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PREVENTIVE MEDICINE AND CONTROL AND
TREATMENT OF TUBERCULOSIS AS SEEN IN
SOVIET RUSSIA.*

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THE entire framework of medicine is socialised. Its practice—domiciliary and institutional, its teaching—under-graduate and post-graduate, its public health administration, its industrial hygiene—its whole being is supervised. The whole organisation of public health and medical service is centralised in each Republic.

We had the honour of being received by the Vice-Commissar of Health in Moscow, who explained to us the system of control which pertains in each Republic.

Each Republic has its Commissar and Vice-Commissars. Again there are District Commissars and smaller Regional Commissars. Each Commissar is responsible for the medical arrangements in his District, and he is not concerned merely with Preventive Medicine, but with all medical matters concerning sickness, hospitals, polyclinics, maternity and child welfare arrangements, hygiene in general, factory hygiene, tuberculosis, venereal disease, housing—in fact, with all matters pertaining to the health of the community. Each medical person is expected to consider the health of the patient, not merely as a patient, but to regard him as a member of the community, who must be returned to productive efficiency. In this respect there is no separation between clinical medicine and preventive medicine. Each medical person is concerned with both aspects.

In general preventive medicine we learned little as to the incidence of the more common infectious diseases. For example, in the Ukraine we inquired carefully from the District Commissar as to the incidence of the Typhoid group, but could only learn that this was decreasing. That the Typhoid group must be a source of trouble is evident by the fact that T.A.B. inoculation is given to each person when he joins a factory. And likewise each person is vaccinated on joining a factory.

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The Vice-Commissar gave us certain figures in the Vital Statistics of the Soviet. There are almost 600,000 births every month, and this works out at 2 per 1000 increase in the population each year. The infantile mortality was in 1936 at the low figure of 80 per 1000 births. Pre-revolution it was 290. The death-rate which was 28 per 1000 in 1913 is stated now to be 14 per 1000. The birth-rate is 36 per 1000 and one doubts the low figure of infantile mortality.

For the care of mother and child there are now 19,900 Maternity Hospital beds. These did not exist in pre-revolution years.

In many areas there was no hospital accommodation whatsoever, and this problem is being rapidly overcome. There are now almost 50,000 beds for infectious diseases, but while this figure is small, it compares very favourably with the small number of fever hospitals in pre-revolution days.

We saw hospitals in course of construction, and the cubicle system of isolation was the rule. In general hygiene, comparison cannot be made with our own standard. In every hotel in which we stayed at least one water-closet would be out of commission. As one interpreter put it to us—"the Russian has not yet learned how to construct water-closets."

Industrial Hygiene.

Stalin's edict that man has a right to labour and to rest might well sum up the attitude to industrial hygiene. There is a seven-hour work day in most factories, and a rest day every sixth day.

In every factory there is a medical staff, and no one is taken on until he has passed through the sanitary station.

There is a careful record kept of all workers who become sick, and if any disease or disability is common, a reason for this is sought. Special attention is given to workers who are reporting sick at frequent intervals, and I was informed that cases of pulmonary tuberculosis in its earlier stages were not infrequently discovered by factory medical officers in this group.

The factory medical officer is kept informed from the polyclinic as to the nature of illness of any worker.

We had no means of studying industrial disease as such, but we were informed that no cases of ill-health from overwork arose.

Care of the Child.

The child seems to be very carefully observed right from birth.

We visited a child welfare centre in Moscow, and there is abundant propaganda by illustrative cards showing how the child should be nursed, fed, bathed and clad. Cards showing the food value and vitamin content of various articles of diet are given to the parent.

For the older child there is the factory crèche. The parents may both be at work and the child is left at the crèche during working hours. Thus the child is used to communal life from an early age. In fact there is as much communal life as family life for the child.

The same idea of communal life is fostered throughout childhood. The pioneers' palaces in the cities to which school children can go in the afternoons and evenings keep this communal spirit always in the front.

In Kharkov we visited what might be called a Preventorium for children who do not appear to be as fit as they ought to be. In this Institution, which is situated in a wooded region outside Kharkov, 500 children may be accommodated in summer and 100 in winter. Children are sent from the polyclinics, and the type received are those who seem not to be thriving, or who show evidence of lymph node enlargements. Doubtless most are tubercle infected children.

The children may stay one month in the summer, or longer if such is advised.

The age limit is eight to fifteen years.

Physical culture is much in evidence—just too much for the child with a definite infection with the tubercle bacillus, but against that most of the children seen seemed to be very fit. We saw these children at their recreation hour, and were entertained by their song and dance. The Russian child seems to take most naturally to the ballet.

Another institution for young persons was visited in Kharkov. This was the Dzerjinski Labour Commune. This Commune is for young people with criminal tendencies, and the average age is from thirteen to sixteen years. There were 400 boys and girls in the Commune. The aim is to reform these young subjects, and this is accomplished by Labour, Education and Régime. In the school they are encouraged

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to go in for higher education, and may enter for a profession. Others go to the factories, of which there are two in the Commune. By régime is meant the fostering of a communal spirit. The boys have their own court and deal, themselves, with offenders. Payment is given for labour, and a boy may earn 300 roubles a month. Sixty-five per cent. of the earnings go back to the Commune and 35 per cent. to the worker.

