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HEALTH WORK IN SOVIET RUSSIA

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Vanguard Studies of Soviet Russia

Health Work in Soviet Russia

By ANNA J. HAINES



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*To the sincere men and women of Russia who, despite
prison, exile, and death, burned out their
lives trying to attain freedom, peace,
and brotherhood for the
common people.*

BIOGRAPHICAL NOTE

HAINES, ANNA J.

Nurse; born in Moorestown, New Jersey, 1886; educated at Friends Academy, Moorestown, Westtown Boarding School, Bryn Mawr College, Nurses' Training School of the Philadelphia General Hospital, and Pennsylvania School for Social and Health Work; after graduation from college taught for a year and a half in public schools; worked one year with Children's Bureau, and three years doing settlement work, in Philadelphia; acted as housing inspector in Department of Public Health, Philadelphia, for four years; went to Russia in 1917 as relief worker for American Friends Service Committee, returning to the United States in 1919 and working for a year under American Red Cross in western Virginia; went again to Russia for a year as representative of American Friends Service Committee; returned to America and studied nursing in Philadelphia General Hospital and in Pennsylvania School for Social and Health Work; went once more to Russia for American Friends Service Committee in 1925 for a period of almost two years; now planning to return to Russia as soon as sufficient funds have been raised for the American Friends Service Committee to establish a Nurses' Training School in Moscow, for which the Soviet Government has already given its permission; author of several articles on experiences in Russia and on subjects related to nursing, published both in America and in Russia.

EDITOR'S INTRODUCTION

THE Russian Revolution startled a war-diseased world and ushered in the most daring political and economic experiment of the twentieth century. Considering the vast territory affected, the radical changes inaugurated, and the influence which has been and still is being exerted on international relations, there is probably no greater event in modern history, whether for good or evil. Most Americans forget that a decade has already passed since Lenin and his Communistic followers assumed the power. The period of rapid revolutionary change has gone. Russia is painstakingly, step by step, building something different, something unique, something whose final destination is unpredictable.

America has been a land of discovery from its foundation. Not only in the realm of scientific invention, but in first attaining the coveted North Pole and in exploring other unknown areas of the world, Americans have given generously of life and treasure. Today we are uninformed about a great nation covering one-sixth of the land surface of the world. Russia is cut off by an Atlantic Ocean of prejudice, misunderstanding, and propaganda. We still maintain a rigid official quarantine about the Soviet Government. The result is ignorance frankly admitted by one "of the highest authorities in our Government," who declares this inevitable "in the absence of diplomatic relations." The late Judge Gary corroborated this verdict, "Like many other Americans, I am ignorant in regard to many

of the conditions which exist in Russia at the present time."*

Every scientist realizes that ignorance is one of the most dangerous forces in the world today. No matter how good or how bad the Soviet system, we should know all about it. Instead, we have been ruled by propaganda and hearsay.

The fact is that for the past ten years the Bolshevik government has been operated on, dissected, and laid in its coffin amidst loud applause and rejoicing by distinguished orators in all parts of the world; yet today it is stronger, more stable, than ever before in its history and its leaders have been longer in power than any other ruling cabinet in the world. It is high time that we appraise this government as scientifically and impartially as possible, without indulging in violent epithets or questionable and controversial dogmas. Surely the world is not so abysmally ignorant that after ten years of the rule of the Soviet we cannot discover a common core of truth about Russia.

Whether the Communists are thought to be "dangerous enemies of society" or the "saviors of humanity," the facts should be known before judgment is pronounced. No matter what our conviction, we have to admit that the Bolsheviks are hammering out a startling new mechanism in the field of political control. Their experiment deserves scientific study, not hostile armies; intelligent criticism, not damning epithets.

In the past, America has been flooded with propaganda of all shades. Dr. E. A. Ross dedicates his last volume on Russia "To my fellow-Americans who have become weary of being fed lies and propaganda about

* *Current History*, February, 1926.

Russia." In his chapter on the "Poison Gas Attack" he lists forty-nine stories broadcast throughout America which have been proved totally false. Other writers have pointed out similar facts. Walter Lippman, Editor-in-Chief of *The New York World*, in his illuminating study of all Russian news which appeared in *The New York Times* in the early period of the Revolution, has proved the stupidity, inaccuracy, and falsehood of the "facts and fabrications" which have passed as news. Even those articles and books which have tried to deal honestly with the subject have usually been inadequate. They have either been too general or they have been specific but too brief to be of more than passing value. In all too many cases they are based on only a few weeks of observation in Russia by someone who did not know the native language.

The present series is designed to meet the need for reliable, accurate information on the major aspects of present-day Russia. We have tried to make it as scientifically accurate as is possible in the treatment of contemporary phenomena. It has been our aim in selecting each author to choose someone who because of previous experience and training was peculiarly well qualified as an authority on the particular subject to which he was assigned. In every case we have chosen those who either have made a prolonged stay in Russia, actually writing their volumes while in the country, or those who have made a special trip to Russia to secure the facts about which they write. We have tried to make the series inclusive, covering the more important aspects of the many-sided developments in Russia. Each volume is devoted to one major subject alone. People want detailed, accurate facts in readable form.

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Here they can be found, ranging all the way from an analysis of the governmental machinery to the school system. Within this series some repetition has been inevitable. The editor believes that this is distinctly desirable since each author expounds his subject in his own way, with an emphasis original to him and in the light of his own data. No effort has been made to eliminate contradictions, yet they are surprisingly few. Where the testimony of all is unanimous, the conclusions reached are overwhelmingly strong. Where differences exist, they should stimulate the reader to weigh the evidence even more carefully.

It is probably too much to hope that propaganda organizations will not endeavor to discredit any such genuine effort to arrive at the truth. Perhaps it is sufficient to say in refutation that no similar attempt to secure the facts about Russia from trained experts has yet been made in America or elsewhere, so far as the writer is aware. There is scant ground for intelligent criticism unless similar scientific studies have been made with conflicting results; even then time alone can proclaim the final truth. No sincere and unprejudiced scientist will deplore an effort to study and describe what has happened in the first experiment the world has ever seen in applied communism, even if mistakes have been made in the analysis.

These volumes, on the whole, not only contain the most valuable data so far available, but they will probably remain of permanent worth. In the future no real historian endeavoring to master the facts about the great political upheaval in Russia will care to ignore them. Is Russia the most tyrannical dictatorship of bloody despots that the world has ever seen? Is Russia the first step in the building of a new world order

whose keynote will be industrial democracy? We do not pretend to give here the final judgment of history, but we do claim to have made a sincere effort to portray the facts.

Thanks are due to the authors who have so painstakingly sought to present the truth as they found it, to the publishers for their assistance in making this a notable and usable series, and to all those whose labor, whether by hand or brain, has helped to give these volumes to the American public.

JEROME DAVIS,
Yale University.

ally do, the essential information to the making of a picture. And it is this picture more than a scientific presentation that I think will give value to the book. It ought to have a permanent place in the vexed years of Russia's adventure. Miss Haines tells her story and gives her information with the simplicity, the veracity, and obviously with the single purpose of sharing her intimate knowledge of Russia's attempts to give protection through health measures to her people.

LILLIAN D. WALD.

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HEALTH WORK IN SOVIET RUSSIA

CHAPTER I

INTRODUCTION

TEN years have now passed since the October Revolution brought the Communist Party into control of Russia. During that time there has probably been more written about different phases of the economic, social and political life there than has ever been written about a similar period in any other country. Truly surprising numbers of books, pamphlets and magazine articles have appeared, most of them, unfortunately, devoted to a spirited defence or denunciation of the present conditions. The unbiased objectivity of a camera lens is probably never possible to achieve in describing social phenomena, but too many recent writers about Russia have shown posters for propaganda rather than real pictures. What is unsensational and little advertised is apt to be overlooked, even though it may be a very fundamental factor in the new structure.

Because during these ten years it has gone rather doggedly about its own affairs, not irritating foreign nations in any way and devoting all of its energies to constructive work, we have heard very little about the People's Commissariat for the Protection of Health.

This silence on the part of journalists and authors is unfortunate for two reasons:—first, because it has given many Russians the impression that we are interested only in their spectacular or destructive activities, and second, because it has prevented us from observing the take-off of a number of very interesting experiments, especially in the field of Public Health.

The more significant of these are certain new methods of approach to the organization and administration of health work. To the present-day Russian physical health seems as important a factor in life as education. Therefore medical service has been put in the same category as the public school system, the state aiming to provide both of them freely for practically all citizens. This widening of the boundaries of public health work, the so-called "nationalization of health service" is the most important experiment that the Russian medical situation offers for observation, since no other country in the world is putting such a system so fully into operation.

Out of this initial project there have developed many other by-products of almost equal interest. The limiting of the working-day required of all doctors to six hours, and the opportunity thus given to them to carry on research work, private practice, or any other avocation they may wish in their ample leisure time, is an original contribution to the solving of the problem of the overworked professional man.

The organization of all workers in medical institutions (including doctors, nurses, orderlies, laundresses, stove men, chauffeurs, etc.) into the "Medical Workers' Union" is a solution of the problem of industrial relations which will seem even more revolutionary to many of us; yet the Union is growing in membership and the

idea is growing in popularity even among those Russians who at first repudiated all consideration of it.

Concrete examples of new medical institutions are also provided by Russia. A unique contribution to the treatment of tuberculosis is offered in the "night sanatoria," where working men and women in the early stages of tuberculosis may spend all their non-working hours in health-building surroundings, and yet live near to their families and to their places of work. Another unusual type of institution is the "forest school," a public boarding school in the country with outdoor classrooms and long periods of outdoor rest and play for malnourished city children who need three or more months of especially careful hygiene. The free diet dining rooms to which doctors may send patients requiring scientifically prepared food, just as they might require some scientifically prepared prescription, offer another example of experimental work in public health.

The reduction of the infant mortality from the 27.0 babies per hundred who died in 1913 to the 17.0 per hundred who died in 1923, notwithstanding the fact that the intervening years were filled with war, famine and disease, stirs one to enquire into the kind of infant welfare work which could bring about such an improvement. The report of visitors to Moscow that they have never seen such beautifully arranged and instructive health exhibitions; the attitude of the workers for prohibition, who fight alcohol because they classify it with the spirochete and the Koch bacillus as a social poison; the government's quite revolutionary attitude toward family limitation: all of these factors contribute to the picture of a new conception of health as a positive national asset.

Because there has been so little written in English

about the health work now being carried on by the Soviet Government, and because I have been able to see this work both at long and at close range, it has seemed worth while to write some account of what is being done there.

I went to Russia for the first time in 1917 while Kerensky was still in power, and lived for more than a year in a former *Zemstvo* hospital in a village of about 5,000 souls on the southeastern steppe. At that time I was a worker with the American Friends Service Committee which was carrying on medical and other relief work for Russian refugees and civilians. In the fall of 1918 we went to Siberia and spent nine months in Omsk, affiliated with the American Red Cross in refugee relief work, at a time when the epidemics of typhus, scurvy and small-pox were at their height. During 1920 I was with the Home Service Section of the American Red Cross in the mountainous western part of Virginia, and had the opportunity of seeing some almost Russian conditions in our own country. The latter part of that year I returned to Russia as the representative of the Friends to help with the distribution of milk, clothing and medicines to the children of Moscow, which in that year endured almost famine conditions. While I was there the great famine began and I accompanied a group of Russian doctors on the first tour of inspection of the famine area, where cholera, the black plague, scurvy and malaria were supplementing the famine's activities. My third visit to Russia lasted from February, 1925, to November, 1926, at a period when living conditions were much more normal and when I spent my time at first working in a hospital and then teaching nursing in the school for infant welfare workers in Moscow, with week-ends and vacations of travel

to other cities, to the Caucasus, and to the former famine area. This total of over five years' residence in various parts of Russia, during which time I learned to speak the language, not very correctly but rather fluently, has given me an opportunity to see the health work not only in large cities and in well-known industrial centers, but also in the primitive steppe villages and in remote mountain hamlets. In the pursuance of my work I have had several interviews with Dr. Semashko, the Commissar of Health, and with Dr. Lebedeva, Director of the Department for the Protection of Infancy. Letters from these two executives and from Dr. Schaeftel, head of the Bureau of Foreign Information in the Commissariat of Health, have made it possible for me to enter, without previous announcement, hospitals, day-nurseries, sanatoria and other medical institutions in the remotest parts of the country. Whether I was a visitor, a fellow-worker or a teacher, I have found the members of the medical profession (and in Russia this term includes workers other than doctors) most courteous, patient with my poor language equipment and eager to hear what I could tell them of health work in America.

Most of the information in these pages I have gathered at first hand from an almost daily contact with some branch of the health department. The statistics of course are not of my own compiling. Most of them have been taken from the official *Statistical Material 1913-1923* issued in 1926 by the Commissariat of Health. Although this book is a mine of information, there are occasional contradictions and more often annoying hiatuses. For example, the Russians have never kept mortality rates with the same inclusiveness as their morbidity rates, so that it is difficult to discover how serious some of their epidemics have been, or to

estimate the effectiveness of their therapeutic work. In the pre-revolutionary day it was the duty of the priest to collect the vital statistics of a village, since practically all the births and burials were known to him. After the Church and State were separated this cooperation ceased and for a number of chaotic years no reliable health records are available. It is only since 1925 that there has been legal and financial provision made for the general collection of vital statistics, and when one has sat beside a sleepy country doctor and watched him make up his statistical sheets at the end of a day's work one sometimes doubts the accuracy of the next issue of *Statistical Material*. The general trends in health work, however, are shown by these mass figures even if they may not be accurate to the last decimal; in certain instances where we have personal knowledge of the situation we have found it corroborated the more general findings.

In the chapter on the Fundamental Principles of Soviet Medicine I have tried to present the problem of a nation's health as it appears to the Russian Socialists; when that attitude is understood it is easier to appreciate the development of the organization of their health service.

Throughout I have used the Russian terms for geographic units of government: *gubernia*, *ooyzed*, and *volost*. These correspond roughly to our words state, county, and township, but the areas they represent are all much larger than in the United States; most of the *ooyzeds* are larger than most of our states, and one *volost* will often contain several villages of 1,000 to 3,000 population each. The abbreviations R.S.F.S.R. and U.S.S.R. refer to the Russian Socialistic Federation of Soviet Republics, and the Union of Socialist

Soviet Republics. The first is made up of the 32 central gubernias which we usually consider European Russia, as well as the states in the north Caucasus region and all of Siberia. The U.S.S.R. is a looser union of the R.S.F.S.R. together with the Ukraine, Georgia, Armenia, Azerbaidzhan, and the various Russian states in central Asia. Always in reading about Russia one must remember the enormous size of the country, comprising one-sixth of the land surface of the earth. Inhabiting this are more than 140,000,000 people of whom all but about 6,000,000 are engaged in agriculture; of the non-agricultural group about 1,600,000 are industrial workers, about 700,000 are transport workers, the remaining being office workers, teachers and civil servants, with a small minority engaged in private trade. It is over such areas and such masses of people that the health problems extend.

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In the chapter on the Fundamental Principles of Soviet Medicine I have tried to present the problem of a nation's health as it appears to the Russian Socialists; when that attitude is understood it is easier to appreciate the development of the organization of their health service.

Throughout I have used the Russian terms for geographic units of government: *gubernia*, *ooyzed*, and *volost*. These correspond roughly to our words state, county, and township, but the areas they represent are all much larger than in the United States; most of the ooyzeds are larger than most of our states, and one volost will often contain several villages of 1,000 to 3,000 population each. The abbreviations R.S.F.S.R. and U.S.S.R. refer to the Russian Socialistic Federation of Soviet Republics, and the Union of Socialist

Soviet Republics. The first is made up of the 32 central gubernias which we usually consider European Russia, as well as the states in the north Caucasus region and all of Siberia. The U.S.S.R. is a looser union of the U.S.F.S.R. together with the Ukraine, Georgia, Armenia, Azerbaidzhan, and the various Russian states in central Asia. Always in reading about Russia one must remember the enormous size of the country, comprising one-sixth of the land surface of the earth. Inhabiting this are more than 140,000,000 people of whom all but about 6,000,000 are engaged in agriculture; of the non-agricultural group about 1,600,000 are industrial workers, about 700,000 are transport workers, the remaining being office workers, teachers and civil servants, with a small minority engaged in private trade. It is over such areas and such masses of people that the health problems extend.

CHAPTER II

MEDICINE UNDER THE OLD REGIME

To understand the size of the problem which confronted the Commissariat of Health on its establishment in July, 1918, one must know something of the medical situation in Russia under the old regime. As in many other spheres of Russian life, here also there were the most diverse extremes of backwardness and enlightenment.

In general, the standards of medical education were high, and certain experimental laboratories and institutions stood at the very forefront of the scientific world. In 1847 Dr. Piragoff was using in St. Peterburg a method of anaesthesia which is only now being favorably reported on in New York; more recently the physiological research of Professor Pavlov has made all countries debtor to him; Metchnikoff's name was known even in the non-scientific circles outside of Russia; a thoroughly modern children's hospital with an almost luxuriant scientific and housekeeping equipment existed in Moscow, and the same description could be applied to one of the maternity hospitals in St. Petersburg.

These individuals and institutions however, were separate instances, the result of personal intelligence and of philanthropic generosity. Although clinics and memorial hospitals where poor people were treated freely could be found in all of the larger and many of the smaller cities, there was no organized effort on the part of the government, either local or central, to ensure medical

attention to the mass of the people in the cities. The number of philanthropic medical institutions never really met the needs of the sick, and except for one or two experimental child welfare centers prophylactic and educational health work was unknown.

In the country districts the situation was slightly different; there doctors were provided by the *Zemstvo* or regional authorities who had charge of the distribution of tax money intended for local purposes, such as schools, roads and hospitals. The value of these medical outposts varied greatly with the type of doctor in charge. In some cases they were really devoted to their work, receiving large numbers of out-patients daily and driving many miles through deep snows to patients in remote villages. Too often, however, they were men who had failed to make a living for themselves in the city and therefore had been forced to accept the poorly paid country posts, where they consoled themselves for the loneliness and isolation of their lives by heavy drinking and by accepting bribes from the peasants. It is still a very general tradition that "good" medicine must be paid for and that free medicine is only colored water. Very rarely would these country doctors perform any operations, and the expense of a trip to the city for such a purpose was prohibitive to most peasants. They made little or no effort to keep abreast of the modern developments in their profession and sometimes were no real help to the neighborhood in which they lived. During the summer of 1926 one of these old practitioners was found in a remote hill town whose only treatment for diarrhoea in little babies was cognac, and, if that failed, more cognac. A change or restriction in diet was never suggested to the mother, who probably continued her practice of nursing the baby whenever it cried and

The infant death-rate under the Czarist regime was admitted to be very high, the highest of any civilized country; 27.0 per hundred in 1911, when Norway showed 6.5, England 13, France 15.6 and Germany 19.2 (From Dr. B. S. Ginsburg's *The Protection of Motherhood and Infancy*, p. 15, Moscow, 1926.) But so long as the birth-rate was high enough to assure the normal growth of the population, little attention was paid to the death-rate. This loss of infant life was largely due to the lack of trained midwives in the villages, a lack which resulted in the ministrations of *babkas* or "old wives," whose practices were so crude and often so cruel that they are scarcely believable.

One responsibility that was felt by the government was for the prevention of widespread epidemics. Vaccination against small-pox was provided freely, and expeditions, sometimes under the direction of foreign specialists, were sent into territories infested with the black plague and malaria.

There was, however, no central health organization, the prevention of epidemics being directed from a small division of the Department of the Interior. The army and fleet had their own separate medical units, there were certain insurance companies sending doctors to their clients, some cities had their public institutions, but in general the peoples' health was in the hands of private practitioners and of benevolent individuals. These institutions and individuals had no common standards to comply with, no inspectors to unify their work and no program making for an organized campaign against disease.

CHAPTER III

THE FUNDAMENTAL PRINCIPLES OF SOVIET MEDICINE

WITH the founding of a socialized state all the needs and activities of individuals were scrutinized with a view to discovering which of them were of the fundamental and group character warranting their assumption by the state. Health was immediately recognized as one of these basic needs.

In a state predicated on the law that every adult should be a worker making some constructive contribution to the general welfare, it is not possible to consider disease as a person's private business, to be indulged in or not as he sees fit. Disease is seen to be harmful, not only to the person suffering from it, but to the state of which he is an economic and social unit. Illness, moreover, seldom comes in single instances to a community; even a common cold rarely stops with its original owner. Years ago governments which were not all socialistic felt a responsibility toward protecting their citizens from the so-called "contagious diseases" such as small-pox, diphtheria and yellow fever. In no civilized country are these left entirely to the initiative of the individual patient and the private practitioner. Many more diseases share this "contagious" character, but private physicians and the medical associations have taken alarm, sensing the danger that many of their patients might be deflected to free state clinics.

The difficulty of their position is greatly increased by the shifting of emphasis in recent years from curative to preventive medicine. There is no gainsaying the greater scientific and economic value of preventing disease rather than merely curing it or caring for its chronic forms. But only the Chinese have ever devised a system whereby a man pays his doctor so long as he is well, and collects a fine from the physician if he becomes ill. In Western countries the theory has been evolved that the state should assume the responsibility for sanitary inspection of buildings and food, for vaccination, for the periodic examination of school children etc., etc.; that is, for a gradually widening circle of prophylactic measures, for which the individual healthy citizen is slow in assuming financial responsibility. But the increase in prophylaxis should mean the decrease in individual cases of illness, and therefore, however unintentionally, the decrease in the income of private practitioners. The truth that "an ounce of prevention is worth a pound of cure" ultimately may be translated into dollars and cents. American medicine is now in this impasse. Our medical journals and influential physicians are at the same time eager to adopt the most modern and scientific attitude toward disease and yet are jealously on guard against what they feel to be the encroachments of "state medicine" when it tries to put this attitude into practical effect. We have not gone even as far as most European countries, who have recognized health as a state asset to the extent of creating governmental ministries for its protection. Officially we are still taking very much the same attitude toward the health of our citizens as did Czarist Russia. In some fields our mortality and morbidity statistics do not bear comparison with those of other countries; because we

we still rich in numbers we are content to be wasteful of human lives.

Russia broke with this point of view during the October Revolution of 1917 and started on the foundation of a new conception of State Medicine with the creation of the Commissariat of Health in July, 1918. Just as the banks and the railroads and the private trade were nationalized in those days, so medical institutions and the treatment of disease were made a state function and responsibility. In *The Foundations of Soviet Medicine*, an essay published in 1926, Dr. Semashko, the Commissar of Health, presents the point of view which distinguishes the health service of socialist Russia. "Soviet government," he says, "is a government by the masses in the cities and the country. This fundamental fact determines the entire character of soviet sanitation and medicine." "The health of the workers is the responsibility of the workers themselves" has become one of the slogans of Russia. "The nationalization of medicine does not mean, as some think, the closing of all private hospitals and the prevention of all private practice, but the actual *socialization* of medicine; i. e., the taking over by the state of the responsibility of providing for everyone at his earliest need a free and well-qualified medical treatment. Only then will disappear, like a shadow before sunlight, all private hospitals and all commercial private practice. This is the perspective of Communist medicine."

This goal is to be achieved by the application of five basic principles:

- A. The unification of medicine.
- B. The accessibility of medical aid to all citizens.
- C. Free medical treatment for all citizens.

- D. Medical treatment by qualified personnel.
- E. The placing of emphasis on prophylactic work.

A. The first step toward the practical realization of national health was seen to be the formation of an intelligent program and the organization of all the available medical resources into a unified system for its enforcement. The Commissariat, or, as we should say, the Department of Health was the organ through which this program was put into effect. The details of its organization will be more fully described later; here it is only necessary to say that all doctors, feldshers, nurses and pharmacists became civil servants, and all hospitals, sanatoria and drug-stores, became state institutions; unified schemes of medical work appropriate to rural conditions as well as others for towns and cities were drawn up and fitted into the general plan of volost, ooyzed and gubernia political organization; a standardization of hours of duty and of salaries based on professional responsibility and local economic conditions was worked out, to be applied throughout the country; programs of child welfare work and campaigns against venereal disease and tuberculosis were prepared on a nationwide scale; central institutes were established for research and teaching in various branches of medical science; to which provincial doctors could come for post-graduate study; the wholesale preparation of drugs and the purchase of those produced abroad was carried on as a state business, without the cost incident to private production and advertisement.

It is not only the Russians who have seen the economy of effort and of money involved in such a unification and systemization of the forces working for health. In his opening address to the American Health Congress

PRINCIPLES OF SOVIET MEDICINE

at Atlantic City in May, 1926, Dr. Lee Frankel of the Metropolitan Life Insurance Company said: "To put it as tersely as possible, are we ripe in the United States for an attempt to unite the various national voluntary health organizations in one compact body which shall not limit itself to campaigns for the eradication of any one particular disease, but whose main purpose shall be reduction in morbidity and mortality through a concerted unified attack on all disease? Is it the psychological moment to think in terms of national health rather than of special disease? I am convinced that a united organization, manned by representative men and women, with divisions and bureaus to cover every field of activity now covered by existing national health organizations, with a definite purpose to cooperate with existing official health bodies, either local, state or national, could revolutionize health work in the United States. Not the least of its activities would be the education of 110,000,000 people in preventive medicine and personal hygiene. Only when we have united effort, through the work of a unified association can we ever hope to bring about another dream, a united Federal Department of Health."

One could scarcely find a stronger witness to the inherent intelligence in the idea of the unification of medicine, which the Russian state has been the first to try to put into complete operation.

B. The accessibility of medical help to all citizens is also an essential part of the application of state medicine, but in a country of 140,000,000 people spread over 8 million square miles of territory the immediate accessibility of medical treatment to all becomes no easy matter. It is sure that many more doctors are now being graduated from the universities than before the Revolu-

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B. The accessibility of medical help to all citizens is also an essential part of the application of state medicine, but in a country of 140,000,000 people spread over 4 million square miles of territory the immediate accessibility of medical treatment to all becomes no easy matter. It is sure that many more doctors are now being graduated from the universities than before the Revolu-

tion, but there is also a greatly increased demand for them within the new institutions created under the socialized health program. A generally applied health insurance policy or a practical child welfare campaign in a city doubles the municipal positions open to doctors there. If these demands are met the villages are meanwhile left with little medical aid, and the steppes of the south-east and of Siberia are still more helpless. Everywhere this lack of personnel is recognized and regretted.

The same conditions are true of institutions as of personnel. It is on the program that medical institutions be open to all citizens needing such care, but it is by no means true that the financial situation of the central or of the local health departments permits this program to be carried out. There are indeed fewer hospitals in the country as a whole now than there were before the destructive years of war. What does exist, however, is a program of expansion which automatically goes into effect as revenue increases, an increase which will come with the improvement in harvests and industries. The growth of the health service may depend on economic conditions, but it is not a matter for political bargaining.

C. The third principle—free medical treatment for all—must at present be discussed in much the same terms as the accessibility of treatment. The original and the ultimate intention is that it should be free to all citizens, but as Dr. Kuchaedze, the Commissar of Health for Georgia, writes in *Fundamental Problems in the Structure of Soviet Medicine* (page 4), a pamphlet printed in Tiflis in 1926: "This principle unfortunately cannot now be completely carried out owing to the lack of material resources. From the moment of the inaugura-

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principle of soviet medicine—has a meaning peculiar to Russia, owing to the existence there of the feldshers, or non-qualified medical personnel, who still out-number the doctors and who from necessity are still carrying much responsibility in the rural districts. The policy of the Commissariat of Health is to reduce their number gradually by offering to them each year a certain number of scholarships in the medical schools, and by eliminating the feldsher courses so that no new feldshers will be trained.

At the same time a distinct propaganda for specialization is being carried on among the young doctors. Graduates from the general medical courses are urged to continue their studies along some special branch before accepting any practical position, and attractive courses of post-graduate work are offered with interne service, which is not included in the general program. These courses are very popular and it is possible that in time they may come to be required and that all physicians will be specialists. Excellent as this system may be for the complicated medical service of a city one is somewhat appalled at the dilemma of a rural community unable to afford more than one doctor, and forced to choose among pediatricians, surgeons, psychiatrists and dentists.

A campaign is also being conducted to improve and standardize the work of other medical personnel. Several nurses' training schools have been opened and classes are held in many institutions for the ward maids and orderlies.

E. The reorganization of Russian health work under the soviet regime came just at the time when "Prevention" was the slogan in medicine everywhere. It was a new point of view for Russia and it fitted admirably into the new Russian sense of values. Preventive medi-

cine deals with groups rather than with individuals, it seeks causes rather than symptoms, it aims to eradicate evils rather than to ameliorate or to cure them. It is easy to understand why "phophylaxis" has become the most popular medical term in Russia.

