, 1938, 1-2, 111-123.
6. Slătineanu A. și colab. - *Plasa sanitară Tomești, cinci ani de activitate*. Iași, Ed. Brawo, 1936.