Many of the serious diseases there have been serious only because of the lack of attention to personal and public hygiene. Where the body louse is not tolerantly endured typhus does not spread, where the supplies of drinking water are pure typhoid fever and cholera do not flourish, but these diseases in the past have taken heavy toll from Russia. The methods which have almost rid the country of these dangers are now being applied to the reducing of tuberculosis, venereal disease, infant mortality, etc. The kissing of sacred images, eating from a common bowl of soup, the giving to young children of food partially chewed in an older person's mouth—to eradicate these sources of infection requires more than a doctor's prescription. A new word "dispensarization" has been coined to cover all the measures used in combating these diseases of society, as they are called. Dr. Semashko, in *The Foundations of Soviet Medicine*, says:

"An anti-tuberculosis dispensary differs from a simple out-patient clinic in this, that it aims not only to cure the sick person, but to examine into his living and working conditions; if his apartment is not sanitary it tries to help him to find another more sanitary. If the patient needs some kind of material help the dispensary finds this help.

"The dispensary inspects the factories and warehouses in its neighborhood and if it notices something dangerous to health on the premises (if they are full of dust, if there is poor ventilation, if poisonous gases are emitted)

the dispensary tries, by bringing pressure to bear on the administration of the business, to eliminate that danger.

"The dispensary carries on a widespread propaganda for sanitary instruction, by means of lectures and reports, not only within the dispensary, but also within the nearby factories and warehouses.

"Finally the dispensary maintains close relationship with the workers' organizations in its neighborhood; with the unions, women's clubs, the Communist Youth movement, and cooperative societies. At the dispensary there is always a Council of Social Aid (it is sometimes called "The Commission for Improving Conditions of Life and Labor") made up of representatives of these organizations.

"Thus a dispensary not only prescribes for sick people and sends them to sanatoria and hospitals, but also prevents disease, first of all by means of universal teaching of personal and public hygiene, since the great majority of diseases (typhus, small-pox, syphilis, tuberculosis, skin disease, etc.) grow out of the hygienic illiteracy of the population, out of ignorance of the simplest rules for protecting themselves from disease.

"This is what is meant by the 'dispensary method.' We wish all our medical work to proceed along these lines. . . . The goal of Soviet medicine—the reason it works not only for the healing but for the prevention of illness—is to create the positive health of the population.

It is this conception of a health service which shall be an active, not a passive, factor in the life of the people that distinguishes the Russian Commissariat of Health from the usual Public Health Department of other countries; its physicians are schooled not as policemen or inspectors, but as social workers and teachers.

CHAPTER IV

STATE HEALTH INSURANCE

It seems at first strange that not until 1922—five years after the Revolution—was there any organized form of state health insurance, an obvious service for a socialized state to undertake. But it must be remembered that in the early years of the Soviet regime factories and the larger business enterprises were not under state management, but were conducted by committees of the workers in those factories. Many of them had introduced health insurance as part of their running expenses, but these arrangements were accidental and not standardized. With the adoption of the New Economic Policy and the taking over by the state of the management of large-scale industry there was for the first time an opportunity for working out a unified program of social insurance, in which the Commissariat of Labor, the Trade Unions and the Commissariat of Health could all join.

This program includes provision for old age through pensions, the partial or complete support of those temporarily unable to find work, and the extension of medical aid to all ill or crippled workers, to wounded ex-soldiers and to the members of the immediate families of all these classes. Such an all-embracing social responsibility is naturally expensive, and anywhere from fifteen to twenty percent of the wage bill of any business enterprise, whether under state or private ownership, must

be set aside from the proceeds of the business to cover this tax. However, it takes the place of most of the public and private charity funds in other countries, since it aims to care for all the aged and the ill workers and those dependent on them.

Offices of the organization are set up in every community where there are 2,000 or more people eligible for insurance, i. e., workers for wages; there are few offices in the rural parts of the country as the great majority of peasants work their own land without the help of hired laborers. In every county seat there are administrative officers who establish the standards for pensions and other kinds of assistance in that locality, this decentralization allowing for variation in standards and cost of living in different places. The central headquarters in Moscow outlines the general principles and coordinates the work in all parts of the country, settles disputes, maintains a staff of legal advisors and inspectors who can be sent to any outlying district, and carries on an educational campaign regarding the benefits to be obtained by state insurance. (A more detailed discussion of organization and administration is given in *How to Set Up the Machinery of Social Insurance* by B. M. Feingold, published by the Commissariat of Labor, Moscow, 1926.)

It is only with the provisions for health service that we are concerned. This aid is usually given through the regular clinics and institutions of the local health departments, whose budgets are increased by subsidies from the insurance funds, but in places where these are inadequate the insurance fund may establish institutions of its own.

The basic institution is the "first aid station" required by law to be maintained in all establishments employ-

ing 100 or more workers. Medicines, dressings, instruments and a stretcher service are part of a first-aid station. A doctor or a feldsher must be continually in attendance there; his duties include treatment of emergency illness or accident and of minor short-time ailments. He is also the sanitary inspector of the plant and responsible for the installation of safety devices, better ventilation and proper toilet facilities. In general the Russian factories are still below the standards of American factories in these respects, but the Russian traditions of sanitation and hygiene are so primitive that what seems to us a rather mediocre achievement is often a distinct advance. There is the intention to keep these first-aid stations as emergency and prophylactic outposts only, and to have all genuine cases of illness referred to more central clinics having a specialized medical service. Insured workers and their families are given precedence at these general clinics and are being educated to understand that it is usually better to walk a mile and be treated by a specialist than to have immediate attention from a less qualified person. It has been found that a working man and his family average fifteen visits a year to out-patient clinics. The average number of patients seen by a doctor in an hour is seven and a half, and it is on this basis that the insurance department regulates the employment of its own doctors or the subsidy to the budget of the health department.

Free hospitalization is also given to workers and their families, the norm to be supplied by local institutions being one bed for every 100 insured workers and an additional bed for every 150 members of the insured workers' families. One maternity bed is allowed for every 200 working women. In Moscow it was found

that the average insured worker was ill 13 to 14 days out of each year and that the factory workers showed an even higher average—18 days a year. Those working on power sewing machines averaged 26 ill days a year, textile workers 19, leather workers 18, chemists 18, metal workers 17, typists 16, printers 14. The average length of time one patient occupied a bed was found to be 22 days, but there was a wide range in time according to the type of disease. For example, a tuberculosis bed had four patients a year, a bed in the nervous-disease ward six, a bed in the medical wards, fifteen, a surgical bed ten patients, a maternity bed twenty-seven patients in a year. (These figures are taken from *State Insurance and Medical Aid*, Moscow, 1926, pages 72 and 43.)

In order to save the cost of hospitalization of certain diseases the insurance funds maintain a home visiting medical service on the same basis as the out-patient work. Drugs, eye-glasses, crutches and other equipment are furnished freely, but where these supplies may be limited there are three categories of recipients. The first to receive help are those who by means of the equipment can go back to their former positions or to some new work of the same rank; the next to receive it are those who, with such help, can do some work; and finally come the members of the families of insured persons and those former workers who are completely invalidated.

The State Insurance Fund is also responsible for paying a full salary to all women for the six to eight weeks absence from work before and after child-birth. It arranges through a commission for the allowance given in place of a salary to all workers during protracted illness. This allowance does not encourage malingering.

ing as it is only about one-fifth of the original salary.

Since the financial resources of the insurance department are so often drawn upon to help workers ill with preventable disease (50 percent of the applicants for sick benefits in Moscow are victims of tuberculosis), the officials, like those of our own large insurance companies, have come to take a lively interest in preventive medicine. Venereal, tuberculosis and alcohol dispensaries are aided by insurance funds, as well as the various types of institutions under the Department for the Protection of Motherhood and Infancy. Many health resorts, vacation homes and sanatoria are also subsidized from these funds. In 1924 there were 25,000 patients sent to sanatoria by the insurance department.

In addition to this preventive work with individuals the insurance department is eager to investigate conditions in factories and working places, especially where some hazard to health is obvious. There is an Institute for Occupational Diseases in Moscow which carries on continuous research into the effect of different trades and different industrial processes on the workers' health. It maintains a 75-bed hospital, employs 13 physicians permanently and operates five different research laboratories. It is claimed that only under a system of state owned industry is it possible for the well-being of the worker consistently to be put ahead of profits to the industry; in some cases this means that quick, cheap (and dangerous) processes of labor must be replaced by slower and more expensive methods which do not imperil the workers' health.

Dr. Alice Hamilton, Professor of Industrial Hygiene in the Harvard Medical School, after a visit of investigation to Russia wrote in the *Journal of Industrial Hygiene* for February, 1925: "It is accepted that the

worker's welfare is far more important than what he produces. Consequently the difficulties which we encounter in this country when we wish to make a thorough study of a given factory or a given industry in which we suspect some unusual hazard are unknown in Russia. It is therefore easy to see what an excellent field for the study of occupational disease Soviet Russia presents. While we were there the Institute for Occupational Diseases was examining the litharge men from the rubber works, none of whom was ill; but since it was desirable to discover whether any were absorbing lead they were all instructed to report to the Institute at the end of the day's work and to spend the night there so that a full examination could be made. Dr. Friefeld in the hemotologic laboratory was finding interesting blood changes in most of them. There was no question of a sensitive or hostile employer, no question of an argus-eyed industrial insurance company, no question of frightening the men or of leading them to bring unwarranted claims for compensation and no fear on the part of the hospital that it might get into trouble with the insurance company and so lose the chance of having any more cases of suspected plumbism sent to its wards. Here the whole question could be treated as openly and as thoroughly as if it were a problem of pneumonia or typhoid fever. Given the fact that industrial medicine is recognized as a branch of the medical curriculum fully equal in importance to any other, that it is enjoying the services of some of the ablest men and women in the medical profession and that their work is meeting with enthusiastic cooperation and with no obstacles except the lack of money, it would seem that we are justified in looking for great things in this field to come out of Russia."

CHAPTER V

THE MEDICAL UNION

ONE of the unique contributions of present-day Russia to the problems of health work is the Medical Workers' Union, the professional organization to which belong all the workers in hospitals, sanatoria and other medical institutions of the country. To many Americans the idea of a doctors' or a nurses' "union" is distinctly unpleasant, conveying a mercenary connotation which is really not inherent in the word. Certainly in Russia the connotation does not exist, for the Medical Union was founded in 1920, at a time when all workers received food and lodging and clothing and recreation in return for their labor, but practically no salary in money. The aims of the unions of those days were educational and to some extent political, but not mercenary.

Just as there was a more or less successful attempt to eliminate the social differences implied by the two words "profession" and "trade," so there was an elimination of the professional organizations as they are known in this country, and a reorganization of all workers, whether mental or manual, into unions based on the kind of institution in which they worked. Thus there were founded educational unions, including teachers, artists, actors, janitors and scene-shifters; medical unions, including doctors, nurses, pharmacists, laun-

dresses and chauffeurs; as well as textile workers' unions; building trades' unions; and office workers' unions, including bookkeepers, typists, cleaners, etc.

The growth of the organization of medical workers has been evolutionary, the present union being the heir of several pre-revolutionary associations. In the early eighties the "middle medical personnel" of several provinces in Russia had organized themselves into professional societies for mutual aid. The term "middle medical personnel" included the feldshers, the midwives and the nurses. By 1905 there were seventeen such organizations which united in publishing the *Medical Workers' Journal* and were planning to combine into an All-Russian Association of Medical Workers. The abortive revolution of that year, however, caused the government to become very suspicious of all such professional groups and to take repressive measures against them. As a result there was a decline among these organizations both in interest and in unification until the successful revolution of 1917, when they again became very active. They continued, however, as a separate association of "middle medical personnel" until 1918, when they dissolved their individual union to help in founding the present All-Russian Medical Workers' Union.

The history of the smaller pharmaceutical workers' association is very similar, except that even as early as 1870 they had begun to unite and to work for better standards of education and living conditions for druggists. They were gaining some degree of success when they also were caught by the reaction following the attempted revolution of 1905, and with most other trade unions were driven into a semi-legal or illegal existence. From 1917, when the labor movement was

legalized, they again became active and were very successful in improving the standards of their work and wages. In 1919 the nationalization of drug-stores was carried out with the cooperation of the union members, but it was not until 1920 that they were willing to merge their separate union into the All-Russian Medical Workers' Union.

Of all the groups of medical workers the doctors were the slowest to see the advantage in an association which would include them on the same footing with the other workers for the people's health. Czarist Russia, like other Western countries, had its medical association, encouraging the exchange of scientific and social opinion and protecting the interests of the medical profession. This association continued after the Revolution and rather definitely resisted the overtures toward affiliation made by the All-Russian Medical Workers' Union.

The idea of the amalgamated union of all the health workers in Russia had been conceived by the Union of Middle Medical Personnel and under the driving force of the latter was founded in 1918. By 1920 the pharmacists, veterinary workers and sanitary inspectors had joined it and it was strong enough to go to the All-Russian Central Council of Trade Unions and obtain an injunction against the legality of the separate professional association of doctors. This latter organization was dissolved with considerable hard feeling, although a number of individual physicians accepted the invitation to join the victorious Medical Workers' Union.

The Union, however, realized its need of including in its membership the majority of the doctors if it was really to represent the medical workers of Russia. It therefore again approached the leaders of the former medical association with the suggestion that the latter re-

organize as a doctors' section within the Medical Workers' Union, and this compromise measure has finally been effected. At the first meeting of the new "doctors' section," representing practically all the physicians in Russia, a resolution was passed "recognizing the necessity of active cooperation of the Russian physicians with the organized proletariat and the mass of working people." The section also declared "that the Russian doctors should show their solidarity with the proletariat in the trade union movement and should enter as an organized body into the Medical Workers' Union, which is to be considered a non-partisan organization doing creative work. . . . At first the doctors were not very active in the union work although the resistance of the great mass of doctors to union membership ceased. But gradually the doctors' sections were drawn into union activities, working on the basis of the sections." The foregoing quotation is taken from *A Short History of the All-Russian Medical Workers' Union* (page 20) published in Moscow in 1923.

This history of the Medical Workers' Union has been given in some detail in order to show the practical steps taken to overcome what was in Russia, as it would be in any country, the prejudice of a highly trained, scientifically minded professional group against the apparent merging of its identity with less trained and even illiterate manual workers.

According to the union rules, the following are ineligible to membership, even though occupying a position in a medical institution: Persons employing laborers from whose work they profit financially; persons profiting from private trading; superintendents in private institutions having vested in themselves the right to hire and discharge other workers; criminals, members of the

pre-revolutionary police force, former White Army soldiers; priests or other church officials; physicians having a private practice and having no connection with any public service (this does not mean those private practitioners who practice only in the hours after their public service is over, for they may belong to the union); persons in prison or exile. The entrance fee is graduated according to the salary of the worker and the annual dues are 2 percent of the salary. Any assessments over this amount must be voluntary.

The routine meetings of these unions are apt to be vivid occasions, with a picturesque red-kerchiefed laundry worker in the chair, a woman doctor graduated from the Sorbonne as recording secretary, and committees including the tolerant, humorous-eyed director of the institution who may have been a famous specialist fifteen years ago, an excitable young doctor who is equally enthusiastic for communism and for medical research, a sleepy stove-man whose high boots reek of poorly cured leather, and several rows of whispering, stolid nurses and orderlies. The meetings last long into the night, as much of the detailed administration of the hospital or clinic is discussed and decided here. Complicated technical details have to be put into slow and simple language, a process often exacting heavy toll from the patience of the nimble-witted doctors, but when the session is at last over there has usually been worked out a rather remarkable understanding of the situation, together with the intelligent cooperation of different groups among the staff. These union meetings are a real school of democracy.

CHAPTER VI

DR. N. A. SEMASHKO, THE COMMISSAR OF HEALTH

TO THE leaders who are making history in the Russia of today, institutions, ideas, and people in collective masses constitute the interesting and determining factor in life, but to Americans, a greater value always seems inherent in the individual. If Nikolai Alexandrovich Semashko had accomplished in any other country what he has done in Russia, he would probably be a well-known figure in the medical circles of the world. The initiation and growth of the Commissariat of Health from nothing to its present enormous size is a monument to Dr. Semashko's mental energy and tact in handling men.

Before the Revolution there had been no central health organization although several different departments like the army and the railroads, were doing unrelated health work. In general, doctors, like other professional men in Russia, were not sympathetic to the workers' revolution, which deprived them of their property and private practice, and offered them in exchange hard work and low salaries as state officials. Out of this disaffected personnel and unorganized material setting Dr. Semashko has created an integrated Department of Health with a loyal group of men and women carrying out its complicated details over a wider area than that which

any other state controls. He has been able to do this because everyone recognizes the sincerity of his interest in the health of Russian people, whether they be Slav or Semite, Communist or Cossack, peasant or professor. He is everywhere recognized as a party man of old standing, but in his appointments and his support of efficient fellow-workers he seems never to question anyone else's politics. Therein is probably the secret of his having gained the respect and loyalty of so many of the medical profession in Russia to whom the theory of Communism is still abhorrent.

Dr. Semashko was born in the Orlov Gubernia in 1874. Growing up in the country he laid the foundation for a rugged good health which many radical leaders of Russia have lacked. Another characteristic which one senses on meeting him, and which was probably developed in his early years close to primitive conditions, is a quiet self-reliance, a practical ability to take care of himself and of others in any emergency, and this also is not a characteristic of all Russians. It is told of him that he showed very early much sympathy for the peasants and an intolerance for the way in which they were treated by the landowners. Once when he was quite a little boy he doubled his fists and started to fight a local official who had sent a young peasant, a friend of his, to jail because he had outraced the official's horse on the road. And yet this sympathy with the peasants' joys and sorrows never became sentimental. Perhaps from his very closeness to them he learned their weaknesses as well as their strength—their very human devotion to people rather than to ideas or ideals, and that selfish individuality bred by generations of wrestling single-handed with nature which makes them so uncomprehending of the meaning of socialism. Semashko

never became a Populist, although many educated people of his generation, inspired by Tolstoi, gave themselves to this movement.

The nearby schools gave him his early education—a rather formal and bookish education under strict, almost military, discipline. During the last years of his course at the gymnasium (a school which corresponded to our high school and junior college years combined) he sought mental stimulus outside of the state supervised curriculum. With a number of other eager young students he organized a club for the study of political and social questions. Although their attitude was not very radical the young men took themselves seriously and since those were the days of suppression of free thought and speech their professors also took them seriously. When the existence of the club was finally discovered most of the members were expelled from the school with a document prohibiting their entrance to any university, but Semashko was luckier than his fellows. He was an excellent student and had stood at the head of his class for several years, so that he escaped to the medical school of the University of Moscow with only a severe reprimand.

Coming to Moscow in 1893 he found a great many other students full of the same dissatisfaction with current political and social conditions as himself. This more mature group of young people was not content with a passive study of problems, but carried on a campaign of active propaganda. Reading clubs were organized and libraries of illegal books circulated among the intelligentsia, and much radical literature secretly distributed among the workers. Nikolai's father had died while he was still at school and his university education was obtained by his own efforts, this necessity to work

making it all the more difficult for him to find time to participate in the activities of radical circles. By his third year, however, he was already well known, and after some slight clash between the students and the police he was imprisoned for some months, together with several other leaders. The regimen was severe—small dark cells, no exercise, no reading matter, but finally they prevailed on the warden to give them one book. On unwrapping it they found it to be the Bible, in French. However, the Bible is more interesting than many would believe, and besides, Semashko became a very good French student during the next three months. At the end of that time he was exiled to his old home in the Orlov Gubernia, to be under police surveillance for a year and a half, and permanently expelled from the Moscow University.

While in the country he read omnivorously in science, history, philosophy and political economy, and also conducted a Sunday-school for workers on the railroad. These Sunday-schools were very popular and a legal means of educating illiterate adults, their political, social or religious significance depending largely on the personality of the teacher. By this time Semashko was teaching Marxian Socialism in his school. It is significant that he chose railway workers, and not his old friends the peasants, for pupils.

In 1897 his exile was over and he immediately entered Kazan University in order to complete his medical course. Again throwing his energy into radical channels we find him organizing secret political clubs among the city workers. In these activities he met and became the friend of Rykov, the present prime minister of Russia. Also he met an enthusiastic young woman student burning with zeal for social service, who became his

wife. In those early days she helped him with his clubs and with the underground distribution of literature, until in 1901, during a sympathetic strike of the students on behalf of some poorly paid factory workers, Semashko was imprisoned as one of the leaders of the demonstration. After several months' imprisonment he was released, but was refused permission to enter the city of Kazan or any other center of commerce. Owing to this prohibition he settled in the suburbs of the city and with considerable difficulty finished his medical studies and took his final examinations.

His first independent medical practice was in the Samara Gubernia, but in 1904 he moved to Nizni-Novgorod where he immediately became active in underground political work. The next year he was arrested again, and imprisoned for about a year. Having now the reputation of being a dangerous radical he knew that he would be so watched that further activities would be almost impossible, and on his release from prison he left Russia to join the group of emigrant Russians in Geneva.

Plekhanov, his mother's brother, was there the leader of the Menshevik Socialists and as such distinctly cold toward his Bolshevik nephew. But there also he met and became the personal friend as well as the co-worker of Lenin. Pamphlets and journals were prepared here for distribution in Russia and other countries; party policies were fought over and adopted in semi-secret all-night sessions. It was a frugal, feverish life, exceedingly intellectual and unpractical, but very satisfying to the eager spirits of the participants.

In a few years the split in the Socialist Party was so serious that the Bolshevik group under Lenin's leadership moved to Paris and the Semashko family joined

them there, settling in the suburbs where their home and their children provided happy recreation for the serious idealists who were the parents' friends. Dr. Semashko supported himself by his medical practice, but found time to be secretary of the Foreign Bureau of the Central Committee of his party and to devote much energy to the founding of a school for workers in Paris, and to speak publicly for social insurance, and for the eight-hour day. By 1913 the group of agitators were under such suspicion from the French government that it was necessary to find another home, and this time Dr. Semashko left the central cities of Europe for the Balkans where he worked as a doctor more or less obscurely until the March Revolution in Russia.

As soon as possible he tried to reenter Russia, but found that the Kerensky government was not especially hospitable to such a well-known Bolshevik as himself. He was detained at the frontier for several months, but finally entered Moscow in September and resumed both his medical and his political activities. He became a councilman for the Zamoskovresky ward, took part in the October Revolution and immediately afterwards was made head of the Moscow City Health Department.

This was an unorganized jumble of private hospitals without funds on which to operate, a few wretchedly equipped public hospitals and a dwindling staff of disgusted doctors, feldshers and nurses. While he was trying to bring some cohesion and plan of work to this mass of material the whole Soviet government moved down to Moscow from Petrograd, and almost immediately Lenin asked his old friend Semashko to draft a scheme for a Department of Health on a nation-wide scale.

To one who had been thinking in collective terms for

so many years the paper plan for such a department was not difficult. The really great accomplishment has been to vitalize the plan. Socialized medicine has never been and cannot be a source of revenue to the state; on the other hand, like a public school system, it is tremendously expensive, and from the beginning even some of the Communists could see it only in that light. Semashko had Lenin and several others behind him in the fight for the recognition of the People's Commissariat for the Protection of Health, but after it was created there remained the problem of making it work. Here Dr. Semashko was more alone, for the majority of people with whom he had to deal belonged to the aristocratic-minded old medical profession among whom Lenin's approval was not a conspicuous help. The health conditions in Russia at that time, though exceedingly bad for the country, were perhaps of some assistance to the newly established Commissariat. Epidemics of typhus, cholera and malaria were raging; typhoid fever, small-pox and scarlet fever were increasing. In such a crisis it was easier to appeal to any physician's loyalty to his profession, and also easy to make everyone appreciate the necessity for state control of the medical situation. By the time the worst years of plague and famine were over and a more constructive policy of prophylactic work brought into consideration, the Commissariat of Health was firmly marching, and the Commissar was granted by all to be a wise general of forces.

From 1922 to the present time have been years of gradual expansion and consolidation. Formerly famous specialists found themselves again at the head of their profession, irrespective of their political beliefs—that is, so long as they gave their scientific activity their whole attention, which the majority wanted to do. Dr. Pavlov

head of the Institute for Preventive Medicine in Leningrad, Dr. Speransky director of the Institute for the protection of Motherhood and Infancy in Moscow, and they with many others have wider opportunities and facilities for research than was possible in their former days of private practice. There are positions open to every doctor in Russia; two women physicians at least who were formerly nuns and who still wear their religious costume are now being employed by the government.

Much of the doctors' willingness to work when people of other professions have sabotaged, much of the tolerance toward them on the part of a somewhat politically suspicious government is due to the general confidence in Dr. Semashko. Of all the Commissars he is the easiest to approach, the only requirement being that one put into writing one's reason for seeking an interview with him, and then wait one's turn in an ante-room decorated with signs "Smoking Not Allowed in the Offices of the Commissariat of Health", "Do Not Shake Hands; It Is a Waste of Time and May Spread Disease"—slogans which are directed against two of Russia's favorite habits. The Commissar himself is short, fat and jovial, definite in his questions and answers, showing a close and realistic knowledge of the many details of his department. One comes away from an interview feeling that one has been face to face with one of the real builders of the new Russia.

CHAPTER VII

THE ORGANIZATION OF THE COMMISSARIAT OF HEALTH

WE can better understand the internal organization of the Commissariat of Health if we first orient it in the general scheme of Soviet Government. The following extract from the *Guide to the Soviet Union*, published in English by the U.S.S.R. Society for Cultural Relations with Foreign Countries will make this plan clear:

"The fundamental nucleus of the Soviet power is the Soviets [*Soviet* is the Russian word for council] of the productive unit; i.e., the village in the country, and the factory or office in the city. The soviets are elected annually by all the working people. . . . The Soviet Congresses of the various provinces and of the Autonomous Republics elect delegates to the Union Congress. . . . The Union Congress of Soviets [The Union Congress of Soviets corresponds to our Congress] is the supreme organ of authority, having both legislative and administrative functions. . . . The actual work of legislation, on the basis of the principles laid down by the Union Congress, is carried out by the Central Executive Committee of the Union Congress . . . [which] is vested with the authority of the State during the intervals between the [annual] meetings of the Union Congress. Simi-

larly the local authority is vested in the local Executive Committees that are elected by the local Congresses and are responsible to them. . . . The work of the Council of People's Commissars [The Council of People's Commissar corresponds to our Cabinet] of the U.S.S.R. is carried on within the limits prescribed by the Central Executive Committee which elects it. Unlike the ministerial cabinets of parliamentary countries the Council of People's Commissars, within the sphere of its activities, possesses not only administrative but also legislative authority. The Council of People's Commissars is composed of the Chairman and his deputy and ten People's Commissars responsible to the Central Executive Committee for the different branches of the affairs of the State."

In other words, one may say that in Russia the Cabinet officers are chosen by the permanently sitting executive committee of the Congress and that the Cabinet is legislative as well as executive authority, although ultimately it is responsible to the Congress for all its activities. The Commissar of Health corresponds to one of the Secretaries in our Cabinet and the Commissariat of Health to one of the departments of our Federal Government.

It was actually founded by a decree of the Council of People's Commissars in July, 1918, but its present status dates from a statute promulgated by the same body in 1921. Its aim is put forward in Article I of its statute as follows: "The People's Commissariat of Health is responsible for all matters involving the people's health, and for the establishment of all regulations promoting it, with the aim of improving the health

standards of the nation and of abolishing all conditions prejudicial to health." Here one sees the intention more fully emphasized by Dr. Semashko's words quoted in the previous chapter, to make positive health and not just the curing of disease, the foundation of the government policy. Prophylaxis is not to be a fad of a moment, but a part of the law of the country.

Article II of the statute gives the duties of the Commissariat of Health, indicating the practical paths leading to the goal:

(a). The protection of motherhood and infancy; the protection of the physical development of growing youth.

(b). The drawing up of sanitary regulations for cities and villages and the organization of sanitary inspection.

(c). Campaigns against social and infectious disease.

(d). The maintenance of hospitals and other curative institutions.

(e). The protection of the health of the Red Army and Navy.

(f). The provision of expert legal and medical advice as well as treatment for wounded ex-soldiers and those incapacitated for labor.

(g). The preparation and publication of statistical data relating to national health conditions.

(h). The establishment and maintenance of research institutes dealing with all scientific and practical questions in the sphere of health.

(i). The organization of medical instruction in cooperation with the Commissariat of Education.

(j). The drawing up of regulations for education in hygiene.

(k). The supervision of all curative institutions as well as those dealing with public sanitation; the responsibility for the equipment, instruments and other property of these institutions.

(l). The widespread publication, to institutions and to private citizens, of new and valuable discoveries in the sphere of health conservation.

(m). The responsibility for the carrying out of all laws and ordinances pertaining to health.

(n). The responsibility for the activity of all medical departments.

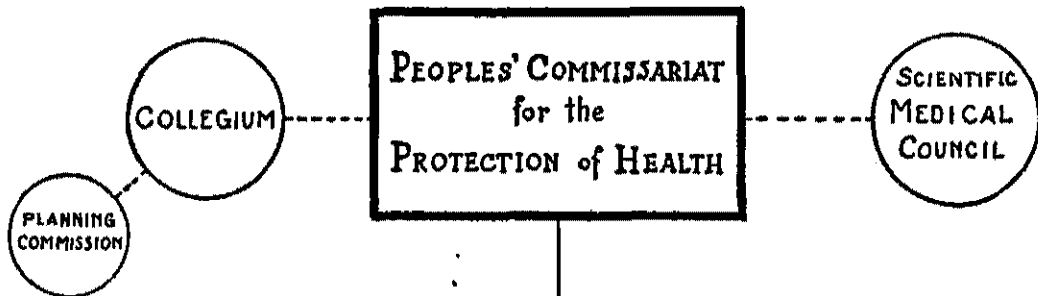
These functions are given in such detail in the statute itself that very little supplementary comment is needed to explain them. It can be seen that much of what we call social service is here definitely included in the health program.

The Commissariat is situated in a large office building in the center of Moscow; the three advisory committees and the nine departments into which the administrative work is divided have their main offices in the same building, effecting thereby an economy of time, space and personnel. The diagram on the following pages shows the internal organization of the Commissariat and the relationship of its various departments. At the head is the People's Commissar for Health, chosen by the Central Executive Committee, and sitting as a member of the Soviet of Commissars. This position has been held by Dr. Semashko ever since the formation of the Commissariat in 1918. As his immediate assistants, advising him in all important decisions, are

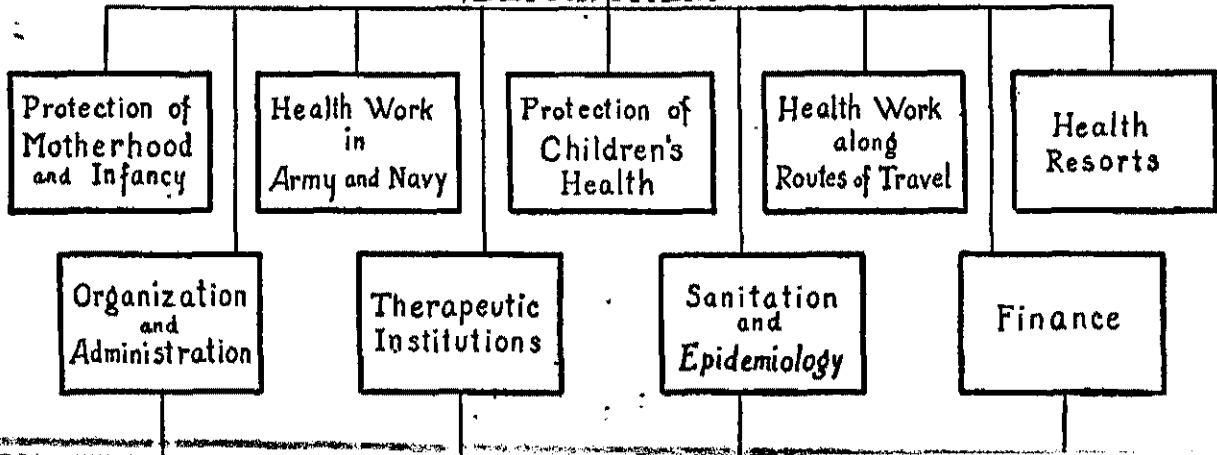
the members of the Collegium. This body is made up of the Commissar, the Assistant Commissar (who is also the President of the Russian Red Cross and the Chief of the Health Department of the Army and Navy) the President of the Medical Workers' Union, the head of the Finance Bureau of the Commissariat, and a representative of the peasants. At all meetings of the Collegium, moreover, there are present various other people whose interests are involved in the discussions of that day, or whose advice is sought on some proposed legislation. These people may be department heads, executives of institutions, scientific specialists, or even representatives of other commissariats or non-medical trade unions. A subsidiary organ of the Collegium is the Planning Commission, which has the duty of working out in practical detail the suggestions of the Collegium, of fitting them into the active work of the department and of submitting them to the Collegium for its final approval before they become actual administrative orders.

Parallel with the Collegium, but without its administrative responsibility, is the Scientific Medical Council, a group of about thirty specialists in various branches of medical science, who must give their expert advice regarding the scientific foundation for all the health regulations drafted by the Commissariat. Almost all of the members of this Council are directors of the various State Scientific Institutes and have back of their decisions the results of research in the best laboratories of the country. They may invite to the Council meetings any person whose services they may consider necessary for the better understanding of the matter in hand. Beside its advisory function the Council is authorized to call congresses of medical workers, to institute de

**DIAGRAM OF THE
PEOPLE'S COMMISSARIAT
FOR THE PROTECTION OF HEALTH**



DEPARTMENTS



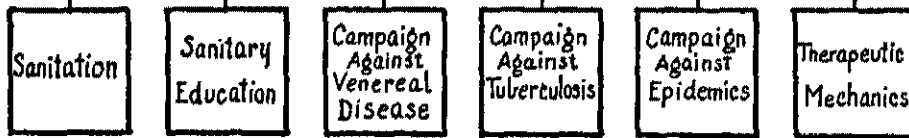
BUREAUS



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bates and discussions, and to appoint commissions to study any phase of health. It is a self-perpetuating body, but new members must be approved by the Commissar.

The State Scientific Institutes whose research supplies the basis for the activities and decisions of the Scientific Medical Council are a very interesting and important part of the work of the central Commissariat of Health. In America we are accustomed to think of government funds being expended only for proved types of work, leaving to private resources or foundations the encouragement of all experimental research. Quite the reverse is true in Russia, where the resources of the state are applied to the investigation and discovery of new scientific material and methods. These Institutes include in their function not only research, but also the training of specialists in various branches of medicine such as tuberculosis and X-ray work, and the maintenance of model institutions whose equipment and administration can be copied in the provinces as soon as local funds will permit. The titles of the State Scientific Institutes located in Moscow show the wide range of medicine covered by their activities:

1. The Microbiological Institute.
2. The Institute of Hygiene and Sanitation.
3. The Institute of Experimental Biology.
4. The Institute of Tropical Diseases.
5. The Institute for the Control of Sera and Vaccines.
6. The Institute for the Study of the Physiology of Nutrition.
7. The Biochemical Institute.
8. The Tuberculosis Institute.

9. The Institute of Physical Therapy and Orthopædics.

10. The Institute of Therapeutic Apparatus.

11. The Institute of Biologic Physics.

12. The Venereal Institute.

13. The Dental Institute.

14. The Institute of Social Hygiene.

15. The Institute of Physical Culture.

16. The Institute for the Protection of Motherhood and Infancy.

17. The Institute for the Protection of Children's Health.

18. The Balneological Institute.

Besides these there are several other Institutes, mostly for bacteriological research, maintained by state funds in other cities. The work of some of these institutes will be described in more detail in connection with the administrative departments whose practical work they supplement.

As the diagram following page 46 shows, the Commissariat of Health is divided into nine administrative departments, as follows:

A. The Department of Organization and Administration, which has the most complicated duties. Its sub-divisions are:

a. The Bureau of Instruction and Information.

b. The Bureau of Coordination.

c. The Bureau of Budgets.

d. The Bureau of Miscellaneous Matters.

e. The Bureau in Charge of the Central Library.

- f. The Bureau of Statistics.
- g. The Bureau of Foreign Information.
- h. The Bureau in Charge of Personnel.

Every foreigner interested in learning at first hand something of the health work in Russia soon becomes acquainted with one of these Bureaus, that of Foreign Information. Its courteous director, Dr. Schaeftel, makes great pains to help all visitors to understand the organization of Soviet state medicine and to see as many of the Russian health institutions as they wish. But his first duties are really in the reverse direction, for his bureau is the link between the Commissariat of Health and the medical work of the Western world. All the foreign medical journals of importance pass through his bureau; connections are made with representatives of Russian health work in England, America, Germany, Italy, France and other countries; foreign specialists and delegations are invited and welcomed to Russian medical congresses; a Russian-German Medical Journal is published in cooperation with a group of German scientists; and membership is maintained in the Section of Hygiene of the League of Nations and in other international organizations.

B. The Department of Therapeutic Institutions is the most important of all the departments from the point of view of the financial outlay involved. It supervises all regular hospitals and out-patient departments in the cities and rural communities and constitutes the solid background of the practical medical work of the country. Seventy-seven percent of the local health department budgets, as distinct from the budget of the central Commissariat, is devoted to this branch of health work,

evidence of how much better it is understood throughout the country than the newer branches of prophylaxis and sanitation which must depend for their promotion largely on the central budget. A considerable proportion of the funds for the maintenance of hospitals, sanatoria and out-patient departments is received from the Health Insurance Department of the Commissariat of Labor. All industrial workers and office workers in state, cooperative or private business are automatically insured at the time of accepting employment. The large surplus of money from this source is used for opening and maintaining institutions which give special medical attention to insured persons and their families. The work of the Department of Therapeutic Institutions is divided into:

- a. The Bureau of General and Specialized Medical Aid.

- b. The Bureau of Pharmaceutical Aid.

- c. The Bureau of Medical Aid to the Insured.

C. The Department of Sanitation and Epidemiology is closely allied to the Department of Therapeutic Institutions, but places the emphasis of its work on preventive measures. It is subdivided as follows:

- a. The Bureau for the Campaign Against Epidemics.

- b. The Bureau for the Campaign Against Tuberculosis.

- c. The Bureau for the Campaign Against Venereal Disease.

- d. The Bureau of Sanitation.

- e. The Bureau of Sanitary and Hygienic Education.

- f. The Bureau of Therapeutic Mechanics.

he activities of the first three of these bureaus will be described in detail in other chapters as they offer good samples of the application of the new attitude and principles of Soviet Medicine.

D. The Department for the Protection of Motherhood and Infancy occupies a middle place between the departments devoted to prophylaxis and to healing, as it has under its direction institutions of both types. Its maternity hospitals are places of actual care for ill people, while its infant welfare stations are intended only for well babies. Much of the work of the department is along the lines of health propaganda and will so be described in greater detail later.

E. The Department for the Protection of Children's Health supplements the work of the preceding department by protecting the health of children from the ages of three to eighteen years.

F. The Department of Health Work in the Army and Navy has entire charge of health and sanitation among the soldiers and in the army camps and in the navy; it has its own regional administrative centers, independent of any local health department, and its own separate budget. The Assistant Commissar of Health is the chief of this Department.

G. The Department of Health Work along Routes of Travel is also responsible directly to the central Commissariat, without control by local departments. It also has its own regional administrative centers, which supervise the sanitation of all railroad lines and docks, and the hospitals and clinics maintained throughout the country for railway and merchant fleet employees and their families. In the provinces the representatives of this department become members of the local boards of health so that the friction and overlapping of their work

and of that of the regular local civilian medical institutions may be minimized.

H. The Department of Health Resorts was created to meet the necessity of organizing and correlating the service of sanatoria and vacation homes throughout the widespread area of their distribution.

I. Finally there is the important Department of Finances, with its three divisions:

- a. The Bureau of Estimates.
- b. The Bureau of Bookkeeping.
- c. The Bureau of Operating Expenses.

As we have seen, the original plan for the Commissariat of Health placed its maintenance entirely on the central government, but since May, 1922, when the New Economic Policy became effective, most of the local institutions have been supported by local taxes and by the insurance funds. The central Commissariat is still responsible for:

- a. The upkeep of the "flying squadrons" ready to combat sudden outbreaks of epidemics anywhere in the country.
- b. The support of laboratories making vaccines and sera.
- c. The support of several research laboratories.
- d. The maintenance of model institutions, showing how best to campaign against the social diseases, to protect children's health, etc., and of certain model rest and vacation homes for workers and peasants.
- e. The maintenance of certain hospitals in outlying regions which care for more than a local popu-

lation; e.g., a psychiatric hospital in Siberia, several leprasoria.

f. The maintenance of hospitals for crippled ex-soldiers.

g. The maintenance of a staff of medical experts required as witnesses in the law courts.

h. The purchase of medicine from abroad.

The total amount of money spent on health work in 1925 (the last year for which the figures are available) was 180,462,900 roubles, or about ninety million dollars.

The sources of income for health work in the U.S.S.R. in 1925 were:

a. The central Commissariat budget	10.5%
b. The state budgets of Autonomous Republics	1.4%
c. Income from investments .....	.2%
d. Income from vacation homes .....	.6%
e. Local budgets from taxes	48.8%
f. Amount set aside for repairs.....	1.1%
g. Insurance and other special funds	27.7%
h. Budget of Army and Navy Departments	9.7%
Total	100.0%

(From the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress*, p. 87.)

It is also interesting to see the way in which this money was spent. According to the same source (page 4), this was as follows:

DISTRIBUTION OF FUNDS FOR HEALTH WORK IN
R.S.F.S.R. IN 1925

a. For hospitals and out-patient departments	77.0%
b. For protection of motherhood and infancy	14.0%
c. For sanitary and hygienic education.....	2.0%
d. For sanatoria	1.0%
e. For campaigns against contagious diseases .....	.6%
f. For psychiatric treatment .....	.4%
g. For unclassified purposes	5.0%
Total	100.0%

The figures given above were compiled from the expenditures of the local health departments, as these are much more representative of the health work in the country as a whole than the figures of the central Commissariat which would be more heavily weighted by administrative and experimental activities.

The work of most of these departments will be described in more interesting detail in later chapters, but a clearer appreciation of the organization and administration is gained from the rather dry information afforded in the working diagrams of the Commissariat, just as the blue prints of a house may give a better idea of the architect's intention than the complete model of one room.

For those who are interested in this administration and organization it may be worth while to describe the plan of one of the Bureaus to the point where it is possible to see exactly how the individual worker or peasant is

reached. Following page 56 is shown diagrammatically the administrative units of the Bureau for the Campaign Against Venereal Disease, which is one section of the Department of Sanitation and Epidemiology.

In a given city, for example, the Venereal Dispensary belongs definitely to the local health department, but this department is subdivided into bureaus corresponding to those of the central Commissariat, so that while the dispensary is expected to depend on local funds for its support, it works under the scientific direction of the specialists of the central organization. The same principle applies to the city hospital, maintained by the Department of Therapeutic Institutions of the Territory or organized health organizations.

The functions of the City Venereal Dispensary (and in large cities there may be several) are:

- a. The education of the population in social hygiene.
- b. The carrying on of a campaign against prostitution.
- c. The treatment of cases of venereal disease.
- d. The examination of contact cases.

The first two of these functions are achieved by means of social service methods: lectures, moving-pictures and poster exhibits are used to instruct factory workers, students, women's organizations, etc. in the problems of social hygiene; prostitution is attacked by police methods and by means of finding other work for the prostitutes who are willing to accept it. The last two functions are of a more medical character. The doctors who are on duty in the dispensary are specialists trained by post-graduate work usually in the State Venereal Institute.

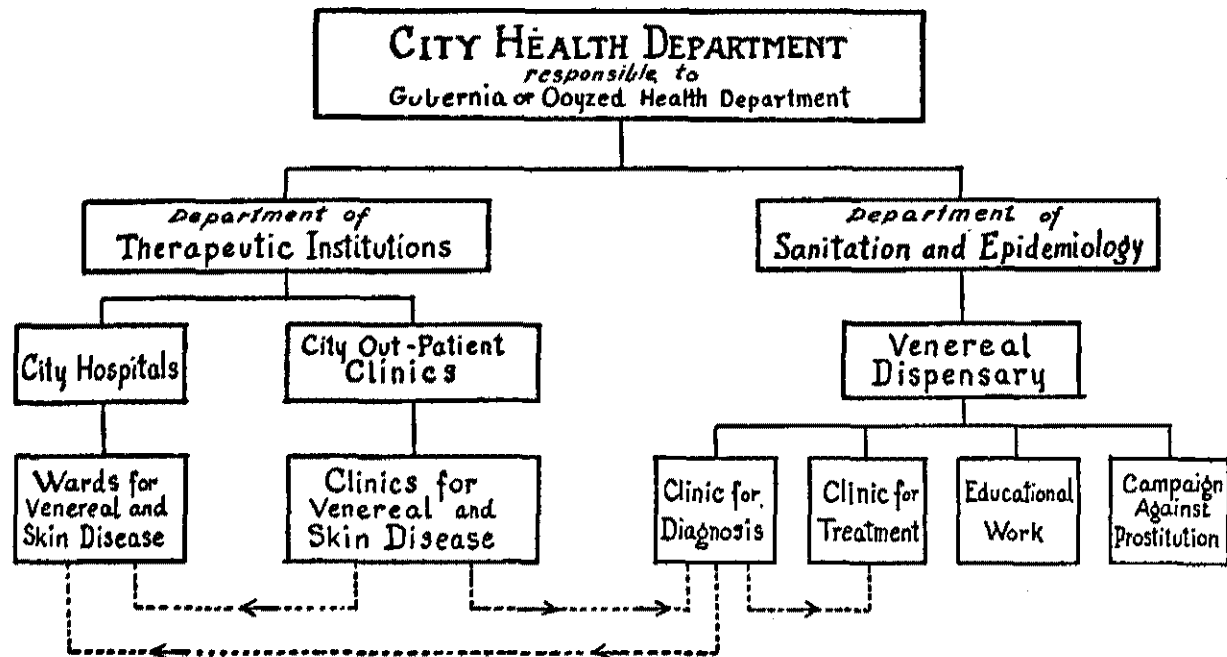
If, therefore, any case of venereal disease presents itself to the out-patient department of the city hospital or to the city clinics, it is immediately directed to the venereal dispensary. This is the explanation of the dotted line with the arrow pointing toward the venereal dispensary. On the other hand the city hospitals are expected to maintain a certain number of beds for venereal cases, to which the doctors of the dispensary (which has no facilities for permanent bed-patients) may send those too ill to be ambulatory patients. This latter connection is represented by the dotted line leading toward the city hospitals.

In the villages the general plan of work is the same. The permanent venereal stations here are very small; they have the same relation to the village hospitals that the city dispensaries have to the city hospitals.

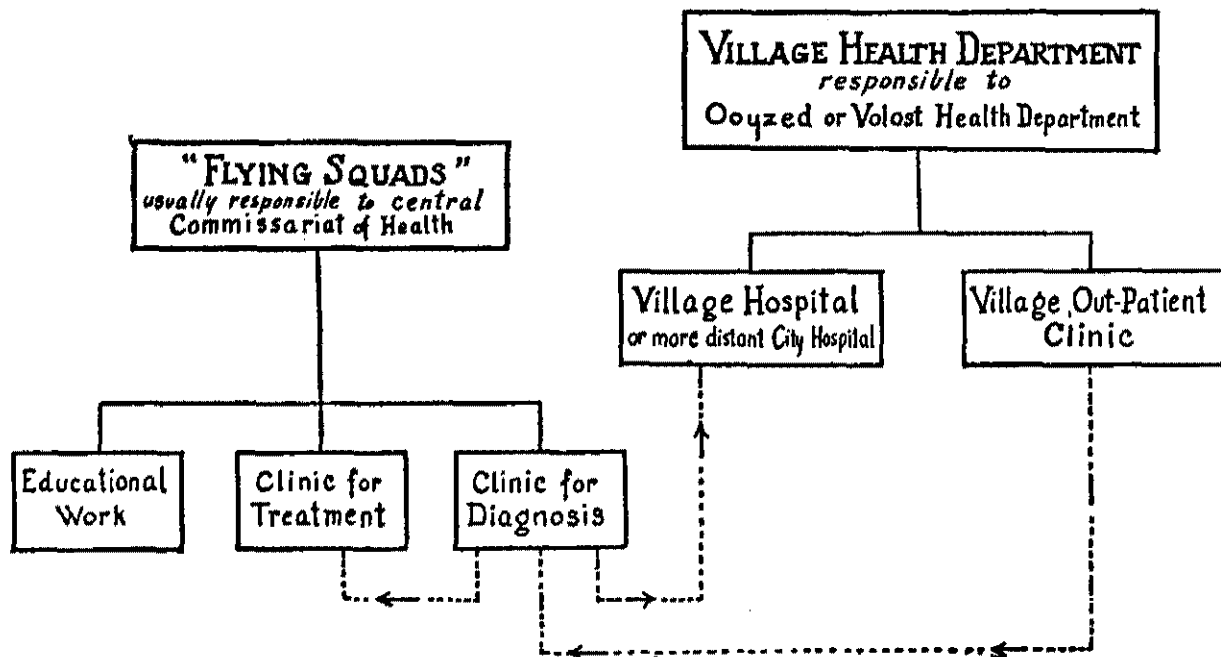
What is more frequently found in the country is a "flying squad;" i. e., temporary clinics with special doctors, laboratory equipment and medicines sent for a limited time into a rural neighborhood to make a survey and to examine the population. Treatment is carried on for a time and an intensive educational campaign adapted to the peasants' understanding and living conditions. Then the active cases are turned over to the regular local medical facilities for a continuation of the treatment and the "flying squad" moves on to another neighborhood. The permanent stations for such specialized service, as well as the "squads," are usually supported by non-local funds.

The Bureau for the Campaign Against Tuberculosis has an almost identical outline of work, with corresponding institutions and connections. Other bureaus have equally detailed plans, appropriate to the type of work they are doing.

LOCAL ORGANIZATION FOR CAMPAIGN AGAINST VENEREAL DISEASE, IN CITIES



LOCAL ORGANIZATION FOR CAMPAIGN AGAINST VENEREAL DISEASE, IN RURAL NEIGHBORHOODS



In addition to showing the plan of one definite branch of health work this diagram also indicates the general organization in the provinces. Corresponding to the Central Executive Committee of the central government there are local gubernia, ooyzed and volost executive committees. These committees, which are the permanent local units of government, are made up of representatives of all branches of local government, among them being one or more representatives of the health department. In so far as the administration of medical matters is concerned the local executive is the final authority, even though its make-up be only slightly medical in character. It is charged, however, with carrying out all the laws and regulations of the central Commissariat of Health, by which it is directed and controlled in its medical and sanitary activities. The local health departments, as is shown by the diagram of the Bureau for the Campaign Against Venereal Disease, are divided into different bureaus corresponding to the scheme of the central Commissariat. In connection with the provincial and rural health departments are local "Sanitary Councils," which occupy a position somewhat analogous to the central Collegium. These Councils are made up of representatives of the local workers and peasants, of the trade unions, of the Communist Party, etc. and have the double function of general advisers to the medical officials and of interpreters of the work of the health department to the community.

This somewhat detailed description of the central and local organization of health work which has just been given, applies in its definite particulars only to the R.S.F.S.R. The Union of Socialist Soviet Republics has no Union Department of Health, but each republic has its own Commissariat of Health whose general or-

ganization and promulgations are very similar to those in Moscow. In the 1923 Constitution of the U.S.S.R., is a clause giving to the legislative body of the Union the right "to draw up common regulations in the sphere of health." Of more practical importance than formal laws, however, in coordinating the health activities of the different parts of the country, are the frequent congresses on many phases of health work. These congresses are usually held in university towns irrespective of their political or geographic situations and are attended by doctors and other medical workers from all parts of Russia.

CHAPTER VIII

THE DEPARTMENT FOR THE PROTECTION OF MOTHERHOOD AND INFANCY

WITHOUT doubt the most energetic department in the Commissariat of Health is that presided over by Dr. Vera Lebedeva and devoted to the protection of motherhood and infancy. It had a challenging field of activity open before it on its organization in 1918—the highest infant death rate in any civilized country. When in pre-war days the mortality of infants under one year of age registered in England 13 per hundred and in Germany 19.2 per hundred, the Russian rate was 27.0 (according to *The Protection of Motherhood and Infancy*; Moscow, 1926, p. 15, by Dr. B. S. Ginsburg). These figures were already troubling pediatricians and philanthropically minded citizens before the Revolution and certain tentative efforts to improve conditions were being made along the lines of private charity. Occasional infant welfare centers and milk stations were to be found in Odessa, St. Petersburg, Moscow and other cities, but they were of a frankly experimental character and had no unified program.

With the outbreak of the Revolution and during the first terrible years of bloodshed and uncertain victory there was a great need, admitted even by those steeled to ruthless deeds, for some practical expression of the idealism which was hidden in the heart of the movement. Much of this need was met by an emotional tenderness

for children and an intellectual appreciation of their role in a socialized world, an attitude embodied in the early slogan "Our Children—the Hope of the Future." Personal sacrifices were made and state funds freely appropriated to shield children from some of the hardships of those years. During this wave of enthusiasm the Department for the Protection of Motherhood and Infancy gathered a momentum which it has never lost.

The first institutions opened under its control were "consultations" or, as we should say, Infant Welfare Stations, and day nurseries for the children of working mothers, but the perspective soon widened. As one of the provincial directors says: "We went into this work with one idea—to make a campaign against the infant death rate. Now we find that we are involved in the whole social and economic life of women." The scope of this report excludes all except those aspects of the work affecting health, but they are many and fundamental.

The following figures (taken from the *Report of the Third All-Russian Conference for the Protection of Motherhood and Infancy*, page 12, published in Moscow in 1926) present an accurate picture of the growth of the department throughout the R.S.F.S.R. from 1917 until 1925:

INSTITUTIONS FOR THE PROTECTION OF MOTHERHOOD
AND INFANCY

Type of Institution	1917	1918	1919	1920	1921	1922	1923	1924	1925
Day nurseries in industrial neighborhoods ..	14	78	126	565	668	914	447	503	584
Summer day nurseries in the country	—	—	—	—	—	125	209	524	1,853
Permanent day nurseries in the country	—	—	—	—	—	—	—	—	5
Consultations for babies	6	39	58	133	161	179	157	165	372
Consultations for pregnant women	—	—	—	—	—	29	28	95	208

Type of Institution	1917	1918	1919	1920	1921	1922	1923	1924	1925
Consultations in the country	—	—	—	—	—	—	—	7	120
Legal consultations	—	—	—	—	—	—	—	30	130
Homes for mothers and babies	—	10	17	99	125	237	110	91	96
Babies' Homes	7	92	121	370	418	765	491	362	287
Totals	27	219	322	1,167	1,372	2,249	1,422	1,777	3,655

In this table one sees the rapid growth of institutions during the first years when most of the funds came from the central Commissariat, then the sharp decline in 1922 when the New Economic Policy required local institutions to be supported in the main by local funds. After that date there is again a growth, this time more slowly and only along the lines of those institutions which met proven needs. One can also trace here some of the developments in the point of view of the authorities themselves. In the early days much emphasis was put on children's homes. Parents were encouraged to place their babies in these homes, where nurses were provided to give the expert care which was expected to show better results than the clumsy efforts of the untrained mother. Although schools for older children gave many proofs of the value of collective living, it was found that infants did not respond well to this regime, and so we find that after the famine years (when there was a real need for the extra food supplied in these homes) this type of institution permanently decreased, although recently all other forms of institution have been increasing in number. The department has now definitely adopted the policy of encouraging all mothers to keep their infant children at home, even orphans being placed out with private families under visiting nurse supervision. The recent direction of attention to the country districts is also reflected in the growth, first,

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Day nurseries in industrial neighborhoods ..	14	78	126	565	668	914	447	503	184
Summer day nurseries in the country	—	—	—	—	—	125	209	524	1,853
Permanent day nurseries in the country	—	—	—	—	—	—	—	—	5
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of summer day nurseries to care for the babies of peasant women working in the fields, and finally in the establishment of a few all-the-year-round day nurseries in the villages.

A Consultation, whether in a muddy steppe village or in a busy industrial center, always presents a lively picture. Early in the morning women in shawls and sheepskins or in silks and astrakhan coats (for all classes come to these health stations, even ex-princesses), each with a closely wrapped baby, gather at the door of the building. One doctor is supposed to examine only twenty-five babies a day, so that full time and unexhausted interest may be given to each case; therefore the punctuality, as latecomers are turned away unseen. At nine o'clock the nurses arrive and the doors are opened into the waiting rooms. The head-nurse, dressed as are all the personnel in flowing white overall and white kerchief, stands guard at the entrance and past her slowly file the mothers and babies. If any of the latter have colds or a temperature or an upset stomach their mothers are directed into a side-room divided by glass partitions into separate little cubicles each with its chair for the mother and examining table for the baby. Here the doctor comes first, to prescribe for the minor ailments and to direct the mother to a hospital if the child is really very ill. The other babies are taken by their mothers to long wooden shelves which line the general waiting room and which are divided by wooden partitions into separate stalls. Here the babies are undressed and then weighed and their temperatures taken by the nurses. The walls of the waiting room are covered with bright colored posters illustrating the right and wrong methods of child care. One corner of the room usually contains a model bed and toilet table for a baby; the proper and

improper kinds of toys are shown somewhere; a shelf displays wax models of suitable and unsuitable food for babies and nursing mothers. Frequently it is the father instead of the mother who brings the baby for examination, as his time free from work may be more convenient than hers for this duty. The clients of these consultations soon become well acquainted with each other and the room buzzes with Russian conversation louder than the occasional howling of the babies. Any mother coming for the first time gives to the nurses a long social history of herself and her baby's father, and a detailed description of the sanitary conditions of their home.

When the doctor arrives at ten o'clock the baby and its parent and the records are taken for an interview with him, which includes a complete physical examination of the baby, lasting from ten to thirty minutes according to the needs of the case. The geographic district served by that consultation is divided into smaller areas and one nurse is assigned for visiting the homes in each area. Each nurse is supposed to help during the doctor's interview with the mothers of her district so that later in the week when she visits in the homes she is already acquainted with the instructions the mother has received and can report on the care with which they are followed.

If artificial feeding is necessary the mother receives a prescription which she takes to the milk kitchen connected with each Consultation. If she can afford it (and her own estimate of this ability is compared with the visiting nurse's report on the home), she is supposed to pay for this extra food—usually more than half the prescriptions for food are filled without charge. The milk kitchen is presided over by a trained worker, and formulæ, more varied and more complicated than those

used in America, are prepared and issued daily. If medicines are needed they are also prescribed and usually given freely. If surgical dressings are required the baby returns daily until they are no longer necessary. Vaccination and the Perquet test for tuberculosis are given to all the babies registered. Visiting nurses go to the homes of the babies soon after they have been registered, and as often afterwards as seems necessary, to improve living conditions or to instruct the mother in home care. Far more primitive conditions are found than even New York's tenements can offer. It is not unusual to find four families occupying one room, with the baby's existence and needs only grudgingly admitted; it often sleeps on a corner of the stove or in a curtained basket swung from the ceiling. In the villages a "sugar teat," made of bread and sugar chewed in someone's mouth and tied in the corner of an old rag is used instead of the more sophisticated rubber pacifier of the cities. The people of the Caucasus not only wrap their babies in swaddling clothes, but bind them tightly down to their little cradles so that no amount of hearty rocking by slightly older brothers can displace them. No peasant of whatever nationality will readily believe that a bath is good for a baby. Against these and a thousand other superstitions the doctors and visiting nurses wage continual campaigns, and not unsuccessfully. One nurse, herself a Mongolian, who had been trained at the school conducted by the department in Moscow, went back to work among her people. Her own baby had been born while she was in training and she took it home, a rosy roly-poly of four months. "She's my only salvation," laughed her weary mother. "No one believes what I say until I use her as an exhibit and even then they follow me home to see if I really

do the terrible things to her (like giving her a tub-bath, letting her sleep out-of-doors covered only with a mosquito netting, etc.) that I urge on them."

A recently organized activity of these Consultations is a department giving free legal advice to mothers on all questions affecting the welfare of themselves and their children. Almost one quarter of all existing Consultations now have a lawyer visiting them one or two days a week for this purpose. The Soviet law stipulates that a father contribute to the support of his children whether his marriage to the mother has been registered or not, and many of the cases brought to the legal consultation deal with this question of children's alimony. Not only is advice given, but the mother is assisted in collecting the alimony or in obtaining her rights in other matters.

Most of these Consultations also have connected with them what used to be called "Consultations for Pregnant Women," but which recently have been changed into the more generalized "Consultations for Women." To them any woman may come for advice on any matter affecting her health as a woman. The effect of various trades on women, the type of physical culture best adapted to them, and other similar questions are investigated and reported upon. No actual gynecologic treatment is given, but examinations are made and the patient directed where to go if treatment is necessary. It is suggested that all girls on leaving school should come to these Consultations for examination and advice, but as yet they are not staffed to handle such numbers. At present the most active work of these Consultations is with pregnant women who are encouraged to come regularly for examination and who are instructed in all matters of hygienic living and of child care.

The questions of birth control and abortion are also

dealt with in these Consultations. In 1917 abortions were legalized in Russia as one result of the campaign for the social and industrial equality of men and women. It soon became evident, however, that the practice, freed from medical supervision, was resulting in the overloading of hospitals with women who had developed infections as a result of unscientific operations. Although this state of affairs had existed almost to the same degree prior to the legalization of abortions, there had been then the possibility of prosecuting the practitioners of illegal operations. Under the new law this was impossible. It was felt, moreover, that some women were shirking motherhood without adequate reason. Therefore in 1920 it was decided to make it illegal for abortions to be performed outside of hospitals or by anyone save a qualified physician, and in 1924 local commissions were established to which all applicants for abortion were to present their requests. These commissions usually are composed of a doctor, who judges the medical aspects of the case, and one or more members of the local women's organizations (similar to our women's clubs) who decide on the social and economic fitness of the applicant. Women workers already having three or four children, women whose health would be jeopardized by another pregnancy, women whose economic situation is very poor, are usually granted permission for a legal abortion. In one county seat, a city of about 30,000, the commission sat once a week and it was estimated that about 20 percent of all the pregnant women of the city were making application for abortions; 18 percent received the permission. Heated discussions are still being held as to the results of these measures; it is generally admitted that more abortions are being performed under medical su-

ervision, but it is also true that very few pregnant women come before the commission unless they know that their petition will be granted. If their case is doubtful they still go to the malpractitioners for secret operations. The increase in the number of legal and illegal abortions is thought to be about equal, and together they are said to bear about the same ratio to the total population—between five and six cases of abortion to every thousand persons—as in Germany, where all abortions (with a very few exceptions) are illegal. Since abortion was legalized in Russia statistics show a decrease in the number of abandoned infants, and also a decrease in the infant death rate, but it is perhaps too early to consider these facts as definitely related.

Birth control is little understood as yet in Russia, many doctors still confusing it with abortion. There is no law against it and in some of the Women's Consultations information on the subject is fully supplied, but the matter is left for the most part to the individual decision of the physicians in charge. The general attitude of the authorities seems to be that it is a practice dictated by the economic oppression of capitalism and having no place in a socialist state like Russia, rich in food and able to support an increasing population. State control of the birth rate through commissions for abortion seems more in line with the general principles of communism than the individual control which would be the result of widespread birth-control information.

Each adult in Russia is supposed to be a working unit with a definite contribution to the economy of the state, but it is recognized that her economic activities along other lines must not interfere with a woman's contribution to the state as a mother. Every woman who is a manual laborer, therefore, is entitled to eight

weeks' holiday with full pay before and after the birth of her child, and every mental worker to six weeks' holiday. These weeks free from work may be spent at home or in one of the Homes for Mothers and Babies which are a part of the state program for infant welfare. These homes are at present found only in the larger cities where the crowded living conditions make them especially necessary. They are usually old mansions converted into comfortable pensions for twenty to thirty women, with attractive living and dining rooms, bedrooms for the mothers and a nursery for the babies. The director is a trained nurse and there is a staff of trained assistants as well as cooks and laundresses. The mothers and expectant mothers do the lighter work of the house and learn to care for their own and their babies' physical needs. They are allowed to receive guests and to be away from the home a certain number of hours each day. The babies are not born in these homes, but in maternity hospitals where normal obstetrical cases remain only four or five days. In the Homes, however, the mothers and babies are under the care of a physician and it is thought that this supervision has had much to do with the recent reduction in infant mortality. The number of these Homes is very inadequate as yet, but there is a definite gradual increase.

Permanent Homes for young children were advocated in the early years of the Revolution as one of the duties of a socialist state, and again during the famine there was an increase in their number, but with the return to more normal conditions their popularity has waned. Emphasis is now laid on instructing the mother in child hygiene and on the supervised placing-out of little babies if their own parents cannot care for them.

Next to the Consultations with their manifold activi-

ies, the day-nurseries play the most important role in the protection of infancy. When the mother returns to work after the birth of her baby she often finds that the factory or institution where she works has a day-nursery as part of its social equipment. If not, there is usually one maintained by the city health department of which she can make use. Here the baby from six weeks to three years old is received in the morning when the mother goes to work, cared for by a trained personnel, examined daily by a physician, bathed, kept in the open air if the day is fine, and returned to the mother when her six or eight-hour working day is over. If she is nursing the baby she is given by law a rest period from her work every three hours to attend to this duty. During these visits to the nursery she is further instructed in the care of the child and interested in its psychologic growth. Charming play-rooms with furniture and toys especially recommended by students in the field of mental hygiene are provided for the older children, who are also trained in good habits of personal hygiene and of social amenity. Every fine day all the children sleep or play for two or more hours in the open air, most of the nurseries having gardens attached to the house. Thus it is hoped that both the advantages of the individual home and of communal living may have their effect on the growth of the child.

At first these advantages were only for the children of industrial workers, but in 1921 there was a considerable agitation for summer day nurseries for the children of the peasant women who work all day during the harvest time in the fields. In the next year there were over one hundred of these temporary nurseries started, and each summer since then their number has more than doubled. Compared with the elaborate city institutions

these little country nurseries look very humble and primitive, but they represent a tremendous effort and cultural change in the peasant point of view. One was opened in 1926 in a village some three hours' ride from Moscow. Two rooms of the village school had been cleared of desks, scrubbed, whitewashed and fitted with twenty-five little reed beds of the simplest pattern, with straw mattresses and white sheets sewn by the Pioneer (an organization corresponding to our Boy Scouts and Girl Guides) of the village. About fifty mothers and babies listened respectfully to the address of the visiting doctor (who would be able to come to them only once a week) and eyed rather suspiciously the young nurse who had come to take charge of the infants for two months. The chairman of the local woman's club, an energetic young peasant woman, had worked for more than a year to arouse enthusiasm and then financial support for the nursery, and as she presided, perspiring and beaming with satisfaction, at the opening exercises of the little institution, one felt that certainly a new impetus to life had come to that village.

The question of personnel is closely bound up with the growth of these new institutions, for it is not every doctor or nurse who has the tact and social outreach to make them successful centers of positive health. Realizing this need for personnel the Central Department for the Protection of Motherhood and Infancy opened in Moscow an institute for the study and teaching of infant welfare. Here, in the buildings erected by Catherine the Great and operated until 1917 as the largest foundling asylum in the world, have been created a score of model children's institutions, presided over by specialists in as many different branches of pediatrics and "pediology," as they call the science of normal child development.

There is a model medical ward, a model tuberculosis ward, a model day-nursery, consultation, out-patient clinic, etc., each caring for twenty to twenty-five children under three years of age. Most of the children come from the homes of workers in that part of the city, some are the babies of the doctors, nurses and other workers in the institute. Young doctors here receive a year of practical post-graduate work in child welfare; nurses are given an excellent two years' course fitting them for work in the day-nurseries, consultations and homes; midwives are trained for independent work in the villages. Scientific research is carried on in the laboratories and actual medical and social assistance provided for the surrounding neighborhood, but the emphasis is put on the creation of a model establishment serving as a pattern to the hundreds of students trained here yearly.

One of the departments of this Institute is a remarkable exhibition of posters and models relating to the care of mothers and infants. Several large rooms are filled with the beautiful handpainted originals of the photographed posters and postcards prepared for general distribution. Carefully made wax models show diseased conditions, and accompanying placards show their cause and cure. Shelves of natural-looking artificial food tell the mother what should and should not be eaten by herself and the baby. Cases of recommended and harmful toys are on exhibition. One room is fitted as a model layroom, another shows the proper sleeping and bathing arrangements for the baby. Thousands of visitors, individually, and in organized groups, come to this exhibition, and those from foreign countries regretfully admit that there is nothing in their own lands to compare with this scientific and artistic health propaganda.

The results of all this activity are now beginning to be evident. For several years past one could see new institutions, better prepared doctors, poster propaganda; these were records of effort. But now one can point to results, for all the statistics of the last two years unite in registering a lower infant mortality. Naturally this shows most definitely in the two cities of Moscow and Leningrad where the campaign has been under the most scientific direction and where funds have been more abundant. Moscow Gubernia now has a death rate of 13.7 for every hundred infants under one year of age, as compared with the 27.6 of pre-war days; Leningrad has dropped from 23.0 to 12.9 per hundred. Other gubernias like Vladimir, Tver, Ryazan show almost equally great improvement. (From the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925*, p. 32.) For the whole of Russia it is estimated that the infant death-rate has fallen from 27.0 per hundred in 1913 to 17.0 per hundred in 1923. ("Vital Statistics in the U.S.S.R." by Professor Michaelovsky in the *Report of the Third All-Russian Conference for the Protection of Motherhood and Infancy, Moscow, 1926*, p. 147.) What corollary these figures have in reduced morbidity, in conservation of maternal life and vigor, it is impossible to estimate. They stand as a permanent monument to the devotion and energy of the head of the Department and of hundreds of her inconspicuous fellow-workers.

CHAPTER IX

THE DEPARTMENT FOR THE PROTECTION OF CHILDREN'S HEALTH

AT three years of age the children who have been under the care of the Department for the Protection of Motherhood and Infancy are given their final examination and discharged with a record of their medical history to the Department for the Protection of Children's Health, which is responsible for the safe-guarding of all children from three to eighteen years. The aims of this department (as stated in the *Report of the People's Commissariat for the Protection of Health to the 21st All-Russian Congress, 1925, p 35*) are:

a. The supervision of school-house sanitation with emphasis on the prevention of overcrowding, as well as the supervision of the health of each pupil.

b. The supervision of the school regime with the aim of bringing the conditions in the ordinary schools up to the standards of those provided in open-air schools.

c. Dispensary service to the child population, of a prophylactic as well as a therapeutic nature.

d. Conducting a campaign against the mental and physical over-straining of children and adolescents, not only in schools but in their social and club life.

e. Special provision for the "homeless children" showing mental and nervous abnormalities.

f. Regular physical examination and follow-up work with adolescent workers.

g. Medical control of the program and check-up on the results of physical culture (provided by the Commissariat of Education) for children and adolescents.

The formal school life of children is supposed to begin with the kindergarten, to which applicants are admitted at three years. An increasing number of kindergartens are being opened, but they are still far from sufficient even for the city children, and in the country districts they are practically non-existent. As in America the greater number of children first enter school at about seven years. Here they are given a thorough physical examination by physicians who are trained and assigned especially to this work. Unlike those of the American schools these doctors are expected to prescribe treatment as it is required, so that there is minimum of time and effort wasted in what we know as "follow-up work." In cases requiring the services of a specialist the children are sent to the clinics where that particular defect is treated, but the great mass of the work is expected to be done in the regular children's dispensaries. These dispensaries show another difference between the American and Russian system, in that the doctor does not have his office in the school building, but in a separate dispensary especially equipped for this work, with rooms for examination and treatment, all the furniture, instruments and utensils being adapted for work with children. Not the least effective item is a central registry room for records. Although a definite time is as-

igned to each child for this physical examination, no compulsion is brought to bear on him to present himself at the dispensary. He may absent himself for the whole year from the examination if he wishes. The signature of the school physician, however, to the effect that the pupil has been examined and has cooperated in trying to remedy his defects, is obligatory before he is passed into the next higher school grade.

Owing to a lack of funds and of personnel, it is estimated that only about 34 percent of the school children of the U.S.S.R. have the advantage of these dispensaries since there are only fifty-five of them in existence up to the present time, but in 1924 over 1,000,000 children were examined and each year there is an increase in the number of the dispensaries. In the Republic of Georgia, for example, there were ten school doctors employed by the Health Commissariat in 1921 and fifty-four in 1925; throughout the entire U.S.S.R. there were 1,094 school doctors in 1926.

In addition to their routine medical work these doctors are frequently members of the committees organized by the children themselves in each school to take charge of the sanitary conditions of the buildings and the personal hygiene of the pupils. The cleanliness and repair of the school-rooms and the discipline of the student body in regard to health matters comes under the direction of this sub-committee of the general student executive committee. It also arranges for lectures on health and sanitation to be given in the school, and tries in every way to fulfill its functions of making the children themselves feel the responsibility for their own health.

In the winter of 1925 a Congress of the Sanitary Committees of all the city schools was held in Moscow.

Original posters relating to health were prepared by pupils of all grades and a judging committee of children was elected to choose those considered worthy of exhibition. In crowded homes hygiene is often dependent on the prejudices of other members of the family, so that the large red letter question "What does a Pioneer (boy-scout) do the first thing in the morning?" was proudly answered, pictorially, "He gets up and opens the window." A small parenthesis added that some intrepid souls even slept with their windows open all night. A school-room before and after the advent of the Sanitary Committee, tables spread with model meals for growing bodies, and other devices familiar to public health workers in America were also prepared for the Congress, which was held in a large central hall. The afternoon was devoted to showing visitors about the exhibition, whose popularity was evinced by the long line of parents and friends who waited in the snowy street for a chance to enter. In the evening the business session opened, presided over by a girl of fourteen who was the chairman of the sanitation committee in one of the large schools. Reports were read, some by nine-year-old children, of the activities promoting health in various schools; statistics were given by school doctors; telegrams of congratulation were received from the Commissariat of Health and other important officials; and then the meeting was turned over to the entertainment committee which staged four or five short plays and ballets embodying health propaganda. This Congress was exceptional in being held in a large hall and attended by several thousand people, but it is quite usual even in the villages for the sanitary committees of the schools to give evening entertainments of a similar nature to the peasants.

The statistics of the Moscow City Department for the Protection of Children's Health are arresting in their portrayal of the general low vitality among children, a condition which many of the examining physicians believe to be the effect of the famine years. The following table shows the percentage of malnutrition, anemia, and functional heart disease found among 20,000 school children in Moscow examined in the years 1919 to 1924, and is taken from the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925, p. 37*. The figures are not to be taken as a history of the same 20,000 children, since the statistics were compiled from alphabetically arranged lists and each year some new children were admitted and others withdrawn.

Character of Disease	1919	1920	1921	1922	1923	1924
Malnutrition	17.7	21.8	34.0	30.2	23.0	22.5
Anemia	9.0	11.2	15.3	21.9	39.3	42.3
Functional heart disease.....	4.2	8.0	13.5	23.5	27.9	36.0

In reading these figures, one should bear in mind that the recent health statistics in all countries show an increase in heart disease among children and adults,—an increase which in Russia as elsewhere may be partly accounted for by earlier and more accurate diagnosis.

The present very crowded housing conditions in Moscow make it difficult for children to have the proper play space and resting space which they require for their complete recovery. Tuberculosis is known to be very widespread, but there are no reliable statistics at hand in regard to it. It has been found, however (according to the *Campaign for Health*, a publication of the Committee for Organizing an Anti-Tuberculosis Tag Day of the Moscow City Soviet, p. 71), that only 5.6 percent of all the children in Moscow have a

missariat near Moscow, spent several months in 1926 studying such preventoria in Germany, France and England and feels sure that they are the best means of raising the standards of adolescent health in any country. There are now 57 of these boarding schools in Russia.

One of the most difficult problems facing the health and education authorities at present is the great number, probably about 250,000, of *bezprizorni*, or homeless children, who for the past several years have led a street-rab life all over the country. One of the results of the chaotic years of war and famine, they are by now quite intolerant of any organized habits of life, finding it much more exciting to pilfer and to beg than to submit to even self-government in the schools which are hopefully opened for them. Disease is an inevitable result of their irregular lives; many of them show a definitely abnormal psychology. For such of these as reach the police courts or the regular children's dispensaries the Commissariat of Health has opened special psychiatric sanatoria to the number of nineteen, where a specially trained personnel endeavors to reconstruct the personality of these a-social children,—and if this proves impossible, to protect them and society mutually from each other. Many of those still on the streets are vendors and users of narcotics, many are sex perverts, and almost all are expert pickpockets. Owing to the lack of funds in the Commissariat of Health there are far too few of these special and—it is to be hoped—temporarily needed institutions.

In pursuance of the general policy of the Commissariat of Health to emphasize prophylactic measures, much importance is now laid on physical culture. In former days the Russian youth was rather lethargic physically,

and where a love of sports did exist it was apt to develop into a one-sided specialization in running, bicycling, pole-vaulting, etc. After the Revolution there was a tendency to consider these former champions as leisure class parasites. General physical culture, however, came to be valued as a means of keeping fit, whether for mental workers or for children or as a counter-balance to unhealthful types of physical work. The slogan "Physical culture twenty-four hours a day" was coined and people began rather doggedly to play football and to trot around a cinder path and to go through a daily dozen. What responsible workers may have adopted as a duty, however, was eagerly taken on as fun by the children. Few city schools have ever had any playgrounds attached to them, so that most of the athletic activity has to be carried on through other organizations. Many social clubs both for children and for adults are now building well-equipped athletic fields with trained instructors in charge. Institutes for Physical Culture have been opened in Moscow and in Leningrad and practical courses are offered to prepare doctors and physical directors for this type of work.

At fourteen years of age children may start on their career as workers. The factory or other employing institution, however, must guarantee them a four-hour working day and ensure their attendance at some educational institution the remaining four hours of the regular adult eight-hour day. The school doctors still have the health of these young workers under supervision until at eighteen years of age they enter the ranks of adults.

CHAPTER X

MEDICAL INSTITUTIONS AND PERSONNEL

IN spite of the modern emphasis on public health and prophylactic measures the hospitals and the out-patient dispensaries still remain the backbone of the work of the Commissariat of Health. It is true that not much money has been spent in building new hospitals for it is hoped that the "preventive" program will soon make the present number of beds sufficient for the needs of in-patients. Sound as this policy is in the long run, it means that many of the hospitals at present in active use were built from twenty to one hundred and fifty years ago.

They were planned on the basis of cheap human labor and are usually wasteful of space, inconvenient in layout and poorly supplied with conveniences and labor-saving devices. Central heating, for example, is often impracticable, and each morning—sometimes twice a day—the big tile stoves must be filled with wood; modern laundry machinery is almost unknown and most hospital linen is washed by hand. In consequence there is a very high ratio of personnel to patient, the former sometimes outnumbering the latter.

The wards are smaller than in most American public hospitals, seldom containing more than fifteen beds; private rooms are unknown. During the years of war and famine with their accompanying outbreaks of typhus, cholera, malaria and scurvy, the hospitals suffered

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The wards are smaller than in most American public hospitals, seldom containing more than fifteen beds; private rooms are unknown. During the years of war and famine with their accompanying outbreaks of typhus, cholera, malaria and scurvy, the hospitals suffered

terribly from overcrowding, lack of personnel, lack of medicines, instruments and linen. Even in Moscow sheets were a luxury and a new patient was placed between the unchanged straw mattress and the vermin-infested blanket of his recently deceased predecessor. Two adults or three or four children often occupied the same bed. To anyone who saw the Russian hospitals in those years their present condition seems an almost miraculous change for the better. Iron beds with metal springs and hair mattresses have very generally replaced the wooden cots with a straw pad; sheets are supplied and changed frequently; the blankets are cleaned and sterilized after use; floors are kept clear of food, clothing and all the litter that anxious relatives can supply; the windows are frequently opened and the wards aired, in some cases the little ventilators are permanently open even when the thermometer stands at 30° below zero. It is true that the food is neither very attractive nor very attractively served. Breakfast consists of bread and tea; dinner of a vegetable and meat soup or sometimes of meat with potatoes or macaroni and a compote of stewed fruit; and supper of a cereal of some sort with bread and tea. Special diets are just beginning to be used; relatives are allowed, even encouraged, to bring whatever supplementary food they wish to provide.

Medicines now abound, and to the surprise of most American visitors are placed on each bedside table to be taken by the patient himself according to the doctor's prescription. A locked medicine cupboard with a nurse administering the drops or pills at stated intervals has not yet been made a part of the new economic policy; such a system has never been the custom in Russia. The nurse usually has charge of more than one ward and her time is fully occupied in taking temperatures and

giving hypodermics and carrying out the more complicated orders of the doctor. All the personal attention required by the patient, as well as the simpler procedures like enemata, are given by ward maid or orderlies, who also do the cleaning of floors, windows and furniture. Bed-baths and "morning toilets" are not known, nor is bed-making performed daily, so that a ward seldom gives an impression of neatness or restfulness. On the other hand the patients are usually very well satisfied with the relaxed discipline which, for example, allows convalescents to sit on the edge of their beds and smoke, and they almost invariably speak highly of the kindness and attention shown to them by the doctors and nurses. Much modern equipment, especially for various forms of electrical treatment, is being imported from Germany, and doctors are sent from the provinces to Moscow for short periods to enable them to get in touch with new treatments and technique.

People are entering hospitals more willingly when they are ill and the hospital death-rate is lower than it formerly was. Figures recently published by the Commissariat of Health (in *Statistical Material*, Moscow, 1926, page xii) show a comparison between the number of patients presenting themselves for admission to hospitals in the years 1913 and 1923, in thirty of the central gubernias of Russia. Twenty-seven of these showed an increase in the use of hospitals and only three a decrease. In Moscow Gubernia which includes the city of Moscow, the increase has been 139 percent; in eight gubernias which include such cities as Leningrad, Archangel, Yaroslav, the increase has been from 50 percent to 100 percent; in five other gubernias from 25 percent to 50 percent; in ten others an increase up to 25 percent; while in two—Tambov and Pskov—there

was a decrease up to 25 percent; and in the Don a decrease of 35 percent.

The following table (taken from the same source, pages 2 and 74) shows hospital conditions for the entire area represented by the present U.S.S.R. for the two years 1913 and 1923:

Year	Total Population	Number of Hospitals	Number of Hospital Beds	Total Number of Patients During Year	Total Deaths	Ratio of Deaths to Hospital Population
1913....	146,914,869	7,496	197,903	3,247,500	152,064	4.68
1923....	133,644,206	3,501	146,326	2,039,582	79,671	3.90

From these figures many interesting deductions can be made: for example, the fact that in 1913 there was in the region now occupied by the U.S.S.R. one hospital bed for every 742 persons, and in 1923 in the same area one hospital bed for every 913 persons. The cities show a better average than the country as a whole, furnishing about one bed for every 150 persons, while certain centers of industry are even more liberal, for example Tver has one bed for every 98 of its inhabitants, Leningrad one for every 111, Tula one for every 125 persons. The decrease in the number of beds had usually been the result of closing the small isolated hospitals which were under the care of feldshers or not fully qualified medical personnel. The actual decrease in the number of hospitals, however, is a cause of much anxiety to the health authorities. Since the institution of the New Economic Policy in 1922 it has been the rule to expect the local tax receipts to carry all permanent local health measures, receiving help from the central funds only in time of epidemics, or for temporary campaigns, "flying squads", etc., but as in America, the rural population is often very slow to realize the benefits of medical aid and especially of prophylactic education. Many regions,

noreover, have not yet recovered economically from the famine years. Therefore in 1925 a sum of over \$3,000,000 was appropriated from the central budget for the strengthening of medical work in the country. Half of this amount was to be spent in salaries and the other half in repairs to existing hospitals and the building of new institutions.

An interesting example of the mixture of the old and the new was furnished at an operation for appendicitis performed in August, 1926, in the city hospital of Maxach-Kali (formerly Petrovsk), a fish-canning and kerosene-exporting town of 50,000 inhabitants on the Caspian Sea. It is the capital and largest city in Daghestan, an autonomous republic inhabited for the most part by Musselmen and Persians. The director of the hospital was a surgeon, the only one for the 900,000 people of the republic, and his days consisted of one operation after another. The operating room was large and well lighted and shining with freshly scrubbed yellow paint. When I entered, the surgeon was scrubbing up, a process which ended in soaking his hands in iodine since rubber gloves were an impossible luxury there; a feldsher assistant, also with iodine-painted hands, was removing the instruments from the sterilizer and sorting them into appropriate groups for the ensuing operations. The patient, a tall, middle-aged Musselman, was sitting entirely naked on the wooden operating table looking with some apprehension at the shining array of cutlery proudly displayed by the feldsher; a nurse was preparing a syringe for the spinal anaesthesia. The doctor explained that he used spinal anaesthesia almost always as it was more economical, quicker and easier in its after-effects on the patient. He then administered it, the patient swung around to a recumbent position,

his eyes were covered with a towel and his abdomen with a small laperatomy sheet. When he ceased to wiggle on being tickled the incision was made and in an incredibly short time the appendix was out. There was a minimum loss of blood, only one small gauze pad being used. As the last stitches were being taken the nurse opened the door of the operating room and two large Turks came in, lifted the patient carefully while the feldsher put on a double spica bandage and then after throwing a sheet over him carried him off to the ward, chatting with him meanwhile in his own language. Two maids came in to wash the floor and the operating table, the feldsher filled out a record and the doctor changed his gown and began scrubbing for the next operation.

This hospital housed 150 beds with an active turnover of medical surgical and obstetrical cases. There were often ten births a day, all of the normal deliveries being attended by trained midwives. It was the first civilian hospital the city had ever had, although there had been an army hospital nearby before the Revolution.

Americans who have been ill in Russian hospitals criticize the lack of fresh air at night, the coarseness of the food and the failure to take into consideration the physical comfort or the peace of mind of the patients. They feel that the actual medical attention is good, that the wards and beds are clean and that the attitude of the personnel to each other and to the patients is good. In the university centers like Moscow and Leningrad many of the hospitals rival those of Western Europe in equipment and the patients remain under the doctor's care until convalescence is well established, but scattered everywhere throughout Russia one sees these typical 150-bed provincial hospitals—in the ancient capital of old Novgorod; in Samara, the wheat center of the Volga

region; in Tiflis, the largest city of the Caucasus; in the Siberian cities of Omsk and Irkutsk; and everywhere they present the same picture of heavy turnover of patients, of poor material equipment and enthusiastic personnel.

Out-patient dispensaries, frequently not connected with a hospital, have always played an important role in Russian medicine. Before the Revolution the Zemstvo medical aid in the country usually took this form; now in the cities as well as in the country the "ambulatories", as they are called, are the chief out-posts against disease. It is the intention of the authorities to have these dispensaries provided with laboratories and staffed by grouped of specialists so that the patient may receive the most skillful and modern treatment, similar to that provided by the "group clinic" system in many of our cities, except that in Russia the entire service is provided by the state. Doctors and other personnel, as government-civil servants, work for the six hours which is the regular working day of professional people. There are usually two and in some places three and four shifts of workers during the twenty-four hours. It has been estimated (in *Statistical Method*, page xi) that in the thirty central Russian gubernias in 1913, 88 percent of all the ill people were coming for treatment to these dispensaries, while 3.6 percent were admitted into hospitals, and the remaining 8.4 percent received medical help in their own homes. By 1923 these figures had changed to 92 percent attending dispensaries, 5 percent received into hospitals and 3 percent visited in their homes. The regime of economy imposed on all state institutions as a corollary of the New Economic Policy has had two injurious effects on these dispensaries. In the first place it has made it impossible for all the citi-

zens of the U.S.S.R. to receive free medical treatment, as had been the first intention of the Commissariat of Health. What Dr. Kuchaedze, the Commissar of Health in Georgia, writes of conditions there may be taken as true for other parts of the Union.

In *Fundamental Problems in the Structure of Soviet Medicine*, published in 1926 (page 4), he says:

“With the establishment of the Soviet power in Georgia the first measure taken in the realm of health was the full liquidation of payment for medical services and the placing of all curative and sanitary institutions on the government budget. All types of medical aid and medicines were to be free to the whole population. But this principle, unfortunately, could not be fully materialized owing to a lack of funds. On the institution of the N.E.P. we had to draw in a bit, while at the same time maintaining the general policy. Absolutely free medical aid is now given to all those registered under health insurance, as well as to their families, both in the cities and in the country. Free service is also extended to the following categories of the population: to almost all peasants, to the families of Red Army men, to all wounded ex-service men and to all school children. First aid and dispensary service is absolutely free for everyone (with a very few exceptions). The categories of those receiving free medical attention will be widened as material and economic conditions improve.”

The second effect of the halting economic situation is that many of the “ambulatories” are understaffed in proportion to the number of people presenting them-

selves for treatment, so that many hours are wasted by the patients and their friends in the waiting-rooms. As a result of the insufficiency of medical personnel in the government institutions doctors are still allowed to receive private patients in their own homes and to collect fees from them, but it is hoped with a yearly increase in the number of doctors and with the greater appropriation of funds for salaries in the government institutions, that this private practice will die a natural death.

From the general "ambulatories" certain types of patients are sent to other institutions dealing in a more specialized way with their diseases. The most important of these are the tuberculosis and venereal disease dispensaries which will be more fully described in a later chapter. In this group also may be classed the dental dispensaries whose recent growth has been very rapid: oral hygiene for school children was one of the first innovations of the Commissariat of Health. Prophylactic and therapeutic dental care is now provided for children in almost all cities, even in those as far from the center as Archangel, Vladivostok and Tiflis. In many places the funds of the Health Insurance Department have been used to establish dental dispensaries on the theory that early attention to diseased teeth is one of the best means to prevent loss of time to workers through later illness. Although the total number of these dispensaries is only 629, they have an established place in the general health program and will gradually increase in number.

Special dispensaries for diseases of the eye are also much needed in Russia since blindness caused by trachoma, venereal disease and small-pox is believed to be increasing in certain neighborhoods which before the war were isolated from these diseases; accurate statistics in

this connection are difficult to obtain as diseases of the eye are especially prevalent among the Tartars, Musselmen, Mongolians, Armenians and other minor nationalities, living on the periphery of civilization. It is estimated, however, that four-fifths of the 2,000,000 cases of registered trachoma in the R.S.F.S.R. in 1925 were found among the non-Slavic population. As an average throughout the R.S.F.S.R. there is one oculist to every 830,220 persons. Many whole districts, like the republic of Daghestan and the oblasts of Yakutsk, Kalmick and Buriat, have no oculists at all, although it is in these semi-civilized regions that diseases of the eye are most prevalent.

Much attention is being given by the health authorities to the science of physiotherapy. In a recent report Dr. Semashko writes: "Before the war special institutions for physiotherapy, if we except a few private sanatoria for the wealthy, simply didn't exist. During the imperial war which invalidated a million soldiers, four institutions of this type were opened. At the present time (1925) in the R.S.F.S.R. alone there are forty-six physiotherapy institutions. Some of these function as entirely separate institutions, others are connected with hospitals of a more or less general type. "The most important is the State Institute of Physiotherapy at Moscow with an in-patient department of 80 beds and out-patients numbering several hundred a day. Tiflis claims one of the most interesting of these institutions where 500 patients a day are treated. The building is an old palace surrounded by a small but attractive garden; the first floor is devoted to hydrotherapy of all kinds, including the sulphur and mineral mud baths for which that region is famous; the second floor is equipped with the most modern German electrical ap-

paratus and also has rooms for manual massage; the third floor consists of a narrow hallway of showers and dressing-rooms surrounded by a great porch screened off for treatments of natural heliotherapy. A special department with small wicker furniture and playthings is devoted to children. Although the sun here in summer is of tropical strength one can see the snow-capped mountains of the Caucasus from the couches of this porch.

In connection with the general medical dispensaries there have been opened within the last three years diet dining-rooms, an experiment apparently unique to Russia. Where patients are found to be suffering from gastric ulcer, diabetes, heart disease, etc., they are given instead of, or in addition to, a prescription order on the drug-store, a meal order on the diet kitchen. This order enables them to attend the dining-room for all their meals for as long as the physician desires, during which time the progress of the case is checked up by the doctors and laboratory workers in the same building. If the condition is found to be chronic, someone visits the patient's home and instructs the housewife in the purchase and preparation of the food permanently required. This service has been found to be of great value in industrial neighborhoods where the workers usually get their meals in cheap restaurants or in homes where intelligent preparation cannot be relied upon.

Among the medical institutions of Soviet Russia must also be included the health resorts, with their hundreds of sanatoria, rest houses and vacation homes. The most important of these are situated in the Crimea, along the eastern coast of the Black Sea and in the North Caucasus. "The wide territory of the U.S.S.R. is characterized by an abundance of varied health resorts, such as

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In connection with the general medical dispensaries there have been opened within the last three years diet dining-rooms, an experiment apparently unique to Russia. Where patients are found to be suffering from gastric ulcer, diabetes, heart disease, etc., they are given instead of, or in addition to, a prescription order on the drug-store, a meal order on the diet kitchen. This order enables them to attend the dining-room for all their meals for as long as the physician desires, during which time the progress of the case is checked up by the doctors and laboratory workers in the same building. If the condition is found to be chronic, someone visits the patient's home and instructs the housewife in the purchase and preparation of the food permanently required. This service has been found to be of great value in industrial neighborhoods where the workers usually get their meals in cheap restaurants or in homes where intelligent preparation cannot be relied upon.

Among the medical institutions of Soviet Russia must also be included the health resorts, with their hundreds of sanatoria, rest houses and vacation homes. The most important of these are situated in the Crimea, along the eastern coast of the Black Sea and in the North Caucasus. "The wide territory of the U.S.S.R. is characterized by an abundance of varied health resorts, such as

no other country can show. According to Professor Schange, speaking at the 1915 All-Russian Congress of Hydrotherapy, there were more than 600 of these resorts in the empire as it then existed. In the immense area of the Workers' Union are scattered mineral springs of a variety of healing powers, salt lakes and inexhaustible mud deposits of medicinal value, sea baths, mountain resorts of pure cold air, winter and summer (even sub-tropical) resorts, and finally the koumiss establishments of the steppes. There is no kind or method of natural healing treatment which is not prodigally represented in the most diversified form and some of these are found here exclusively." (From the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress*, 1925, p. 88.)

Under the old regime the palm-shaded shores of the Black Sea and the sunny hills of the Crimea and the Caucasus were dotted with palaces and summer villas of the aristocrats and wealthy merchants. These are now the sanatoria and vacation homes of industrial workers and peasants as well as of state officials. Each year more of these resorts are opened until now there are over 25,000 beds in use under the oversight of doctors who during a year direct the regime of baths, diet, walks, etc. of the 70,000 visiting patients. In 1924 (according to the above source, p. 97); manual laborers comprised 41.5 percent of these patients, 1.2 percent were peasants, and the remaining places were divided among such groups as civil servants, children and wounded ex-soldiers. There is a distinct effort being made to interest the peasants in the protection of their own health, and to this end the former Czar's palace, Livadia, in the Crimea, has been turned into a sanatorium exclusively for the use of peasants, a few rooms with their former

imperial furniture in place having been reserved as a museum. A certain number of beds is allotted to each gubernia and "Every republic, oblast and gubernia chooses from its ill peasants those whom it will send to these free beds, which are provided by the Central Commissariat of Health. Beside these, other sanatoria are maintained for peasants by the funds of the gubernia executive committees, by the Union of Land and Forest Workers, and by various other social agencies." (Quotation from *What Health Resorts Are and How Workers Can Use Them*, p. 45, published by the Commissariat of Health, Moscow, 1926.) The majority of patients sent to these resorts are suffering from diseases of the respiratory tract, of the heart and kidneys, of the nervous system and from rheumatism. It is claimed that 85 percent of them leave much improved, if not entirely cured, so that a popular slogan has been coined, "Health resorts—the repair shops of the workers".

Drug stores and laboratories are another type of institution coming under the control of the central and local health officials. During the years of war, famine and blockade there was an appalling lack of drugs and vaccines in Russia. In 1920 the gift from the Friends' Relief Organization of a small bottle of iodine crystals was said to have increased the Moscow supply of iodine by 100 percent. The great increase of small-pox during that and the next two years was also due to the lack of prophylactic vaccine. Since that time conditions have gradually improved until now there are more pharmacies and registered pharmacists in the U.S.S.R. than there were before the Revolution, and all the holders of health insurance and the poorer peasants may receive medicine without payment. Prescriptions of doctors written for

their private practice must be paid for at a rate somewhat higher than in America. Bacteriologic and hygienic laboratories have greatly increased in number recently, 46 having been registered in 1913 and 210 in 1923. As prophylactic medicine has been increasingly practiced the value of these laboratories has been more fully understood.

Turning now to the problem of medical personnel we find that there are many points of resemblance between the situation in Russia and in America. In both countries a great many young doctors are graduated each year, and each year there seems to be a growing tendency among the doctors, old and young, to settle in the cities rather than to go into the rural districts. In that part of Russia now included in the R.S.F.S.R. there were in 1913 (according to the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925, p. 69*), 12,677 doctors, of whom 71 percent practised in the cities and 29 percent in the country. In 1924 there were 25,326 doctors in the R.S.F.S.R., 86 percent of whom worked in the cities and only 14 percent in the country. The proportion of doctors to the population in 1913 was one to 1,400 persons in the cities and one to 20,300 outside of the cities; by 1924 this ratio has been changed to one to 700 in the cities and one to 24,000 outside of the cities.

Dr. Semashko discusses this situation at some length in the report just mentioned (p. 71). He says: "The fundamental reasons for such an uneven distribution of doctors between the cities and the villages are on the one side the concentration within the cities of the larger and better equipped medical institutions, the schools of

medicine, the growth of new branches of medicine and the wide spreading out of medical aid to those holding health insurance (most of whom are city industrial workers); and on the other hand the extreme insufficiency of material equipment and the poor living conditions met with by the physician on duty in the villages."

After discussing the low salaries paid to all grades of medical workers he goes on in words which might apply to many rural parts of America: "In addition to this low income it is essential to mention other difficult conditions facing medical workers in the country—

a. The extreme insufficiency of personnel in the hospitals, the omnipresent and systematic failure to pay for overtime work, the irregularity of days of rest, the lengthening of the working day beyond the established norm, and the continual overwork reacting disadvantageously on the quality of the work done.

b. The lack or inadequacy of living quarters near the institutions where the doctors work.

c. The irregular payment of salaries and the uncertain provision of special clothing (sheepskin coats, felt boots, etc.) which are essential for the drives to visit patients in their homes and to carry on any sanitary inspection or prophylactic work in the neighborhood.

d. The lack of provision of scholarships for scientific study, resulting in the lowering of their professional standing."

How to meet this situation is one of the problems of the Commissariat of Health. Five years ago under War

Communism doctors were ordered to the "medical front," as the rural districts with their epidemics and high death-rates were called. Such measures are no longer resorted to, yet it will be a long time before the local taxes can provide salaries or conditions either for work or for personal life which will attract doctors away from the cities, and in the meantime the mortality and morbidity rates in the country continue to soar far above those of the cities. In Russia as in America a community gets just as much health as it is willing or able to pay for.

CHAPTER XI

EPIDEMICS

No account of the work of the Commissariat of Health would be complete without reference to the great burden put upon it in caring for the epidemic and pandemic diseases which swept over the country during the years of war and famine. Demobilized soldiers and fleeing refugees left a trail of infection and death everywhere along their paths. Funds which had enthusiastically been appropriated for prophylactic work were swallowed up in providing beds for typhus and cholera patients; doctors and nurses succumbed to disease in the very places where they were most needed. As Lenin once gloomily said, "A dirty louse threatens to conquer socialism."

Statistics for these nightmare years are entirely unreliable, for no one in the regions where conditions were the worst had the strength or the desire to count the dying. As an approximate indication of what the country was suffering they may be accepted, with the realization that the registered mortality and morbidity were certainly lower than the actual. Lack of medicines, transportation facilities, personnel and fuel, added to the distress caused by the initial lack of food. From the handicap of those years the health of at least two generations of Russians will suffer, although since 1923 there has been a steady improvement in conditions and a decrease in serious epidemics.

The following figures show the incidence of certain diseases throughout the territory occupied by the U.S.S.R. in 1913, the last normal pre-war year; in 1921, a famine year; and in 1924, the most recent year for which the statistics are available:

CASES OF EPIDEMIC DISEASES IN RUSSIA IN
1913, 1921 AND 1924.

Disease	1913	1921	1924
Black Plague	535	—	599
Cholera	282	204,228	11
Diphtheria	471,130	42,591	66,465
Malaria	3,398,363	508,157	5,595,854
Measles	492,735	99,100	329,504
Recurrent Fever	30,690	1,453,424	48,181
Scarlet Fever	424,507	83,028	201,005
Smallpox	72,236	352,094	26,744
Typhoid Fever	398,291	668,764	166,101
Typhus	118,419	3,354,856	122,546

The above figures came in part from *Statistical Material* published by the Commissariat of Health in 1926, and in part from material in the Bureau of Statistics in Moscow, as yet unpublished.

The campaign against these diseases has of course varied with the nature of the disease. The Bacteriological Institutes are the directing headquarters of the war, their support coming from the central Commissariat, as it is felt that epidemics are of more than local importance and danger.

There are ten "flying squads" ready each summer to be sent to neighborhoods infested with the black plague. Most of their efforts are directed toward the extermination of the *suzlicks*, or little gophers, which carry the pestilential fleas; practically everyone contracting the disease dies, making therapeutic measures worthless.

Small-pox vaccination is now obligatory, and thirty-

one laboratories are devoted exclusively to the preparation of vaccine for it. The decreased incidence of this disease witnesses to the activity against it.

Cholera, typhus and recurrent fever are disappearing as the filthy and diseased hordes of refugees from war and famine no longer crowd the stations and wagons of the railroads, the old army barracks and other public places, and as these places are being repaired and cleaned.

Typhoid fever and dysentery retreat more slowly as the safe-guarding of drinking water, milk, etc. requires a more complicated and costly type of sanitary inspection and control.

The infectious diseases usually connected with childhood have shown a slight increase in the last year, especially scarlet fever.

Malaria is, however, the endemic disease of Russia at the present time as it has been in the past. Thousands of the most fertile acres of the country lie in a region which owes its fertility to spring floods with their sequel of stagnant pools. Drainage to be effective would cost millions of roubles; the prevalence of high winds, as well as the large areas involved, make the use of oil impractical, and many people grow immune to the salutary effect of quinine after several courses of treatment. As a result malaria is still a problem, in spite of the omnipresent anti-malaria stations and the fact that half the stock of every steppe pharmacy consists of quinine. Prophylactic measures both in the treatment of individuals and in the elimination of mosquitoes are being carried on everywhere. In the neighborhoods where the population is sufficiently intelligent to cooperate, and where the swamps and pools are of reasonable area for drainage, there has been a marked reduction in the incidence of the disease.

CHAPTER XII

THE ANTI-TUBERCULOSIS CAMPAIGN IN RUSSIA

FOR more than a century tuberculosis has been recognized as one of the most prevalent diseases in Russia, but until recently there, as in other countries, its nature and treatment were not very well understood. Certain drugs were expected to be specific for it, but especially recommended was the drinking of koumiss, or mare's milk. It was also observed that this treatment was most beneficial if taken actually on the steppe where grew a certain kind of grass on which the mares fed, a region almost on the edge of Asia and inhabited only by nomad tribes of herdsmen. In their zeal to obtain the fresh koumiss both the early doctors and their patients failed to observe that the primitive living conditions in that part of the world necessitated sleeping in a tent and spending all day out-of-doors in the sunny, dry climate of the south-eastern steppe, as well as adhering to an extremely simple though nourishing diet. Tolstoi as a young man was thought to have "consumption", and his letters contain some interesting pictures of life among the Kirghez of the Orenburg region where he spent several summers in taking the cure, apparently with excellent results.

Very few Russians, however, could afford such expensive treatment and the normal living conditions in the country as well as in the city offered every encouragement to the spread of the disease. Even very intelli-

gent people considered the night air dangerous at any time, while during eight months of the year the windows of all houses were sealed shut to keep out the cold. Among the peasants and working people overcrowding and undernourishment were as universal as the custom of eating from a common soup-bowl. The use of a common Communion cup, the eagerly sought privilege of kissing ancient martyrs' reliques and the social sharing of the vodka bottle were all unsuspected as possible sources of infection. Early statistics for the country as a whole are not obtainable; but during the war years, 1914-1918 the records (from *The Tuberculosis Three Days*, report of the Committee for the Organization of the Tuberculosis Three Days in Moscow, 1922, p. 16), show that while Russia lost 1,700,000 soldiers from wounds and disease, she lost 2,000,000 of her total population from tuberculosis alone. According to the same source (p. 14), in Moscow in 1899, with no public nor privately maintained institutions or organizations for the cure or prevention of tuberculosis, there were 31 deaths per 10,000 persons from that disease.

Until 1900 the only interest taken by the medical profession in tuberculosis was shown in an occasional invitation extended to some foreign specialist to come to lecture before the students of the university or to one of the medical societies. In the first years of the new century, however, the Pirogoff Society, a well known group of socially minded people, formed a temporary committee for the study and improvement of conditions fostering tuberculosis. After several years of activity in various parts of the country this committee expanded into the All-Russian League for the Campaign Against Tuberculosis, which was officially recognized by the government but obtained practically all of its funds

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from private benevolence. Its first institution—the first anti-tuberculosis institution in Russia—was a forty-two bed hospital for women, opened in the Staro-Ekaterinskaya Hospital in Moscow in 1906. Considerable opposition both from doctors and from patients' families greeted this attempt at segregation and intensive study of the disease. However, the League obtained a donation from the Royal family's private purse and thus became somewhat of a social and financial success, so that other experiments soon followed—an out-patient clinic, a thirty-bed children's hospital, an Anti-Tuberculosis Exposition, with a tag-day called the "Day of the White Daisy". As a result of these efforts we find by 1909 the tuberculosis death-rate of Moscow reduced to 26.7 per 10,000 (according to the aforementioned report, *The Tuberculosis Three Days*, page 15), a figure as low as any recorded for that city until the intensive campaign of the last few years. Away from Moscow and the inspiration of the founders, the League was not so successful, and aside from the koumiss establishments of the steppes and the sanatoria in the Crimea, which catered to wealthy patients only, there were very few places where the tuberculous could receive treatment.

With the outbreak of the World War humanitarian work of a general nature suffered and even before the Revolution of 1917 the League saw its committees broken up and its medical personnel scattered to military duty. In 1918 the financial resources of philanthropic organizations were taken over by the state and the first phase of the anti-tuberculosis campaign in Russia—under private endowment—was over.

The disease itself, of course, gained by the lull in hostilities against it and when the Peoples' Commissariat for

the Protection of Health was organized in July, 1918, it was immediately recognized as one of the most dangerous enemies to the people's health, an enemy requiring considerable funds and time to conquer. Funds just then were low and equipment for institutions very scarce—it was the period of civil wars and blockade—and so the Commissariat of Health, partly from necessity and partly because it realized the need of such a course, turned its attention to a program of education of the mass of the people into some sense of responsibility for the protection of their own health. A new tag-day was inaugurated—this time the "Three Days of the Proletarian White Daisy", the change in title being intended to emphasize the emancipation from a certain patronizing attitude inherent in the earlier campaign. The protection of the workers from tuberculosis was to be the duty of the State and of the workers themselves now. An article called *Then and Now* appeared in the official report of the Proletarian Three Days which can be condensed into the following paragraph:

Under the old regime the struggle against tuberculosis in Russia had an almost exclusively private and charitable character—it was in other words irregular and accidental. The government took no sustained and active interest in it, although Nicholas II gave to it from his private purse five thousand roubles (\$2500) a year, and the Moscow Duma appropriated two thousand roubles (\$1000) a year. The workers themselves, the greatest sufferers from tuberculosis, had no part in the organization and stood entirely outside of the campaign. . . . The Day of the White Daisy was then exclusively a handout from kind-hearted rich people. It is true that the amounts raised were considerable and

several institutions were opened, but during the World War the founders of these institutions were busy with other affairs, no money was given to them and they had to be closed. Now the campaign has an entirely different character—it is led by the government and one feels the solid foundation under the new institutions, all of which must conform to the same high sanitary standards, and only qualified personnel are employed. The connection of tuberculosis with bad economic and social conditions is understood and official action can be taken to correlate all measures for the prevention and cure of the disease. Working people are on all the committees. The present anti-tuberculosis campaign is knit into the life of society as a whole.

The activities of the Commissariat of Health did not stop with this propaganda, even in the early days. By the end of 1918 a dispensary for tuberculous children was started in Moscow and in the next year the City Health Department organized the Moscow Tuberculosis Institute, with a 300-bed hospital for critically ill patients. In 1921 a special bureau of the Commissariat of Health was set aside for the campaign against tuberculosis and since that time the work has shown an organized and progressive growth.

The tuberculosis dispensary has been the most important type of institution in the campaign. It is primarily devoted to the clinical diagnosis and treatment of the disease among out-patients, but growing out of its findings and recommendations have come a host of other institutions—permanent sanatoria, the "night sanatoria", day camps, diet dining rooms, laboratories, forest schools, visiting nurse service, traveling exhibits. All the important cities now have anti-tuberculosis dispensaries as part of their health work, and their activities

outlined and standardized by the central bureau in Moscow. In the R.S.F.S.R. there were on January 1, 1926, twenty-two cities with a population of over 100,000, and in each of these the law requires at least one tuberculosis dispensary. There are forty-seven cities with a population of from 50,000 to 100,000, and of these forty-two have such dispensaries; of the one hundred and four cities with a population between 20,000 and 50,000 seventy-two have opened dispensaries; and of the five hundred and sixty-five cities with a population from 5,000 to 20,000 fifty-four have dispensaries. Altogether in the R.S.F.S.R. there are 223 of these institutions, a progressive growth since 1919 when four were started as an experiment. (From the "The Tuberculosis Campaign in the U.S.S.R.," by E. G. Munblitt, in the *Russian-German Medical Journal* for April, 1926.) To these dispensaries the factory doctor and the school doctor and the general clinic doctor and also now the private doctor may send their patients to be examined by specialists, with laboratories, facilities for surgery and Roentgen Ray cabinets to aid in diagnosis. The same source says the types of disease found by these dispensary examinations during 1925 were as follows:

	PULMONARY T.B.	T.B. OF BONE	T.B. OF LYMPH GLANDS	OTHER FORMS OF T.B.
Adults	75%	7%	14%	4%
Children	11%	11%	78%	

From the dispensary the patient is sent to the type of institution indicated by his condition, at least that is the ultimate aim, but up to the present time there have not been sufficient funds to provide for all the institutional care really required.

The figures for January, 1926, again according to E. G. Munblitt's article, show that there were then in the R.S.F.S.R. 206 institutions with a total of 14,758 beds offering permanent or long continued care to the tuberculous. Local funds are responsible for 155 of these institutions with 9,567 beds; 39 institutions with 3,991 beds are tuberculosis sanatoria in the health resorts, many of them supported by the health insurance funds; 3 with 220 beds are supported by the Russian Red Cross; 9 with 980 beds are maintained in various parts of the country as model institutions by the central Commissariat of Health. It is interesting to note that among these permanent institutions there are two lupusoria with 180 beds caring for that type of tuberculosis only. This total of about 15,000 beds for totally disabled tuberculosis cases is too low for a population of approximately 140,000,000. It is hoped that within a few years two factors will have brought the demand and supply of these beds into better ratio—the increasing amount of funds available for opening sanatoria, and the decrease of seriously ill patients due to earlier diagnosis, more effective prophylactic measures and generally better living conditions for the population as a whole.

For patients in the early stages of tuberculosis Moscow has worked out a system of part-time sanatorium care which seems unique, yet which might give the same good results in any densely populated industrial neighborhood. Many of the patients coming to the dispensaries must be diagnosed as definitely tubercular, but are nevertheless still able to work and to regain their health if surrounded with proper living conditions. These conditions are very difficult to obtain in Moscow, which is probably the most overcrowded city in the

world, recent statistics showing an average of six and a fraction individuals per room for the entire city. To meet this situation the tuberculosis section of the City Health Department has taken over a number of former mansions and converted them into small model sanatoria to which the dispensaries may send 35 to 45 patients at a time for a two to three months' period. At the end of their working day these patients go directly from the factories or offices to the sanatorium, where they bathe and dress in clean fresh clothing, then lie in long chairs in the garden or on the verandas for a rest of an hour before dinner. This meal is especially nourishing, more so than the average worker's dinner at home would be, and after it comes another rest period. Then for an hour or two there are games, music and reading, sometimes a party at which the patients entertain their families, sometimes an illustrated lecture by the doctor in charge of the institution, and then bed-time. The windows of the bedrooms are nailed open even in the coldest weather and in Moscow this often means 30 degrees below zero Fahrenheit. The next morning a warm breakfast is provided before the patients start to their day's work. Needless to say, the records show almost all the cases improved on discharge, but the authorities feel that the educational value of the treatment to the patient and to his family is of even greater benefit than his immediate gain in health. There is little opposition to entering the sanatoria as they are usually within easy walking distance of the patient's home and his family may visit him often; the other great advantage of this type of part-time care is that the salary of the wage-earner is not cut off from his family. So successful and popular are these night sanatoria among the workers that many other industrial centers have copied Moscow in opening

them. Last year there were over 5,000 beds offering this temporary service to patients still able to carry on their ordinary working duties if their leisure time could be a period of recuperation.

These part-time sanatoria are also provided for school children. The following report was sent to the American Friends Service Committee after my visit to one of these children's sanatoria in 1926:

This sanatorium is situated in the Basmannaya Ward of the city of Moscow and was visited in company with the Russian woman doctor who is in charge of all health work in that ward.

The institution is run as a day sanatorium between the hours of 8 A. M. and 5 P. M. for both boys and girls from 4 to 14 years, and as a night sanatorium between the hours of 5 P. M. and 8 A. M. for girls only from 9 to 14 years. The children are recommended for the institution by the school and tuberculosis dispensary doctors throughout the ward because of their incipient tuberculosis or state of especial malnutrition. As many more children need this care than there are institutions to receive them, two or three visiting nurses take the lists recommended by the doctors and visit the homes of the children, selecting those whose home surroundings are such as would preclude the possibility of their improvement in health at home. The children received in the day-time are those considered too ill for regular school attendance. Both night and day children receive a full daily ration of food from the sanatorium, but this is often further supplemented by food obtained at home. The night children are allowed to visit their homes at the noon school recess and for a short time after school; the day children live at home from 5 P. M. until 8 A. M.

The house is a three-story dwelling formerly belonging

to a wealthy family. It is in very good repair, the rooms being large, well lighted and well ventilated, with good parquet floors. The first floor is occupied by three large bedrooms, bathrooms and dressing-rooms. The beds are metal with fairly good mattresses, two sheets and sufficient blankets. Between the beds are white wooden tables, no other furniture being in the rooms. The walls, floors and beds (we examined several) were very clean. On the first floor there is also a dispensary where the children are given a physical examination monthly by the doctor and where they report twice daily for the taking of their temperatures and once every ten days to be weighed. The second floor has a large playroom, two rooms used as restrooms by the day sanitorium which are very crowded with beds made out of old army cots and stretchers, the dining room—used by both day and night children—and a small office for the doctor. The third floor has the kitchens, store-rooms and the servants' rooms. They were very clean when we saw them, and without odors. The milk, butter, meat, bread, etc. are kept in boxes covered with mosquito netting. Back of the house is an extensive garden, shaded in part by old trees and in part open to the sun. Several tables have been built into the ground allowing for out-door occupations and meals when the weather permitted. Unfortunately on an adjoining lot there was a deep quarry-like depression filled with water which in past years had been a source of malaria. The city sanitary engineers were expected to come the day after our visit to arrange for the draining of the pool. The day sanitorium children spend most of their time in the garden both winter and summer.

From 8 A. M. to 10 A. M. the day children, 48 in number, both boys and girls from 4 to 14 years, arrive,

remove their home clothes (which are hung in individual muslin bags in the first dressing-room), take a tub or shower bath and dress in the institution clothes, much of which were given several years ago by the American Relief Administration. Each child has his own numbered toothbrush, mug, towels and washcloth, the shelves of these toilet articles being protected by netting. From 10 to 10.30 A. M. breakfast is served, consisting of tea, milk and bread. From 10.30 A. M. to 1 P. M. the children play and rest in the garden, small groups being called to the house occasionally for the doctor's examinations. From 1 to 2 P. M. dinner is served of soup, meat, potatoes or macaroni, bread and butter and dried fruit compote. From 2 to 3.30 they sleep on beds in the house. From 3.30 to 4.30 there is active and supervised instruction in singing, drawing, painting, etc. From 4.30 to 5.00 P. M. a light supper is served, after which the day children go home, having first changed to their own clothes.

The 48 children received in the evening are all girls ranging from nine to fourteen years who attend school during the day. They arrive at the institution about 5 P. M., bathe, clean their teeth and change into the dispensary clothes. From 6 to 7 dinner is served; from 7 to 8 all rest on their beds; from 8 until 9 P. M. there is active play (these girls edit a magazine and make most of the decorations about the house) or study their lessons for the next day. At 9.30 a light tea is served, and by 10.30 all are in bed. At 7 A. M. they are wakened, take shower baths, and dress in their own clothes. At 8 o'clock breakfast is served, after which they start to school, taking some white bread with them for the mid-day lunch. Some schools serve a hot lunch for the children, some do not.

The daily food ration received alike by day and night children consists of the following amounts:

Black bread .....770 grams	Butter .....48 grams|
White flour .....200 grams	Sugar .....56 grams
(made into various kinds of buns, cakes)	Meat .....200 grams
Macaroni .....150 grams	Dried fruit .....24 grams
(sometimes potatoes)	Milk .....1 glass a day

This ration is reckoned to amount to from 2,500 to 3,000 calories a day per child, but no attempt has been made to weigh or measure accurately the amounts which each child receives. The doctor said that the greatest lack was fresh fruits and vegetables, eggs and milk, but that the present budget did not allow a better diet. As it was, it was much better than she could afford for her own children.

Over the period of the two and a half months preceding our visit the children had shown the following results in weight:

WEIGHT	IN DAY SANATORIUM	IN NIGHT SANATORIUM
Showing no gain.....	12.0%	5.5%
Showing gain of 1 kilogram	26.0%	19.0%
Showing gain of 2 kilograms	41.0%	39.0%
Showing gain of 3 kilograms	16.0%	29.0%
Showing gain of 4 kilograms	2.2%	7.5%

In connection with these figures it was pointed out to us that the children were at the night sanatorium for a period of sixteen hours out of the twenty-four as contrasted with the eight hours spent there by the day children, and that also the day children were usually in the

poorer physical condition at the start, as they were the ones judged by the examiners to be unfit for school attendance.

That the children coming to this sanatorium needed special institutional care was proved by the reports of the nurses who visited in their homes. Only 33 percent of the children now in the institution had had separate beds at home; 56 percent had shared beds with one or more other people; 13 percent had had no beds at all. Six percent of the children came from homes where the rooms had no window or other direct ventilation, and only twelve percent lived in rooms which were not distinctly overcrowded.

The institution was considered both by the doctor in charge and by the ward doctor to be understaffed, but the premises, food and bed-linen all seemed clean and well-cared for. The personnel was as follows:

1 doctor in charge	2 cooks
1 doctor on part time	1 stove-man
2 teachers	1 yard-man
2 nurses	1 night watchman
5 maids	1 coachman to cart food supplies and wood

The children seen in the garden, in the bath and at the evening dinner seemed very happy and possessed with a real sense of responsibility as hostesses; their magazines both in essays and in cartoons, were amusingly illustrative of the health teaching they had received. The spirit of the staff was enthusiastic and their relations with the children were very cordial.

There are also the forest schools, described in the chapter on the protection of children's health, to which

many tubercular as well as pre-tubercular children are admitted. Then there are many day camps for both adults and children where rest in quiet and sanitary surroundings and a nourishing supplementary diet are provided. The patients attending these also show improvement on their subsequent visits to the dispensaries.

It is too early to offer any definite proof of what has been accomplished throughout Russia by the anti-tuberculosis campaign. Only since 1925 has a registration of the cause of death been compulsory, even in the larger cities; the incidence of disease was previously checked up but not the mortality rate. For Moscow, however, here are figures, and while it is probable that the decrease in mortality there is more rapid than elsewhere owing to the more strenuous campaign against the disease, this decrease may be taken as indicative of what will happen throughout the country as increasing funds are assigned to the rural work. According to "The Anti-Tuberculosis Campaign in the U.S.S.R.," by G. Munblitt in the *Russian-German Medical Journal* of April, 1926, these figures are:

DEATHS PER 10,000 PERSONS FROM ALL FORMS OF TUBERCULOSIS IN MOSCOW

1910	1911	1915	1920	1921	1922	1923	1924
21.5	27.9	29.9	39.7	38.2	26.1	17.5	16.1

Both the climate and the food products of Russia are natural aids in an anti-tuberculosis campaign, and now that there is a scientifically directed propaganda against certain unhygienic habits of the people as well as a nucleus of curative institutions, we may expect to see the disease ultimately routed.

CHAPTER XIII

THE CAMPAIGN AGAINST VENEREAL DISEASE

Up to the time of the Revolution the treatment of venereal disease was entirely in the hands of private physicians and of those country and city medical institutions which handled a general practice. According to the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925*, (p. 19), "the concerted campaign against venereal disease on a nation-wide scale began only after the October Revolution, at the time of the creation of the Commissariat for the Protection of Health, under which was organized the Section (today the Bureau) for the Campaign Against Venereal Disease." Diagrams and a discussion of the organization of the Bureau were included in the chapter on the organization of the Commissariat for the Protection of Health, on pages 55 and 56. The aim of this Bureau is to create throughout Russia institutions for the cure and prevention of venereal disease, and to draw the working people into active participation in the campaign.

Special venereal dispensaries were from the beginning thought to be the best agencies for the fulfilling of aims. Two great obstacles to the widespread establishment of such dispensaries immediately presented themselves: first, the lack of physicians trained to treat venereal diseases; and second, the lack of the necessary medicines, since salvarsan and bismuth pre-

which had formerly been imported from Germany were then excluded by the blockade.

To meet the first need special courses were established in connection with the dispensaries of the large central cities and in 1921 the State Venereal Institute was opened in Moscow. From the first this institute has played a most important role in the training of doctors for practical work in the city and country dispensaries, not only because of its sound scientific work, but because it has also emphasized the non-medical aspects of venereal disease, so that the graduates of its courses are social workers as well as medical specialists. At the present time it has sixty doctors taking a three years' post-graduate course, and sixty taking a year's course, all of whom on the completion of their studies are to be stationed in the provincial districts.

The Institute has met the second great handicap to the campaign; i.e., the lack of medicines, by making original preparations of arsenic and of bismuth which are now widely and successfully used throughout Russia.

A German specialist in venereal diseases, Dr. Jadasohn of Breslau, who visited the Institute in 1925 wrote of it (in "An Account of My Trip to the Second All-Russian Congress in the Campaign against Venereal Disease at Harkov, May, 1925," in the *Deutsche Medizinische Wochenschrift*, Nos. 32-34): "Its diagnostic, therapeutic, experimental and bacteriological equipment are unquestionably of the first rank, the equipment being simple, but very practical. . . . Especially great care is taken with statistics. In this connection two things particularly impressed me—one, the detailed questions asked of the patient, whose answers are later assembled on large statistical sheets (the compilation of

which must be a time-consuming piece of work); and the other, the great value of the statistical findings, which are presented in very intelligently arranged tables. The walls of the director's office in one of the dispensaries were covered with these tables, which were especially well arranged for the purpose of understanding and were also admirable from an æsthetic standpoint."

To a German specialist the medical technique and the statistical information of the four Moscow dispensaries under the direction of the State Venereal Institute seemed especially noteworthy, but to an American public health worker the approach to the patient and the social service offered by the dispensaries are even more interesting.

The oldest of these dispensaries is situated in a large two-story building on a small side street in the central part of the city where many workers live. There is no sign over the door, but the house number is printed in large letters and electrically illumined at night, so that it is easily found without drawing attention to those who seek it. There are separate entrances for men and women leading into broad, well-lighted corridors which serve as waiting-rooms. Between these corridors are the record rooms (where the patient is known only by a serial number given to him by the doctor at the first interview) and a large cloak-room where all out-door wraps and bundles are checked without charge. In the waiting-rooms are tables with chess, checker-boards, dominoes, current newspapers and magazines. On the wall of a corridor hangs a letter-box where anonymous questions may be placed and on the following day the answers are written out on an adjoining blackboard where they remain for a couple of weeks. The walls

also hold a few colored posters showing the extent, causes, prevention and methods of curing venereal disease. These posters are frequently changed, new ones being brought out from a large room which serves as a special picture gallery and auditorium, where popular lectures are given weekly and where seminaries are held for students. A moving picture machine and a magic lantern are part of this room's equipment. On the women's side a room off from the general waiting-room is fitted up for child patients, with kindergarten tables, chairs and washable toys.

Two shifts of doctors, twenty-eight in all, work in the dispensary daily with an average attendance of 1,000 patients a day, the greatest numbers coming in the evening. Patients are received directly from the street, and are also sent from the general medical clinics, from factories and from private physicians. No charge is made for advice or treatment. On the first visit the doctor takes a full medical and social history of each patient and asks permission to call on the patient's family in order to make the necessary tests to discover if other members are infected. Although this permission is sometimes refused at first, it is usually granted before the course of treatment is finished. During these visits to the home, instruction is given in general sanitation and in personal hygiene. As far as possible the same doctor continues with the treatment of one patient and with the home visits to that family. The technique and equipment in the treatment rooms compare favorably with those in American venereal dispensaries. Privacy and care in draping the patient are not so insisted upon, but in general in Russia the naked body is not so unfamiliar as with us. Courteous, respectful treatment of the patient is universal. For lumbar punctures there is a

small ward with five beds where patients may be kept for one or two days at a time. In the office of the Medical Director there is a bewildering display of statistics declared to be the most complete in the world on this subject. They relate to the age, nationality, education, family life, occupation and social position of the patient as well as to many medical aspects of venereal disease.

Prostitution is still admitted to be one of the factors in spreading venereal disease, although it is no longer licensed, nor so openly practised as in the old days when the "yellow ticket" was one of the means by which ambitious and intelligent Jewish girls sometimes could be admitted to university towns otherwise closed to them. The great ease with which marriage can be made and unmade nowadays has undoubtedly lessened the value of prostitution as a trade, while the emphasis put on the teaching of social hygiene in the schools and among groups of young Communists leaves no one ignorant of the dangers of such a trade.

A certain proportion of the patients of every venereal dispensary, however, are still found to be prostitutes, and an interesting experiment in their reclamation is being worked out in Moscow. If they give as their reason for adopting such a profession the fact that they have no other means of livelihood, they are offered the opportunity of living in a dormitory and learning another trade while they are taking their course of medical treatment. For those who are illiterate lessons are given in reading and writing, and for those who are especially unskilled rough work at sewing and mending grain bags is supplied. Acceptance of this way of reform is entirely voluntary on the part of the girl, but once accepted it is supposed to be held to, and if she is absent from the dormitory at night or from the workshops dur-

ing the day she is apt to find her place immediately taken by another applicant, as there is a long waiting list, and room for only about thirty in the dormitory. The girls are paid while in the workshops, and at the end of their course of medical treatment a self-supporting job is found for them in a factory or elsewhere. It is claimed that only a very small percentage go back to their old life. There is, of course, nothing new in these measures as a cure for prostitution; the novelty lies in their adoption by the health authorities as a part of the official medical program in a campaign against venereal disease. The success of this social experiment in Moscow is admitted, but its expense is too great for it to have been included as yet among the activities of other cities.

The backbone of the whole campaign is the venereal dispensary, modeled everywhere along the lines of the central dispensaries. In 1925 there were in the territory of the R.S.F.S.R. fifty-four such dispensaries, thirteen maintained by local budgets and forty-one dependent on the central Commissariat funds. The plans for 1926 include the placing of a dispensary in each gubernia, bringing the total up to sixty-seven. That the attendance at these dispensaries warrants operating them is shown by the following figures for attendance at the venereal clinics of six cities during 1924, which are taken from the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925*, pages 20, 21, and 22.

Tula	30,130	Voronej	12,623
Saratov	12,488	Ivanovo-Voznesen-	
Rostov	7,452	sky	3,284
		Irkutsk	1,164

The total number of beds in the U.S.S.R. reserved for those requiring hospitalization because of venereal disease now equals 3,530 for a population of about 140,000,000, or one bed for about 40,000 people. The norm desired by the officials is one bed for every 1,000 city dwellers and one for every 10,000 country inhabitants.

It is felt that in the future more effort should be spent in the rural districts. This conclusion followed as a result of the reports of the twenty "flying squads" at the present time working in the country. "The squads have examined villages where the percent of those ill with syphilis amounted to 40 percent of all those examined. The work of the squads revealed that 94 percent of all those examined were entirely ignorant of the nature and cause of venereal disease." In some villages, among non-Slavic tribes, where before the war syphilis was unknown, the infection was introduced by the demobilized soldiers and is especially virulent. The infant death-rate caused by this disease is so high in these places that the population is actually decreasing. The importance of these flying squads lies not only in their initial examination of the villages and their immediate follow-up work, but in their educational prophylactic work and in their linking up of the smaller villages with the nearest permanent medical station where treatment can be secured. It is proposed to increase the number of the traveling clinics as fast as financial means will admit.

The educational side of the problem is nowhere neglected by the directors of the campaign. Social hygiene lectures are given to the Pioneers (the organization which corresponds to our Boy Scouts, except that girls as well as boys belong to the Pioneers); factory doctors

not only examine the workers for venereal disease but also include it in their program of lectures; the small health exhibits which exist in every provincial town and in many of the villages include posters and books on the subject; definite instruction is given in the army and navy. The attendance at the lectures given in the dispensaries in several cities is shown below.

ATTENDANCE AT LECTURES HELD IN VENEREAL
DISPENSARIES IN 1924

Place	Number of Lectures	Number of Attenders
Astrakhan	127	22,568
Moscow	1,911	139,653
Tula	80	9,730
Veronej	147	11,600

(From the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925, p. 20.*)

A bi-monthly journal is now issued by the Institute to stimulate interest in this branch of medicine among provincial doctors and to inform them of the most recent scientific discoveries in treatment and prophylaxis.

As Dr. Jadassohn says in the report mentioned above: "It is astonishing with what energy the study and campaign against venereal disease is moving forward in Russia. . . . That the goal has only been seen, but not yet gained is clear to the leaders of the campaign; but the organization is there, enthusiasm and energy for the work at hand—the venereologists of the entire world will follow the campaign with the greatest interest."²⁰

CHAPTER XIV

THE CAMPAIGN AGAINST ALCOHOL AND NARCOTICS

SOME of the most interesting social phenomena of the last few years have been the various reactions of different countries to the almost universal prohibition laws that were put into effect during the war. Everywhere the high resolve to self-sacrifice which prompted the initial obedience to these laws has waned, yet everywhere governments and officials have feared to lose face by a direct repeal of them. In most countries, therefore, there has been a gradual relaxation in enforcement of these laws, then an equally gradual rewording to permit of some of the old social freedom. In Russia, however, changes involving social forces have a tradition of violence, and in the history of the modern anti-alcoholic campaign there is no exception to this rule.

"For centuries alcohol has been a curse to Russia. Vodka drinking is almost universal among the adult Russian males. Russian women drink very little. The drunken muzhik is the comic character of the Russian stage. The emphasis on drink in Russian plays and novels is an accurate reflection of Russian life. The ravages of alcohol have been greater than elsewhere. Not that Russians drink more than Frenchmen, but what they drink is more potent and more harmful." So writes Hans V. Kaltenborn in the *Century* for June, 1927.

Dr. Sholomovich, head of the anti-alcoholic move-

ment in Russia, states that before the Revolution 80 percent of the adult male population were pathologic drinkers. In those days the government itself made vodka of 40 percent to 60 percent alcoholic content; its product was strong, cheap and pure—and one of the greatest sources of income to the state. Home brew was inferior in quality and severely punished by the police. Therefore when the Czar's ukase came in 1914 prohibiting the further sale of alcoholic beverages there existed for a couple of years as complete a condition of prohibition as any country has ever experienced. Seals closed the doors of the great government warehouses, there were no private distilling companies, and individuals were too afraid of police vigilance and too occupied with other affairs to make their own vodka. Prohibition had been decreed as a war measure, therefore when the Revolution came and with it the withdrawal of Russia from the World War, it was natural that the peasant soldiers returning to their villages should demand vodka as a peace-time necessity. Since the government stores and the cooperatives no longer supplied this need, stills were set up more or less openly. The old Imperial police were gone and law and order had become for the moment a matter of local concern.

But the Soviet officials could see only the evil effect of alcohol on the workers and they soon began to make every effort to continue the prohibition which seemed to them to promise such possibilities in improved health and mental attitude, as well as better social conditions for the masses. There was also the economic factor of the waste of the precious wheat, so badly needed if the Russian export trade was ever to be regained.

I quote again from Mr. Kaltenborn: "The peasant was not delivering his grain to the government. Mos-

cow suspected that one reason was the peasant's desire to keep himself supplied with grain-distilled vodka through the long winter. It was decided to teach him the uselessness of this procedure by confiscating every still in the land. The entire moral and material force of the Communist government was concentrated on the effort to make prohibition effective.

"Beginning in 1922 the Russian courts and jails were clogged with prohibition cases. There were only 94,000 in that year, but by 1923 the number increased to 191,000. In 1924 the government authority dealt with 275,000 separate cases in which the prohibition law was violated. There was a special effort to seize the illicit stills which supplied whole villages with the habitual quota of Russia's national drink. In 1922, 22,000 such stills were confiscated; in 1923 the authorities seized 52,000, and in 1924, the last year in which there was a persistent effort to enforce the law, 73,000 stills fell into the hands of the government's representatives.

"By the summer of 1925 it was clear that prohibition could not even be imperfectly enforced except at an enormous cost.

"There was a difference of opinion in the inner councils of the Kremlin as to what should be done. The prestige of the government was involved. To abandon prohibition was to confess failure. To retain it without enforcement would be worse. It was decided to abandon prohibition and substitute government control. The manufacture and sale of intoxicants was legalized as a government monopoly and of the many state enterprises this one soon became the most profitable.

"Comrade Semashko, Russia's Commissar of Health, who was in the thick of the fight on the side of prohibition, confessed failure with a note of sadness. 'We

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abandoned prohibition', he said to the writer, 'not because we do not believe in it, but because we found enforcement impossible. It was better to create a system of legal control than to permit the conditions developed by prohibition to continue. Now we have at least some measure of supervision. Vodka may not be sold to children. No store may sell more than one bottle at a time to any one person. Whenever we are assured that the majority of the population in any district objects to the sale of vodka we do not permit it to be sold there. Already we have dry districts around certain factories and in large areas near Archangel and in the Crimea. I have myself forbidden the sale of vodka in our southern health resorts. We are now seeking to do through education by tracts, lectures, films and posters what we failed to do by law. Our situation is different from yours. You are dealing with highly educated people who can be made to understand that drink is an evil. Ours is a people in a low state of culture. Drinking has been universal in Russia for generations, but our intensive educational campaigns in schools, clubs, youth organizations and moving picture houses is teaching our people the dangers of alcohol. We may come back to prohibition but it will take time.' There is no agreement among Russians or among foreign observers in Russia as to whether conditions are better or worse since prohibition was abandoned. The majority says there is more drinking now than when the sale of vodka was prohibited. Commissar Semashko believes that city conditions are worse and country conditions better since prohibition was abandoned."

It is undisputed that the return to state production of liquor has benefited the financial situation of the government in two important ways: first, by providing

an enormous direct income from the sales; and second, by releasing large quantities of wheat for export since much of the government vodka is made out of corn (maize) and potatoes. But there is still a group of people in Moscow who feel that alcohol should be attacked as a social disease, exactly like tuberculosis and syphilis. Dr. Sholomovich, present director of the anti-alcoholic and anti-narcotic section of the Moscow City Health Department, tells of their work in his *How We Wage War on Alcoholism*. In all countries and ages, he says, people have resorted to the use of intoxicating stimulants, apparently seeking in them a relief from the hard and inharmonious conditions of life. Since these conditions exist more fully in cold climates it is only natural that, generally speaking, one finds the strongest drinks used in the coldest countries. However, as there are few people anywhere without either an internal or external conflict, it is natural that anything producing even a temporary harmony has been widely and eagerly sought. Narcotic drugs are therefore included in the same category as alcohol in Russia. The only hope for the complete elimination from life of these substitutes for happiness would seem to be the elimination of inner conflicts and of unpleasantly harsh exterior conditions—the goal at which Communist idealists aim.

Vodka, he says, is in Russia the most widespread of the narcoholic poisons, as they are called, more than three-fourths of the entire adult male population drinking to excess; the addiction to cocaine and morphine has increased since their use was made known to many during the war; cocaine has become an especial danger to the homeless children; women are smoking much more generally than was the case before the war.

While the government was fighting for prohibition

y attempting to shut off the supply of home-brew, very little was done by any other department in the way of a positive temperance campaign. When the state opened its own liquor stores in 1925 there was but one organization in the country, the narcotic section of the Moscow City Health Department, which was offering prophylactic and therapeutic treatment for alcoholism and drug addiction. It had been organized in the autumn of 1923, but had been given such a small budget that for some time it depended on the generosity of the tuberculosis dispensaries for a home. Even when in the following year a special building was assigned for a "narcotic" dispensary it was very poorly equipped and understaffed; but so zealous were some of its members that the social service workers washed the floors and cared for the stoves so that the dispensary might continue.

The first duty of the section was to define its scope and it decided to include in the term "narcotism" all addiction to alcohol, cocaine, morphine and tobacco. The next more radical step was the separation of narcotism from its traditional grouping with the psychiatric diseases and placing it beside tuberculosis and syphilis as one of the social diseases. This change was thought necessary because only about one-tenth of the psychiatric patients, that is not more than .002 of the total population, were mentally unbalanced because of the use of alcohol or drugs, and it was obvious that the institutions caring for them could not take on a problem involving 80 percent of the men of the country.

The first aim of the anti-narcotic propaganda was to establish a public opinion hostile to drunkenness—something which had never existed in Russia. The medical profession itself was the first to be approached as there

never was a lecture given on alcoholism at which someone did not ask why, if alcohol were so harmful, do doctors prescribe it so often. A pamphlet was prepared and circulated to all the physicians of the country giving the latest scientific findings as to the small therapeutic value of alcohol. Temperance lectures were introduced into the curriculum of medical students and nurses. Then lecturers went out to factories and railroad centers, wherever groups of workers might be found. Up to the first part of 1926 about 70,000 people had been addressed in public lectures, but the more popular types of propaganda among the workers were mock trials, personal interviews, and illustrated articles in the wall newspapers posted weekly in factory corridors. As the police were the public officials having the most immediate contacts with drunkards, a special course of anti-alcoholic lectures was arranged and delivered in the city police stations, so that no blue-coat need be out-argued in a street-corner debate.

Anti-alcoholic and anti-tobacco lectures became part of all hygienic courses in the schools; in the universities all the professors, no matter what their subject, were asked to give from ten to thirty minutes out of each term to a denunciation of alcohol and if certain professors were themselves unable to meet the situation, qualified speakers were sent to help them. Women's clubs and recreational clubs were not forgotten; the Young Communists and the Pioneers, besides receiving special attention regarding the harmful effect of over-indulgence in tobacco, were allowed to help in the collection of social statistics relative to the use of alcohol. A permanent anti-narcotic (the word in Russia includes alcohol and tobacco) exhibition was set up in Moscow, and several smaller exhibitions were arranged for trav-

elling in the provinces. Medical students are often sent out for a short period of service with these exhibitions as part of their training. Several pamphlets have been prepared for general distribution: *The Alcohol and Narcotic Question*, *Cocaine and Its Victims*, *The Child Grows Up* (a tract against tobacco), etc.

With the limited budget at command this educational work was considered more effective than the attempt to maintain sanatoria, but the therapeutic side has not been entirely neglected. There are now in Moscow one independent narcotic dispensary and five narcotic clinics in tuberculosis dispensaries. In 1924, the first year these institutions were open, there were, according to Dr. A. S. Sholomovich's *How We Wage War on Alcohol*, published in Moscow in 1926, 2,899 first visits and 15,148 return visits made by patients, while in the first nine months of 1925 there were 5,461 first visits and 58,474 return visits. Of these patients 50 percent were alcoholics, 20 percent were users of morphine or cocaine, and the remaining 30 percent suffered from nervous diseases or from excessive smoking. Twenty percent of the patients were under twenty years of age; 82 percent were men; 18 percent were women. Among the alcoholics unskilled laborers, office workers and printers predominated; the excessive smokers were mostly students; the majority of morphine addicts were doctors, nurses, druggists and office workers; the users of cocaine were artists, street merchants and youthful workers.

Conclusive statistics as to results are difficult to state considering the short length of time the clinics have functioned. Half of all those treated have shown a definite cessation in the use of alcohol or drug for a period of three months or more. The other half would require colony treatment before any lasting benefit

could be seen, and as yet there is no financial provision made for such a colony. The users of cocaine for the most part need institutional care as it is too easy for them to obtain the irresistible drug while they have their freedom. The morphinists have shown a great tendency to be benefited by the subcutaneous insufflation of oxygen. They cut down in their daily intake immediately without apparent suffering and this in spite of the fact that they are not confined in an institution but live in their usual surroundings. For the ultimate total abstinence from the drug, however, a residence of two to four weeks in some institution is almost essential.

Enough has been said to show that there still exists a definite interest in temperance in Russia. Indeed it is one of the few countries where an entrance fee can be demanded for an anti-alcoholic lecture and the hall be filled with people.

One of the most striking pieces of work carried on by the narcotic section, somewhat outside of its regular duties, is the reclamation from vagabondage of that group of homeless children whose habits bring them to the care of the narcotic dispensaries. As soon as the government recognized these *bezprizorni* children as a future if not an immediate menace to the state it encouraged their adoption into the already existing children's homes. But almost immediately the cry was raised that many of these children were so abnormal, so anti-social in their habits, that no ordinary institution could cope with them. An amazingly large percent of them were found to be habitual drunkards or drug addicts. Especially were they users of cocaine, as the merchants of this drug often employed the children to distribute their wares. A medical examination given to 450 children in the colonies opened later for the *bez-*

prizorni only, showed that 15 percent were users of alcohol or drugs.

Since none of the institutions of the educational department was prepared to receive these children, the narcotic section assembled the funds to open a small observation station in Moscow for them, as well as a special pedagogic colony in the country to continue the treatment of those who responded hopefully. The early days of the observation station were exciting, as the work was of a pioneer type and none of the staff could have had much experience by which to guide the program. Dr. Sholomovich writes of having to deal with "the closely-knit coherence of the gang, the quick confluence of adolescence into a locked collectivity with inner iron-bound solderings, the behavior of this collectivity dictated by the will of the leader. . . . Members of such a gang amazingly unite a-social conduct with strict discipline, pure childish behavior with the delinquency of the adult bandit, irresponsible psychopathic reactions with acute Sherlockian observation and alertness. In the beginning the children's observation home received both narcotic and acute psychopathic cases, drunkards, twenty-year old bandits, epileptics, and once the degenerate young murderer of a prison warden. To serve this conglomerate group of apaches was most difficult, so much so that the terrified personnel, after more than one experience of being beaten up and spat upon, struck and refused to continue even for their six-hour day. Finally we refused to admit the inappropriate, purely bandit adult element, the definitely psychopathic were removed to hospitals, some of the more desperate characters ran away, and there remained a group of ill children who slowly, with great difficulty and very gradually began to yield to the regime of the

institution; to the strict though quiet, patient and gracious treatment, to the pleasant measures of therapy (prolonged baths, showers, massages), to the clean surroundings, to a dining-table, to some garden work, books, stories of the teachers and a regular regime. They began to be accustomed and to value their place in an institution where cocaine was not used, nor vodka drunk, nor 'girls bought for ten cēnts' (the actual expression of a ten-year old patient), but where some sympathy might be shown in the matter of cigarettes. In the course of three or four weeks of such a regime, which could but be monotonous to the little street arabs, they were sent on, sometimes sorrowfully, to the suburban colony, where they found a much greater freedom, but the same authoritative medical care. Here, however, was a nature to be busied about, fishing, bathing, gardening and field work, mouth organ competitions, balalaikas to experiment with, horses, cows, calves needing care. Here gradually came a new gang spirit: 'Take care of our stuff', 'Gather up those spades', 'Quit quarreling'—the idea of self-discipline had come. Within yesterday's little bandit, tired out today with planting in the garden, there is a pathology—the thought kindles about the memory of cocaine, but the soil is unfavorable to the thought and it fades out in exhausted, healthy sleep."

Both the observation ward in the city and the farm colony should be duplicated many times over—the individual homes should always be restricted in the number of patients in order to obtain the best results—but money can scarcely be found to maintain the present institutions. They have not been open long and in actual figures the results may not seem impressive, but to anyone familiar with this type of work any suc-

ness seems rather worth while. Up to the first of the year 1926 there had been twenty-five children who had passed through the observation home in the city; of these, thirteen ran away and twelve were sent to the farm colony in the country, two of this last group had run away, but the remaining ten seemed to have completely changed their ways of life and their anti-social deals.

Every country has need of institutions like these narcotic dispensaries, reclaiming the frontiers of social conduct from the inroads of the wilderness. The Russian experiments boast neither complete success nor perfect technique. But they do suggest a fresh approach and new responsibilities in some problems of Public Health.

CHAPTER XV

HEALTH WORK AMONG THE SOLDIERS AND TRANSPORT WORKERS

THERE are two departments in the Commissariat of Health which are organized along somewhat different lines from the others; these are the Department of Health Work in the Army and Navy, and the Department of Health Work Along Routes of Travel, each responsible to the central Commissariat, but having an internal organization and institutions quite independent of other civilian health work. They are maintained in cooperation with the Commissariat of War and of Transportation, by which commissariats they were organized and administered immediately after the Revolution, when the need for medical work in these spheres was so imperative that it was impossible to wait until the new and unprecedented Commissariat of Health could be put into operation. In the Czar's time the Army and the Railroads had had their separate health bureaus so that it was natural to continue with this familiar plan of work.

The need, moreover, for flexibility, secrecy and quick change in geographic location makes it desirable that the Army have its own hospitals and sanitary work independent of local civilian control. Eight thousand doctors are now employed by the Army and Navy, and their hospitals count 400,000 beds exclusive of the

sanatoria and vacation homes maintained for the soldiers and sailors. Much money has been spent by the military authorities in improving sanitary conditions in the barracks, building bath-houses, laundries, etc.

An officer in the Red Army, who in the old days was a Czarist officer, witnesses to the improvement in living conditions. Formerly, he says, the officers' quarters were very luxurious, but the barracks of the private soldiers were often long, barn-like buildings, with dirt floors and few windows. The walls were unpainted wood and the men slept in their clothes or rolled in a blanket on a low wooden platform built down the middle of the barrack. The officers used to dislike exceedingly the duty of sanitary inspection for the barracks always smelt very badly and could not be made really clean. Now, he says, conditions where he is on duty are quite different. The buildings have been floored with wood and the window space much increased; the whole interior is white-washed and the platforms have been removed; an iron cot with mattress and two sheets and blankets and pajamas are supplied for each man; toilet fixtures and showerbaths have been installed and toothbrushes provided—it was necessary to make instruction in their use a part of the daily drill, owing to the unfamiliarity of most of the recruits with such evidences of civilization. One may well imagine what tales of wonder are carried back to remote villages by the young soldiers on their first visit home.

In addition to this practical teaching in personal hygiene the soldiers receive much theoretical instruction in village as well as camp sanitation, as they are continuously reminded that they are to take back to the "dark people" of Russia the enlightenment of modern life. In 1923 there were over 100,000 lectures on various phases.

of health work delivered to audiences numbering more than five and a half million soldiers.

An improvement in the diet of the army since the war and famine days has greatly decreased the prevalence of scurvy. Dental clinics and advice regarding oral hygiene have been a recent innovation. The rate of illness among the soldiers at the present time is almost identical to that of pre-war days, but the men now are admitted to the hospitals and clinics sooner and for less serious complaints. The early stages of tuberculosis and venereal diseases receive treatment now. There are still many cases of malaria, but they have decreased yearly since 1922.

The following table, from the *Report of the People's Commissariat for the Protection of Health to the 12th All-Russian Congress, 1925*, pages 103, 104, 105, 106, shows the incidence of disease per 1,000 soldiers for four different years,—the pre-war year 1913, the final civil war year of 1920, the famine year 1922, and the last year for which statistics are available, 1924:

INCIDENCE OF DISEASE PER 1,000 RUSSIAN SOLDIERS

Type of Disease	1913	1920	1922	1924
Total number of patients in Hospitals and Clinics	384.5	997.0	756.7	385.0
Number of Typhoid Fever Cases.....	4.9	11.0	2.7	..
Number of Cases of Other Parasitic Fevers .....	....	314.8	125.6	1.0
Number of Cases of Scurvy.....	....	14.9	8.3	1.0
Number of Cases of T.B.....	....	5.9	10.0	5.1
Number of Cases of Venereal Disease .....	....	31.2	45.1	40.6

The army doctors, coming in contact as they do with recruits from all parts of Russia, have the opportunity to carry out some very interesting research in compara-

diverse racial physical characteristics. The anthropometric studies which they are now making will be published later.

A special school, the Army Medical Academy in Leningrad, is devoted to the preparation of doctors for military service. A number of courses not included in the curriculum of the regular medical universities are given here in order to better equip the students for the special needs of the army and navy. A greater amount of laboratory and seminar work is required than in the courses preparing for civilian practice. All the clinical experience is gained in regiment hospitals and outpatient departments, so that by the time of graduation the young doctors are thoroughly versed in the traditions and ideals of military life.

The medical service for transportation workers has had much the same history as that of the army. It also is a legacy from pre-revolutionary days, as the railways and waterways have maintained their own hospitals for years. During the period of epidemics and famine the travel routes were inevitably foci for the spread of contagion, but conditions would doubtless have been worse than they were if the railroad and water transport departments had not set up a certain system of medical inspection and quarantine, inadequate as it was.

In 1924 this department (according to the above source, pp. 119 and 210) employed 3,214 doctors, 5,548 middle medical personnel and 10,861 servants. The railroads supported 207 hospitals with 10,667 beds, and the waterways 30 hospitals with 872 beds. These figures compare favorably with the totals for 1913 of 178 hospitals with 6,052 beds. It has been estimated that there are in Russia 700,000 transport workers, so

that the proportion of one bed to every sixty worker exceeds the norm recommended by the law, of one bed for every one hundred workers in industry.

In addition to these permanent institutions there is a special need for emergency units which can be sent in case of epidemics to establish quarantine and disinfection service at railroad and steamboat terminals. About 400 of these units are maintained, some meeting the black plague as it tries to come up the Volga by boat from Astrakhan, some dealing with the cholera which appears each year in the southeast, many fighting a long war with malaria.

The railroads are able to carry health propaganda into remote places and are doing much in this matter. They have fifteen health exhibitions on wheels, which they reckon have been visited by over 60,000 people, the majority of whom were peasants. Wherever the railroad hospitals are located, the doctors, although not allowed to do active medical work among citizens other than the railroad workers and their families, give many lectures, inspect schools and workshops, conduct anti-malarial campaigns and make the railroad medical service as useful as possible to the general public.

CHAPTER XVI

THE RUSSIAN RED CROSS

IN A review of the factors making for better health conditions in Soviet Russia, the work of the Russian Red Cross must not be omitted. As a general statement Russian medical work may be said to be nationalized, but it is true that the Red Cross Society there is functioning as a semi-private organization, very much as our own American Red Cross does.

Indeed, it has the traditions of all national Red Cross Societies, as it was originally founded in 1860, and when it was recognized after the Revolution in 1918 it was allowed to retain its original name and general principles. During the period of the World War and civil war, its attention was entirely given to military aid, hospitals and medical personnel and supplies being furnished for soldiers in all parts of the country. During the famine days it provided feeding stations and first aid medical work. Food was prepared for 120,000 persons daily during 1921 and 1922, and many village dispensaries were opened.

By 1924 these emergencies were over and the Society prepared to work out a more constructive peacetime program. Conferences with the officials of the Commissariat of Health showed that the official health departments were strongest in industrial and commercial centers and weakest in the rural communities, especially in those wide stretches of Siberia, East Russia

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and the Caucasus inhabited by nomadic, non-Slavic tribes. Here was a great opportunity for a flexible, sympathetic type of medical service such as a private organization could best offer. With this outlet for practical work among what are called the "minor nationalities," the Russian Red Cross has also the wider educational aim of interesting the great mass of working people in improving its own health and the health of its even less cultured fellow-citizens. The social foundations of the Society are to be widened and deepened not by a mere mechanical enrollment of members paying small fees, but by instructing those members in the meaning and value of Red Cross ideals and encouraging the local committees to campaign against social diseases and social poverty.

The central organization through which these aims are put into effect is a committee of seven members located in Moscow, the president being Dr. Soloviev, Assistant Commissar of Health. Local sub-committees exist in all parts of the country, their connections with the center being maintained by visits from members of the central committee, by circulars of general instruction for organizing Red Cross branches and by individual letters of advice in regard to the special problems which arise in each locality. The membership during 1926 was about 75,000, of whom 54 percent were peasants, 10 percent industrial workers, 29 percent civil servants, 5 percent students and 2 percent soldiers. The annual fees were fifteen cents for workers and civil servants, seven-and-a-half cents for peasants and two-and-a-half cents for students and soldiers. Fees are purposely kept low in order to encourage a wide membership, but the greater part of the income of the Society comes indirectly from the government through permission to collect a tax

added to the price of railroad, steamboat and aeroplane tickets, tickets to the theatre and to other places of amusement. The total income of the Russian Red Cross Society for 1925 was about \$1,250,000. There are representatives of the Society in many foreign countries, including Switzerland, Great Britain, the United States, Germany, Italy and Poland. In Persia the representatives of the Russian Red Cross have helped to organize the Society of the Red Lion and Sun, and in Turkey the Society of the Red Crescent. The Russian Red Cross Society is also affiliated with the International Red Cross, whose headquarters are at Geneva.

In the practical work of the Russian Red Cross there is a romance which scarcely any other country can show. Sixty-eight percent of all its institutions are in rural neighborhoods, and over sixty percent are among non-Slavic Mohammedan or pagan tribes whose culture is centuries behind that of the tiny medical units sent out to work among them. To the Yakuts and the Samoyeds of northern Siberia a clinic to combat venereal disease is a mystery far less comprehensible than the dances and tom-toms of their own medicine-men, even though the doctor and the little glass phials may have come riding into camp in a familiar reindeer sledge. When the first malaria stations were opened among the Chuvash of the Ural mountains they refused to let their fingers be pricked for blood smears because they thought the doctors would sell their blood to the Christian Devil, who was admitted to be a personage of some power. In the Irkutsk region a Red Cross medical unit discovered a new tribe—the Karagossi—never before known. Among the Bashkirs, the Buriats, the Kalmucks, the Ossetini and many others from the Arctic Ocean to the semi-tropical Caucasus, clinics have been set up, brought to

these out-of-the-way haunts by camel train—or dog-sled—or hollow-log canoe. And because these people live so dependently on their herds there is also a veterinary doctor to accompany the two medical doctors, and usually an ethnographer and sometimes a midwife and a social worker to complete the unit.

At first there had been the intention to keep the Red Cross to a specialized service of campaigns against the social diseases of tuberculosis, syphilis, malaria, trachoma, etc. But it was soon found impossible to continue specialization when for hundreds of miles there was no general medical service to be obtained. At the present time, therefore, the Red Cross clinics on the fringes of civilization are almost all general medical stations, but as they are able to show the local population the value of medical service they hope that taxes may be levied to support local official medical work and the Red Cross units may again be free to develop the specialized service for which they were originally intended. In 1925 there were 72 of these general medical dispensaries being conducted by the Red Cross; 27 institutions for the treatment of tuberculosis, with 700 beds for patients needing hospital care; 34 clinics for the treatment of venereal disease; 8 clinics for eye diseases, especially trachoma, which is very prevalent in Siberia and the Caucasus owing to the uncleanly housekeeping habits in those regions; 20 malaria dispensaries; and 72 day nurseries and consultations for young children and their mothers.

In addition to the actual curative work being done in these medical out-posts there is a tremendous program of education and sanitary instruction. The tuberculosis workers lecture in schools and factories and clubs, organizing temporary anti-tuberculosis campaigns to acquaint the general working population with the menace

of tuberculosis and to popularize treatment for it. Day-camps for tuberculous children have been opened, especially in the formerly famine regions where the child population is riddled with tuberculosis. The same type of educational work is carried on in regard to venereal disease and to infant mortality, and always in districts which the official dispensaries of the Commissariat of Health have not yet had the time and money to approach.

Most important of all, perhaps, in its bearing on the future is the "Health Service" organized among the Pioneers. The fundamental aim of this Health Service is to help young people to become responsible for the conservation of their own health. Medical workers of the Red Cross brought the "health game" to children's institutions and to schools. Lectures, competitions, excursions to museums of health and to first-aid stations, and medical and sanitary fairs were arranged for and by the children. The best results from these efforts were found in the cities among the children of intelligent workers who cooperated with the Red Cross in encouraging their children's health habits, but especial efforts are now being made among peasant children to wage war on the hygienic ignorance of the Russian village.

The first pamphlets for children about their own health have been written and distributed by the Red Cross: *Thy Health Is in Thine Own Hands*, *The Rules of Health*, *Pioneers Should Be Healthy*, etc. Also a number of posters depicting the rules of health have been made in bright colors for use in schools and club-rooms. Nor have the Red Cross publications been entirely centered on children. The central committee has found it can most widely and most economically spread

the Red Cross ideals by means of pamphlets, and has issued several: *What Is The Red Cross?*, *The Red Cross on the Famine Front*, a Red Cross calendar, as well as a number of small folders for free distribution dealing with health problems or cleanliness, malaria, infant welfare, etc. Many of these are issued in half a dozen different languages for effective work among the minor nationalities.

It is easy to understand from this description that the Russian Red Cross is a very active organization with a program of practical and educational work calling for a large and increasing budget. It counts among its employees 147 doctors and 178 other trained workers. Of the total income of approximately \$1,250,000 for 1925, the central committee raised 74 percent, the local units throughout the country 24.4 percent and the representatives in foreign countries 1.6 percent. In an interview in October, 1926, with Dr. Korovin, the general executive secretary in Moscow, who has been responsible for much of the recent development of the Red Cross movement in Russia, he outlined the future peace-time program as centering more and more on preventive and educational work for children in the rural and sparsely settled regions, in the encouragement of these neighborhoods to take the financial responsibility for their own general medical service, and in the pushing out into yet more remote districts of the tiny pioneer medical units for which the Red Cross is already so well known.

All of the statistics for this chapter were obtained from a personal interview with Dr. Korovin and from the *Annual Report for 1925* of the Red Cross Society of the R.S.F.S.R.

CHAPTER XVII

MEDICAL EDUCATION IN RUSSIA

WITH the changes effected by the Revolution in the sphere both of medicine and of education, it is needless to say that the medical education of Russia today differs in many respects from that of pre-war days. The old Russian medical schools were excellent from the scientific point of view, but wholly inadequate in enrollment of students to meet the country's medical needs; nor did anyone seem to feel the social disgrace involved in the fact that large portions of the population were left without any medical aid. At a time when there was one doctor in the United States to every 800 people and one in Great Britain to every 400 there was an average in Russia of one to every 5,800, according to "A Review of Medical Education in Soviet Russia," by W. Horsley Gantt in *The Journal of the British Medical Association*, June 14, 1924. In spite of the small number of doctors there was much intensive experimental work done in the medical school laboratories, and many graduate students devoted themselves entirely to research. The Revolution smashed completely through this academic approach to medicine. In no other sphere did it announce more clearly its intention to make science the practical handmaid to humanity.

There was, according to the above source, an immediate increase in the number of students admitted to the medical courses, and a change in the type of student

whose application was favorably received. For example, at the University of Saratov before the war there were between four and five hundred students registered, while in 1922 there were two thousand. In the Military Medical Academy in Leningrad 19 percent of the medical students in 1913 came from peasant or working class families, while in 1922 these sources furnished 93 percent of the students. The capacity of the laboratory space and of the teaching force was soon overloaded; equipment which had formerly been purchased in Germany was exhausted without possibility of replacement; and, worst of all perhaps, students were admitted with so little mental preparation that they could not have profited by the course even if the teaching conditions had been ideal. During this period, also, the state was waging continuous war with foreign and internal enemies, and only the barest amount of money for running expenses was granted to the universities which since the Revolution had become entirely dependent on the state for support.

Yet with all these adverse conditions there were certain positive gains. A new attitude grew up toward medical work as a social service, and a great zeal burned in these young student-workers to eliminate the suffering and hindrance to progress which disease had caused among the great mass of Russia's population. They taught their professors to look outside of test-tubes for the causes of disease; laboratory work was extended to include the investigation of insanitary factories and overcrowded homes. The organization of preventive public health work emerged as a new ideal in Russian medical education.

The same source also says, that since 1923 the trend

has been upward along all lines. There are at the present time fifteen medical schools in Russia, of which three are in Leningrad, two in Moscow, and one in each of the following cities: Kiev, Odessa, Kazan, Saratov, Kharkov, Ekaterinoslav, Perm, Krasnodar, Rostov-on-Don, and Varonej. The students are now expected to pass entrance examinations, and only those are admitted who show enough ability to warrant their attempting the course. All of these must have finished the secondary schools or taken special courses for adult workers which guarantee the same academic standing.

The program is practically the same in all the medical schools, having been standardized by a central committee in Moscow. According to a statement issued by the Council on Medical Education in April, 1925, it aims to produce doctors with (a) a thorough scientific preparation, sufficiently familiarizing them with the physical, chemical and biological sciences to understand the laws which lie at the base of biological processes; (b) sufficient social science to enable them to understand current social life and world events; (c) that materialistic point of view which is essential to a correct understanding of the mutual relationship between an organism and its milieu; (d) the social service point of view which takes into account the working conditions and home life of the patient; (e) the knowledge and ability not only to treat diseases, but to prevent them.

The course, as given in the program of the Medical School of Moscow University for 1925-1926, covers a period of five years, the first two of which are devoted largely to what we would call pre-medical work.

For the first year the curriculum includes Botany, Zoology, Anatomy, Histology, Inorganic and Organic

Chemistry, Physics, Historical Materialism and the History of Revolutionary Movements and Military Training.

In the second year the courses are in Anatomy, Histology, Embryology, Physiology, Biology, Biological Chemistry, Analytical Chemistry, and Physical Chemistry.

In the third year the more definitely medical work begins together with the introduction of the student to the hospital wards and to out-patient dispensaries. The lectures cover Pathological Anatomy and Pathological Physiology, Topographical Anatomy, General Surgery, General Medicine, Pharmacology, Microbiology, Hygiene, Obstetrics, Dialectical Materialism, and Common Law.

The fourth year program includes lectures given in the medical and surgical clinics connected with the medical school, Gynecology, Pediatrics, Nervous Diseases, Psychiatry, Skin Diseases, Diseases of the Eye, Special Pathological Anatomy, Hygiene, Urology.

The fifth year is especially devoted to individual work on the part of the student in clinics, under the direction of the professors. These clinics include medicine, surgery, pediatrics, venereal disease, gynecology, nervous diseases, diseases of the eye, ear, nose, throat and teeth as well as practical work in the physiotherapy institute and courses in social hygiene and medical jurisprudence.

The weekly program, as shown in the accompanying diagram on pages 150-151, seems to provide fewer hours of work than are expected of students in our medical schools, but it gives only the minimum requirements of lecture courses and does not account for any of the laboratory work; nor does it show the recommended elective courses, some of which are taken by all the stu-

ents. There is also a system of group research work which is very popular in Russian universities, and which, although voluntary on the part of the students, is very generally undertaken under the direction of the professors. In addition to these opportunities for study the medical students are also expected to take some responsibility as teachers. They are often sent to factories or to mothers' clubs or to the meetings of children's health committees to lecture on some phase of hygiene, and on Sundays numbers of them are always drafted as guides in the permanent health exhibitions to which come excursions of industrial workers and peasants. In this way the students are continually linked up with practical social contacts. At the end of each year there are examinations given by the professors in the individual courses and at the end of the five years the State Qualification Committee holds general examinations, which every student must pass before being allowed to practise.

There is as yet no regular period of interne duty required. The criticism in the past of Russia's medical education—a criticism given wide publicity in the *Notes of a Country Doctor* written over twenty years ago by the novelist Veresaev, himself a physician—was that it tended to be entirely academic, sending out into responsible positions young men and women who had had far too little actual contact with sick people. This fault the present educational program is trying to remedy by including much attendance at clinics, and plans are now being made to make a period of internship an obligatory part of the general course. A few hospitals are already offering positions comparable to internships in this country and these positions are eagerly competed for by recent graduates. Every en-

**PROGRAM OF LECTURES IN THE MEDICAL SCHOOL, MOSCOW UNIVERSITY
FOR THE YEAR 1925-1926**

DAY OF THE WEEK	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	FIFTH YEAR
Monday	Physics 10-12	Biological Chemistry 9-11 Biology 11-1	General Pathology 12-1 Pathological Physiology 1.25-2.40 Pharmacology 2.50-4.05	Medical Clinics 12-1.30 Obstetrics 1.40-3.00 Pathological Anatomy 3.10-4.40	Surgical Clinics 12.20-1.50 Skin Diseases 2-3.20
Tuesday	Anatomy 9-11 Physics 12-2	Physiology 9-11 Histology 11-4	General Surgery 12-1.15 Operative Surgery 1.25-2.40 Obstetrics 2.30-3.50	Medical Clinics 12-1.30 Nervous Diseases 1.40-3.40	Medical Clinics 12-1.30 Social Hygiene 1.40-3.10
Wednesday	Inorganic Chemistry 9-11	Biological Chemistry 9-11 Anatomy 11-1	Medical Clinics 12-1.15 Pharmacology 1.50-3.05 Pathological Anatomy 3.15-4.30	Surgical Clinics 12-1.30 Children's Diseases 1.40-3.10 Diseases of the Eye 3.20-4.50	Children's Diseases 12.30-1.50 Surgical Clinics 2-3.30 Psychiatry 3.40-5.10

Thursday	Historical Materialism and History of Revolutionary Movements 9-11 Zoology 11-1	Physical Chemistry 9-11 Physiology 11-1 Histology 1-4	Medical Clinics 12-1.15 Microbiology 1.50-3.05 Pathological Physiology 3.15-4.30	Pathological Anatomy 12-1.30 Psychiatry 1.50-3.20 Urology 3.20-4	Medical Clinics 12-1.30 Nervous Diseases 2-3.30
Friday	Organic Chemistry 9-11	-----	General Surgery 12-1.15 Microbiology 1.25-2.40	Surgical Clinics 12-1.30 Medical Clinics 1.40-3.10 Obstetrics 3.20-4	Medical Clinics 12.20-1.50 Children's Diseases 2-3.30 Infectious Diseases 3.40-5.10
Saturday	Botany 11-1 Military Training 2-3	Physiology 9-11 Histology 11-3	Medical Clinics 12-12.45 General Surgery 1.10-1.55 Hygiene 2.30-3.35	Surgical Clinics 11.30-1 Skin Diseases 1.10-2.40 Gynecology 3-4	Diseases of the Eye 12.50-1.10 Medical Jurisprudence 2.30-4

couragement is given to the young graduates to continue their studies in some branch of medicine, as it is the ideal of the Commissariat of Health to staff its clinics with groups of specialists rather than with general practitioners.

One of the most picturesque figures of the old days, the poverty-gripped woman medical student, has almost disappeared in the practical reality of the present time. Her successor attends classes in great numbers, almost half of the students at the Leningrad Medical School last year being women, but she is there on a scholarship from the provincial board of health or from the political organization in some factory, on equal terms with the men students and living in the same moderately comfortable dormitory. Gone are the days when an attic shared with two or three friends was her portion, to pay for which she may have saved her kopecks for years, teaching school in a Siberian village perhaps on a salary of seven dollars a month. Russia owes a long debt of gratitude to the nuns and the anarchists, to the busy mothers and the fearless explorers into plague districts who have been her women doctors.

The Russians have a term "middle medical personnel," which is used to include several professions doing health work whose members are not doctors. These are the feldshers, the nurses and the midwives. The Revolution brought many changes to this group in addition to gathering them into one big Medical Workers' Union with the doctors.

The career of the feldsher, for example, has been brought to a dead stop by closing all the courses leading to this title. The present feldshers, and they are more numerous than the doctors, are allowed to continue their work, but each year a certain number of the younger

men and women are given scholarships to the regular medical universities, and eventually this type of half-qualified doctor will cease to exist.

The midwifery courses, on the other hand, have been greatly improved and new institutes opened, as there is a very general feeling that high infant mortality and maternal mortality can be most quickly reduced by sending into the remote villages, which would be too poor to support a doctor, a midwife well trained in medical and surgical asepsis.

The central Department for the Protection of Motherhood and Infancy maintains a midwifery institute in Moscow on which other schools throughout the country are modeled. The applicants must have finished the seven years of preliminary schooling which is all that is required of medical students; then they are given two-and-a-half years of quite intensive work at the institute. At the end of this time they are prepared to carry on independent work as midwives, and since they are usually peasant or proletarian stock themselves, it is reasonable to expect that they will be able to go into the villages and factory towns with a real sympathy and knowledge of conditions that will enable them to cope with the superstition and prejudices of the illiterate women there.

A schedule of their course is given on pages 155 and 156, from which it can be seen that they do receive a good education in preparation for their special work. In connection with this course the Russian midwives get considerable training in conducting prenatal and infant welfare clinics and in methods of general health propaganda, as it is emphasized throughout their whole course that they will be in an exceptional position as teachers of hygiene.

To Americans the whole question of qualified midwives is new, but to Europeans it seems to solve the problem of proper care for the majority of maternity cases. In all normal deliveries the midwife is able to take the place of both doctor and nurse, giving a service which is efficient and economical, whether she is paid by the individual family as is usual in Italy, France, and England, or by the State, as in Russia. In almost all countries, it is at present inevitable that many deliveries take place without a doctor's presence. The Russian Commissariat of Health realized that the number of doctors would not for years be so great that they could expect to do obstetrical work for the whole population therefore they have prepared to raise the standard and increase the number of their trained midwives as the most efficient state aid to mothers and babies possible to provide.

The problem of education for nurses in Russia is on a different footing from that of midwives. The latter had always existed in Russia on a semi-professional basis—the present institute in Moscow is the heir of a pre-war school for midwives—but of the trained nurse in the professional sense there were very few before the war. There were Sisters of Mercy belonging to semi-religious orders, some of them aristocratic and highly educated women, but their nurses' training had more social than scientific discipline. During the war several courses were given preparing women for work in army hospitals, and many of these developed through experience into excellent surgical nurses, but regular training schools connected with hospitals with well rounded and well supervised courses in nursing have never existed. The general attitude toward nursing, moreover, was not such that would induce women to undertake the work

PROGRAM OF MIDWIFERY COURSE

FIRST SEMESTER Subject	Lecture hours per week	Practical and laboratory work Total hours
Anatomy, Physiology, Histology.....	6	45
Physics and Chemistry.....	2	30
Biology.....	3	....
Pharmacology and Latin Letters.....	4	9 (in drug room)
Zoology.....	2	....
Introduction to Principles of Protection of Motherhood and Infancy, and Midwifery..	2	....
Work in Obstetrical Hospital.....	....	10 (each week)

SECOND SEMESTER

Subject	Lecture hours per week	Practical and laboratory work Total hours
Anatomy, Physiology, Histology.....	6	30
Biology.....	3	....
Pharmacology.....	2	9 (in drug room)
General and Social Hygiene.....	2	....
Zoology.....	2	....
Protection of Motherhood and Infancy.....	2	....
Obstetrics.....	12	....
Work in Obstetrical Hospital.....	....	9 (each week)

THIRD SEMESTER

Subject	Lecture hours per week	Practical and laboratory work Total hours
Biology.....	4	....
Bacteriology and Epidemiology.....	2	....
Zoology.....	2	....
General and Social Hygiene.....	2	....
Infectious Diseases.....	6	....
Bandaging and Surgical Technique.....	....	15
Obstetrics.....	15	....
Work in Obstetrical Hospital.....	....	5 (each week)
Microbiology.....	6	....
Examination of Urine.....	....	6
Care of Newborn Infant.....	2	....
Children's Diseases.....	2	....

FOURTH SEMESTER

Subject	Lecture hours per week	Practical and laboratory work Total hours
Bacteriology and Epidemiology.....	2	....
Zoology.....	2	....
General and Social Hygiene.....	2	....

FOURTH SEMESTER (Cont.) Subject	Lecture hours per week	Practical and laboratory work Total hours
Surgical Diseases	2	....
Bandaging and Surgical Technique.....	....	15
Medical Diseases	2	....
Skin and Venereal Diseases.....	2	....
Obstetrics	4	....
Work in Obstetrical Hospital.....	....	10 (each week)
Work in Obstetrical Clinics.....	....	45
Feeding and Diseases of Newborn Infants.....	2	....
Work in Clinics for Children, and in Milk- kitchen .....	....	25
Gynecology	6	....
Work in Gynecological Clinics.....	....	30
FIFTH SEMESTER		
Subject		
Sociology	2	....
General and Social Hygiene.....	2	....
Obstetrics	4	....
Work in Obstetrical Hospital.....	....	25 (each week)
Work in Obstetrical Clinics.....	....	45
Skin and Venereal Disease.....	2	....
Work in Gynecological Clinics.....	....	30
Emergency Aid	2	....
Massage and Physiotherapy.....	....	10
Work in Milk-kitchen.....	....	8

In addition to completing the above studies each student must take complete, independent care of 25 maternity cases before receiving a diploma.

unless under some religious motivation. Nurses who did not wear the uniform of some order were not apt to receive very courteous treatment from the hospital staff or the public at large, and it is true that they were often not the type of women to command much respect. The more independent career of feldsheritza or midwife was open to all ambitious and intelligent girls. The hospital patients suffered from the lack of good nursing care, but usually neither they nor the doctors treating them had ever known what this might mean. Many doctors can still be found who declare that they

ould rather run a hospital without nurses. The leaders of the Commissariat of Health, however, have all traveled outside of Russia, and having seen something of modern nursing in other countries, desire to introduce it into Russia. Training courses for nurses have been started rather chaotically by enthusiastic medical men in various parts of the country who have seen the goal without always knowing the route thither. As a result, many of these courses are really miniature medical courses with most of the art of nursing omitted. To it seems almost ridiculous to plan the curriculum of a nurses' training school and not to have a single nurse present at the planning conference, yet that happened last year at Moscow. As a result of the conference, however, there was worked out a more or less standardized course for nurses' training to be carried out under the joint supervision of the Commissariats of Education and of Health.

All applicants must have finished the seven years of elementary school (this is a great advance, for until 20 years ago nurses were allowed to start training with the mere ability to read and write), they must be at least eighteen years old, and must pass a physical examination (this is also a decided step forward, as many pupils suffering from tuberculosis were formerly admitted). The course covers two years of two semesters each, a semester meaning four months of study and three weeks of intensive preparation for examination. This leaves 10 and a half months' vacation for the pupils in each year, as the training schools are conducted just like other trade or professional schools. The program of work is given on pages 158-159; if to us the requirements for practical ward work seem small, we must remember that to the Russians any kind of supervision of practical

**PROGRAM OF LECTURES IN NURSES' TRAINING SCHOOLS,
MOSCOW, 1925**

FIRST YEAR		First Semester	FIRST YEAR		Second Semester
Subject	Hours per week	Hours per week	Subject	Hours per week	Hours per week
Anatomy and Physiology.....	5		Pathology	2	
Physics and Chemistry.....	3		General and Social Hygiene...	2	
Biology	2		Medical Diseases	5	
Materia Medica.....	2		Materia Medica	2	
General care of the sick.....	3		Contagious Diseases.....	3	
Surgical Diseases.....	1		Nervous Diseases.....	2	
Political Economy.....	2		Political Economy.....	1	
			Hydrotherapy	1	
			Electrotherapy	1	
			Bandaging	2	
			Vaccinating	1	
SECOND YEAR		First Semester	SECOND YEAR		Second Semester
Subject	Hours per week	Hours per week	Subject	Hours per week	Hours per week
Veneral and Skin Diseases.....	2		Gynecology	2	
Diseases of the Eye.....	1		Care in Pregnancy and		
Diseases of the ear, nose and			Confinement	3	
throat	1		Care and Feeding of Infants...	4	
Massage	2		Psychiatry	3	
X-ray work	1		Emergency Aid	1	
Hospital Management	1				

A semester includes four months of school work.

In one year there are eight months of teaching, one and a half months of examinations, which are for the most part oral, and two and a half months of vacation.

**PROGRAM OF PRACTICAL WORK IN NURSES' TRAINING
SCHOOLS, MOSCOW, 1925**

Department in Which Practical Work Is Done	Length of Time Spent in Department
Pharmacy (preparation of medicines).....	21 hours a week for 4 weeks
General out-patient clinics.....	6 " " " " 4 "
Medical wards	21 " " " " 18 "
Surgical wards and dressing-rooms.....	30 " " " " 18 "
Gynecological clinics	12 " " " " 4 "
Contagious wards	9 " " " " 12 "
Nervous disease wards.....	3 " " " " 4 "
Obstetrical wards	18 "
Laboratory	18 "
Children's wards	15 "
Veneral and skin disease wards.....	12 "

Department in Which Practical Work Is Done	Length of Time Spent in Department
Psychiatric wards	9 hours
Ear, nose and throat clinics.....	9 "
Eye clinics	9 "
Infecting unit	7 "
Ray cabinets	6 "
Electric cabinets	6 "
Vaccination clinic	6 "

work is quite new. In fact they announce with the solemnity of a new discovery that henceforward all nurses' training schools ought to be connected with hospitals or some institution where practical contact with patients may be obtained.

Their curriculum and academic standards may still seem to us backward, but there is a side to their nurses' training which we would do well to observe closely. The young women who come up to Moscow from the provinces to take the course are terribly in earnest about the health work of the nation and their place in it. Without having any recognized religious stimulation they have a real missionary spirit that many of our indifferent young student nurses might well copy. Self-government in their dormitories does not have to be begged upon them. Forty girls, utter strangers to each other, may be thrown together one afternoon in a barn-like barracks, and by evening they will have achieved a weekly schedule of cooperative housekeeping duties, and a series of house rules that would do honor to any admistress. The following paragraphs are taken from a report written by a student nurse in Moscow:

"From the very remote places of Russia there come young girls and women sent to the course by the zemstvos and various health departments and other organizations. . . . The nurses vary greatly in regard to their social origins and position but still the greater per-

cent comes from the families of workers or peasants, next from the families of office workers. To enter the school everybody must pass an examination in politics, and those who have not a certificate from school have to pass examinations in other subjects like grammar and arithmetic. All who pass these examinations then have to come before a medical commission. The entrance age is restricted from eighteen to thirty-five years. Marriage has no significance in this connection and would not be a hindrance in entering the school. All the girls lodge in the dormitory of the school where they have rooms provided with the necessary furniture, as tables, chairs and beds, and where they are supplied with bed-clothes.

"Lectures begin every day except holidays at nine in the morning and continue until four in the afternoon, with one hour for lunch. After four the nurses are free from obligatory work and can use the rest of the day at their own discretion, either in preparing for the next lectures, or for additional work in the different sections of their social clubs; i. e., in physical culture, choral singing, dramatics, or in those of a political nature, as trade unions and political economy groups. They can receive visitors until ten o'clock in the evening in their rooms or in the reading room where there are always newspapers, magazines, a radio set, chess and checkers. The nurses take their meals either in restaurants or they cook for themselves. The cleaning of their rooms, their laundry and other housekeeping work must be done by the nurses themselves.

"During the year there are holidays in the winter of two weeks and in the summer of two months; most of the student nurses spend their summer holiday at home or in villages where they help to carry out the campaign

er day-nurseries for the babies of peasant women. Almost all student nurses are members of the trade union of medical workers. Representatives of the students are also members of the School Council and of the Educational Program Commission, where they have the right to take part in the discussions and decisions on all questions of an educational character. The student nurses also take part in social welfare work too. Many of them are members of the Communist Party or of the Young Communists."

CHAPTER XVIII

TAKING HEALTH TO THE PEOPLE

"THE worker's health is the responsibility of the worker himself" is an excellent slogan, but anyone who has had experience in health education will realize that powerful catalytic agents are necessary to stir up that sense of responsibility. This is especially true in Russia where so many household customs and religious traditions combine with illiteracy to block personal and social hygiene. No matter how enlightened may be the policy of the Commissariat of Health, it is to the masses of the "dark people" that it must appeal or it is of little value. And here is where that flair for propaganda which so many visitors have noticed in present-day Russians comes to assist the health officials. Every device of advertising is turned to the business of selling health.

The exhibitions are the most ambitious and most universal means of attracting attention; Moscow has some of the best health exhibits in the world. The posters are especially beautiful, many of them having been executed by well-known artists. Wax modeling is carried out in meticulous, almost too realistic detail. Old engravings, copies of Renaissance pictures, are used to illustrate the history of child welfare or industrial hygiene. Statistics are presented in arresting diagrams. The juxtaposition of the "Right Way" and the "Wrong Way," of "Before" and "After" is made so striking and so apt that the dullest intellect must grasp the meaning. Most

portant of all, the officials who have arranged these exhibitions do not feel that they may rest after the material is in place and the doors thrown open; on Sundays and other holidays excursions of peasants from the country and of workers from the factories (student groups come on week-days) are brought to the exhibits, and painstakingly conducted through the rooms by guides, usually medical students or doctors who are assigned this duty as part of their social service. Many of these visitors cannot read or write but they are practical and intelligent, and it is most interesting to watch their careful scrutiny and final understanding of some feature touching on their own lives. For those who live too far from the large cities, all of which have their own collections, the central Commissariat has arranged traveling exhibitions. The largest of these are in railway cars which are switched onto sidings at small stations and give several days', sometimes several weeks', entertainment to the peasants of the neighborhood. Moving picture machines, magic lanterns, lectures, little plays trained quickly from local talent by the personnel in the car, posters (the outside of the actual road car itself is brightly painted into health posters) and literature for home reading are some of the methods used in this sort of propaganda. Very often exhibitions are connected with the traveling clinics sent out by several of the Bureaus of Health; the tuberculosis, venereal, malarial, etc. Many districts in Russia, however, so far from a railroad and to them still more condensed exhibitions are sent by means of automobiles, horses, camels and reindeer. The radio has become a great instrument for propaganda in Russia and the Commissariat of Health uses it continually, but for work among the peasants it finds the posters and lectures of

a traveling exhibit more effective. Many of the health posters have been enlarged and put up on bill-boards in the cities; there are always some in the railroad stations and parks.

Although this active propaganda for health cannot fail to attract people's attention, it is probable that the greatest effectiveness of the Commissariat comes from the daily contact of the masses with a dynamic health program. More than three-fourths of the Russians are people living in small villages in the country. Their houses, animal sheds and barnyards are still built and maintained after the fashion of their forefathers, but down in the village reading-room, a sort of social center which has appeared almost everywhere within the last ten years, are several disturbing pictures on the wall. On holidays and winter afternoons many of the younger people drift in and read, often with amusement, that one should sleep with windows open, and sink one's drinking water well somewhere else than most conveniently to the cattle trough, and that the ever-present malaria comes from a mosquito and not from God as a punishment to this evil generation. And then an ex-soldier, who may be reading in another corner, tells them that these things are so, that he has traveled much and learned the truth; and the next few hours are given over to reminiscences and to forecasting of the future of Russia, with electricity in every house, and water out of hydrants, and tractors. Nor is progress only for the adolescents. The following description of the introduction of a child welfare station into a steppe village was written by one of the Quaker workers who helped to open it, but the consultation is now being conducted by the local health department:

THE CONSULTATION FOR BABIES IN SOROCHINSKOYE,
SAMARA, RUSSIA.

"What is this confiscation the Quakers are arranging us?" a fat peasant woman asked her neighbor, as they pushed their way toward the door of the crowded cure room.

"Confiscation? Much you understand," said her neighbor scornfully. "Confiscations are only for the bourgeois. We are going to have some kind of a consultation."

"But what is it—a consultation?" asked a pale, working woman, leaving another animated group to join the conversation. "I listened, and I listened to everything the Quaker-doctor said, and now the lecture's all over, I don't understand anything. I thought they would give us *payoks* [rations] of food or clothing, at least," she went on without stopping to take breath. "But there isn't a word of that at present. Only, says the doctor, bring your children to this consultation to be weighed."

"I think,——" the fat woman tried to interrupt her. "To be weighed," she repeated, drowning out all opposition in a flood of words. "We know all about this weighing. In the Children's Home the American nurse weighed the children every month. Every one knows the Americans are crafty people. They can invent anything you like. It was plain as day to them that the Children's Home managers would be cheating, and so they found a way to catch them. If the children gain weight, all right—the American food is inside them. If they lose, it means the goods are in the manager's pocket."

"Very well," an indignant voice chimed in, "very well, but why do they want to weigh our children? They don't even promise us payoks. And if they did, are we the enemies of our own, to steal from their little mouths?"

"O, Lord, what a trial," sighed a gray-haired woman with a sharp wrinkled face. "Until now they were curing but the sick children, bless their souls for the good work. But today she says, don't bring the sick ones—the clinic's the place for them; bring the well ones before they get sick. Now they're invented curing well children. Oh, what a temptation."

"And that's true," agreed the neighbor, while the crowd laughed and exclaimed approvingly. "It's a device for leading the people astray. When they give quinine pills for the fever—that's as it should be. And the nurse, Lord give her good strength, cured all of mine from the scabies. With her own hands she put some kind of mess all over their bodies, and washed them three times in the bania. It turned out better than the babka's mixtures, and nothing to pay. Now anyone would rather go to the clinic than to the babka; but this consultation is all rubbish."

"Yes," said the gray-haired woman, "there's a consultation for you. The lady-doctor wants to tell us how to bring up our children. And she herself unmarried, and never had a baby, I daresay."

"And she says don't give him the pacifier," the fat woman burst out indignantly. "Don't swing him. Only feed him every three hours. You can't give him the breast without watching the time," she went on in an injured tone. "That would be a fine thing. There's the way to drive your man out-of-doors."

"The Lord be with their consultations, let them leave

s in peace," agreed another. "It's just a loss of time for the woman and a cold in the head for the babies. Let those go who have no work to do."

Having settled the question of the consultation to their own satisfaction, the women finally drifted out of the lecture-hall and scattered to all corners of the village.

Half a year later the Sorochinskoye Consultation, in spite of its inauspicious beginning, had over two hundred babies as regular visitors. Now the mothers fully understood the meaning of the word and came gladly on the appointed days. At nine o'clock on one of the consultation mornings the bright, sunny waiting-room was an animated scene. On the walls were hung gay pictures in oil-colors, the work of a local peasant artist. Below them, on the low benches, the mothers had settled themselves with their babies to carry on lively conversation. At the moment they were watching a mother who was proudly teaching her baby to take his first steps.

"Come along, Vaska," she urged. "Soon we'll be talking along the street on our own two legs."

"Oh, what a fine little bridegroom," exclaimed another woman. "Look out now and pick yourself a wife. See what beauties we have—a regular show. Well, take your choice, young man."

And certainly even a hardened child-welfare worker would have found it difficult not to fall in love with these babies, as they lay in their clean dresses, without fuss, wriggling and kicking their little legs and cooing contentedly in their mothers' arms. All the mothers seemed to know each other and there was a lively interchange of experience in bringing up of the young, and of boasts of the wonderful progress made by each particular baby. Here, apparently, the women of the

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And certainly even a hardened child-welfare worker would have found it difficult not to fall in love with these babies, as they lay in their clean dresses, without caps, wriggling and kicking their little legs and cooing rapturously in their mothers' arms. All the mothers seemed to know each other and there was a lively interchange of experience in bringing up of the young, and of boasts of the wonderful progress made by each particular baby. Here, apparently, the women of the

village felt themselves united on the common ground of love for their babies and care for their health and growth.

"Has yours been on the scales yet?" asked a woman in a ragged sheepskin coat, of her neighbor.

"Of course. The nurse weighed him before you came," she answered proudly. "He gained almost half a pound. Here, you can see it written down in my little book, if you can read. I suppose it's because I began to feed him gruel, as the doctor told me."

"And mine hasn't gained this week. There's a trial and sorrow with him. No diarrhoea. And the Lord knows I keep all the rules. I must ask the doctor what it is."

Just then all attention centered on a new mother who had come to be registered for the first time. She was a young woman in a fine plush coat, the baby in her arms wrapped tightly in a thick shawl. Seating herself shyly on the edge of a bench, she unwrapped the shawl and displayed a thin little creature in a many-colored woolen cap, tightly strapped into a motionless bundle. Awakened by the bright sunlight in his eyes the baby burst into a strident wail. The mother, with the facility of long practice, caught him up and began to rock him desperately, swinging her whole body back and forth and patting him in rhythm.

"Sh-sh-sh-shut up—will you shut up—sh-sh-sh," she chanted.

As a result of this soothing process, the baby howled still louder, gasping for breath and straining every muscle of his little body. At once the contagion spread to other children, and in an instant the pleasant quiet room was turned into a bedlam of wails and screams.

"Stop rocking him," shouted one of the mothers above

the din. "Take off his bonnet and unwrap him. What kind of a babka told you to keep him bundled up that way in a warm room, poor little fellow?"

The new-comer looked about distrustfully and, taking a rubber pacifier out of her pocket licked it carefully and stuck it in the baby's open mouth. A murmur of indignation rose from the assembled mothers.

"Show her the picture," called someone from the back benches, "The doctor will give it to her as she did to us the first times."

One of the women, with a virtuous air, rose and pointed to a poster at the front of the room. On it were sketched two babies; one with a cap on its head, a pacifier dropping from its mouth, tightly bound in a blanket; the other happy and smiling, with uncovered head, and hands and feet free to kick and wriggle.

"Well, look at it," continued the virtuous mother. "Which is better, I ask you?"

The new-comer in her embarrassment looked uncertainly from the picture to the babies lying unwrapped on their mothers' knees.

"I suppose if they won't let a baby in like this," she said after a moment's hesitation, "I might as well unwrap him. Let them have their way."

Meanwhile in the doctor's office next door, the work was going on as usual. On a padded table covered with clean white rubber sheeting, lay two naked wriggling babies, each the image of the other.

"Now you can dress them," said the doctor, turning to the mother, a thin, mild-faced young woman, almost a girl. "I congratulate you. Your little girl is getting on finely, and the boy will soon catch up with her. If you carry out my orders as well in the future, your twins will be the prize babies of the consultation."

"I don't know how to thank you," said the young mother with tears in her eyes. "You know, they are my first ones. For three months after their birth I suffered for them with all my soul. First I gave the breast to one and then to the other. I rocked them, I walked the floor with them. I never slept a night through, until at last I saw blue circles before my eyes when I walked on the street. Sometimes it got quite dark before me and I almost fell."

"That was just before you came to us?" asked the doctor.

"Yes," she answered, "one of the neighbors told me that consultation babies didn't cry and weren't sick, so I thought it wouldn't hurt to try. Then you taught me how to feed them and gave me the little bottles of milk from the kitchen. And I bathed them and unwrapped them, and everything seemed to change. Now I put them to bed together at night and they lie the same way until morning."

"My heart is glad for them," she said as she gathered the twins up from the table, one on each arm. "And thanks to you I feel like a human being again."

The nurse and doctor stood watching her as she made her way through the next room to the admiration of the other mothers, and rejoiced together over this living picture of the triumph of the consultation.

In some villages the manor-house of the former landowner has been made the social center for the neighborhood and here there may be recreation grounds with football and croquet of a Sunday afternoon, and perhaps in the morning a visiting doctor from a town fifty miles away will hold the weekly clinic. He may bring a notice some day that the village is to vote for three

people who will be given a free excursion to the city to spend a holiday at the health exhibition there. When these representatives return they will be expected to make a public report of what they have seen—the private reports will be much more spirited and reach almost as wide an audience.

In the winter—for in the summer the peasant is busy night and day in his fields—a traveling health exhibit may come to the village for a week's stay. The town hall or the schoolhouse will be filled with bright posters. In the afternoons one of the women visitors, a nurse or a doctor, will give demonstrations in the proper ways of dressing, bathing and feeding a baby and on household sanitation. Perhaps a woman's club will be organized if there are any leaders evident among the peasant women, for it is out of the enthusiasm of these rural women's clubs that day-nurseries and infant-welfare stations have been known to emerge. In the evening there may be a moving picture shown (perhaps the first to have come to this village), or there may be a lecture on how to escape malaria, or there may a mock trial where tuberculosis is found guilty of manslaughter, or the local children may have been quickly trained to give a toothbrush drill or to dance a Defiance to Dirt. The entire village will crowd into the hall, most of it spitting a continuous stream of the husks of sun-flower seeds, the stench from home-cured sheepskin coats will be almost intolerable to the city visitors—but a whole new set of ideas will have entered into the next year's conversation of that village.

The approach of the health department to the city workers is easier. Not much is being done yet to effect his home living conditions, as the cities are very overcrowded and a house-building program is very expen-

sive. Certain of the smaller industrial cities, however, show some progress; in the oil regions near the Caspian Sea the State Oil Trust has built many new houses for its employees, and in Ivanova-Voznesensky, a textile center, there is a suburb known as "the English village" where about one hundred acres have been laid out in two to three family brick houses with little individual gardens, all grouped about a central schoolhouse and cooperative store. Unfortunately they are not very popular with the workers, who have been used to the old barrack-like tenements. Separate family kitchens are said to be expensive in fuel, and, what is worse to a Russian, lonely and unsociable; the rooms are little and prohibitive of that wide hospitality which all Russians like to extend. In short it seems probable that the Russian model house must be designed by the Russians themselves.

And so it is at their clubs and in their schools, rather than in the home, that the appeal of the health forces is made. The eight-hour working day is in itself one of the most powerful health agents; then there is the new idea of sanitation inspection in factories and of personal health examination of the worker. The provision of sanatoria, and week-end and vacation rest homes for those recommended as needing them, the day-nurseries where women workers may bring their babies and where instruction is given continually in child care, the factory rest-rooms where there is almost always a "corner health exhibit" arranged by the health commission of the factory, on which most of the workers serve in turn,—all of these factors directly affect the daily life of the city worker. Athletic recreation clubs are also being introduced into the scheme of the workers' lives for the first time. Football and tennis and a cin-

dertrack and some parallel bars and rings may make up the entire equipment, but it is something new for the Russian worker to be invited to share in such recreation in his leisure time. In addition to the athletic director, a doctor is always on the staff of each of these centers, and physical examinations are given to all the members, followed by suggestions as to prohibited and recommended activities.

Of course not all the industrial workers are reached by the health forces; many of the tuberculous can find no night sanatoria, sanitary standards within the factories are still lower than in this country and athletic clubs are still to be counted by tens instead of by thousands, but a beginning has been made toward establishing a healthy body as a new ideal worthy of attention.

CHAPTER XIX

CONCLUSION

It is obviously inappropriate to use the word "Conclusion" as the title to any chapter dealing with the activities of the Russian Commissariat of Health. It is only during the last few years that it has been freed from the crushing obligations of war and famine and pandemic diseases; the work by which it ought to be judged has been only started. One can speak of tendencies and programs more authoritatively than of accomplishments, although the preceding pages have offered considerable proof of accomplishments. But an institution need not be apologetic if, instead of action, it brings new ideas to the world. And if, in addition to these new ideas, it can furnish enough of their results to be evidence of their economy and practicability in action it has made a real contribution to the science of administration of the world's work. This contribution I believe the Soviet Commissariat of Health to have made. Its influence on medical work within Russia is already very real; its influence in other countries awaits their better acquaintance with it.

Its most far-reaching result within Russia has been to change the emphasis and ideals of medical education and of the medical profession as a whole from laboratory research to practical service. There are many people within the country and outside of it who think of this change as a distinct loss and backward step. But the

Russian officials have no antagonism to academic research—the State Scientific Institutes are a visible proof of the encouragement given to research if it is not made an end in itself—; it is only that they feel the present medical situation in Russia needs workers in the field rather than in the laboratory, and most people who have lived or traveled in Russia will agree with them. As a practical realization of this ideal, there are more practising physicians per capita of population in Russia today than at any other time in her history.

The next most important work of the Commissariat of Health within Russia has been the creation of a system which will bring a standardized and free health service to every citizen of the country. This system is already in operation in industrial centers and is gradually reaching out into more isolated districts. Many types of medical institutions which before the Revolution, if they existed at all, were available only to the wealthy, are now open to those whose physical condition most needs them. Here also service is the point emphasized.

The third great addition of the Commissariat to the health work within the country has been the introduction of health education as an essential part of the work. Before any unusual reduction in the mortality and morbidity rates comes, the cooperation of the masses of the people in improving personal and social hygiene must be secured. This dynamic crusade for positive health is quite new in Russia.

Some of the practical institutions which have been created to meet various medical needs are new only in Russia; in other cases they are really unique experiments which people from other countries may study with interest. Examples of the latter class are the night sanatoria for workers, the legal consultations connected with

child welfare centers, the diet dining rooms conducted by medical clinics, etc.

If one turns to the larger contribution which the Commissariat of Health may have for other countries, one thinks in terms of social and administrative experimentation, rather than of scientific research. And this perhaps is what other countries most need. Our popular magazines, for example, are full of discussion of the prohibitive cost of adequate medical attention in this country. Louis Dublin, of the Metropolitan Life Insurance Company, writes in *Harper's* for November, 1927:

"Large numbers of middle class families pay their bills, but chafe under what they generally consider the unjustifiably heavy cost of medical service. Only the very rich can afford a serious sickness without concern over their medical bills. Everywhere within and without the medical profession there is the feeling that something is seriously wrong with the economics of medical service. Neither doctors nor patients are satisfied with the present situation. . . . The best estimate of the aggregate cost of sickness in the United States is over two billion dollars a year; the same total as for public education."

Russia's nationalized health system offers one solution neither more revolutionary nor more expensive than our public school system. We may not care to adopt this solution but it can do no harm to watch it. Automatic, universal health insurance with its inevitable insistence on preventive medicine in industry and in leisure time is another stimulating idea. The Medical Workers' Union as a method of promoting cooperation among co-workers in a hospital from the laundry to the laboratory is an interesting thought for our personnel

anagers to ponder upon. All of these principles of Soviet medicine are a challenge to individualism in medical work, and a bias in favor of individualism, if it exists, must be overcome before an open-minded examination of the more significant Russian experiments is possible.

Of all the professions medicine is the most consciously international in its source of inspiration and achievement: Germany and Austria, France and England, Japan and America have each contributed to the common fund of medical knowledge, and each has taken from that fund some portion which it needed and could use. Russia also has her contribution. It would be a pity if an unscientific, stubborn pride prevented our recognizing it.

One day an American woman was being conducted through the various departments of one of the State Scientific Institutes by its director. He was speaking to her in the beautifully correct French of the old-time Russian aristocrat. For almost two hours he had shown her the many-sided modern work being carried on in the old buildings and had glowed with pride as he told of experimental research and of education in certain cases of hygiene. Thinking to show her appreciation the American visitor exclaimed, "What a wonderful work you Communists are doing here!" The little man threw himself up proudly to answer, "Madame, there are ninety-two doctors connected with this Institute and of them one of us is a Communist."

When it is a question of service in the saving of lives and the prevention of suffering the Russian doctors have decided that politics shall not matter. Can we ignore the contribution that springs from such a spirit?