The only criticism we might make is that more attention might be given to the care of the grounds. This Commune could be made a most attractive place.

Before leaving the subject of care of the child and the city of Kharkov, it might be of interest to relate that here we visited a People's Court. We listened to the evidence in a civil case. It was an ordinary case. A young man had had judgment given against him, and been ordered by the Court to pay 25 per cent. of his wages to a woman who successfully claimed that he was the father of her child. This was an appeal, and during the hearing the woman walked up and down the Court nursing the "evidence" in her arms. The appeal was unsuccessful, and no heed was paid to the man's request for a blood test to be carried out.

Tuberculosis—Control and Treatment.

The most informative visit to any tuberculosis institute was that paid to the Central Tuberculosis Institute, Moscow. Here is a centre for diagnosis, for treatment, for research, and for observation of contacts. It is also a post-graduate teaching centre, and in this way serves as a model for the whole country.

Professor W. Hollcmann, who is the senior officer, is certainly an enthusiast. From him we learned that the tuberculosis mortality rate per 100,000 was, in Moscow in 1913, 280, and now is just over 100.

There are 24 tuberculosis dispensaries in Moscow, and over 200 physicians engaged in tuberculosis work one way or another in Moscow.

There are now 980 dispensaries in the U.S.S.R.

This Central Tuberculosis Institute is linked up with all the other dispensaries in Moscow—it has 150 beds. It is situated just in the outskirts of the city. Patients requiring artificial pneumothorax are received, and thoracoplasty can be done there. Patients may first be seen at a polyclinic, or

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sent to a dispensary by a factory medical officer. If tuberculosis is diagnosed, the patient is referred to the Central Institute, and from there his course of treatment is determined.

The regional dispensary observes all contacts, does an X-ray of the whole family, and is especially watchful of the child. The Central Institute has a bacteriologist, a pathologist, an X-ray medical officer, and four assistant physicians.

The bacteriologist has been preparing a method of giving B.C.G. vaccine in tablet form. At first B.C.G. was given to every child born in a family known to have a tuberculous subject. Now the effort is to give every new-born child B.C.G.

There was no typing of the infecting virus done, but Professor Holcmann is alive to the possibility of the bovine type as a cause of disease. At present an investigation is being made into the rôle of the lymphatic system in early disease. Whole sections of lungs are being prepared from cadavers in the cases of children dying from tuberculosis.

This centre was full of activity, and there was a great desire to establish contact with British workers. As to post-graduate teaching, this Institute ought to be excellent. Its series of X-ray films was very good, and all district tuberculosis officers may be sent here for instruction.

There is a similar centre for the Ukraine in Kharkov. Mr Band and I visited this Institute. It is preparing for 225 beds, but there was so much reconstruction going on that no opinion on its work could be given. Here there are 55 beds for children. We fancied it was over-staffed. There are two pathologists, two surgeons, two bacteriologists, and we saw very few patients. The staff is there but the buildings are not yet in order. A special study of the relationship of allergy to immunity in tuberculosis is being undertaken.

Our next approach to Tuberculosis was from Yalta in the Crimea. The Crimea has a delightful climate, and many former palaces are now given over for Sanatoria or Homes of Rest. We visited the National Sanatorium, Yalta. This is the Central Sanatorium for active treatment, and there are 13 other Sanatoria in the Crimea. All cases are sent to this Central Sanatorium in the first instance, and from there may be sent to any other Institution. There are 150 beds for pulmonary tuberculosis, and 10 medical staff. One is a surgeon, one a radiologist, one a bacteriologist, and the others are the clinical staff. Most of the patients have some active

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interference. Many have a pneumothorax. Cauterisation of pleural adhesions is done, and while we were told that thoracoplasty is done, we saw no patient who had been done recently. Treatment by gold salts has not been found to be very helpful.

In care of the individual patient I think our Sanatoria are superior, but in regard to general control of the disease they have a broader outlook, and it was good to hear that throughout Russia control was modelled on the Edinburgh system.

We visited other institutions in the Crimea such as Homes of Rest for tired workers. These doubtless fulfil a useful purpose.

Before leaving the Crimea and crossing the Black Sea, it might be of interest to mention our visit to Sevastopol. In this Black Sea port there is a wonderful hydrotherapeutic Institute. Here treatment for various rheumatic conditions is undertaken. Every type of bath can be obtained—Brine baths, Mud baths, Turkish baths, massage, and inhalation rooms are all to be found. A similar Institute was seen in Odessa.

The historical interest is kept in mind in a wonderful panorama of the Crimean War. Here from a central platform one can see paintings all round depicting many war incidents.

We visited a British cemetery at Balaclava and found the place well cared for—neat and tidy, with names clearly written as if done yesterday.

We left the Crimea and sailed for Odessa. Here two of us visited a Mental Hospital. In regard to care of the insane this appeared to be considerate, but we would want more space and a purer atmosphere. Occupational therapy was rather uninteresting and we doubted if there was a good scientific approach to their therapy.

My last visit in Russia was to a Children's Sanatorium at Kiev. Stalin has stressed the care of the child, and certainly this Sanatorium was a treat. There are 210 beds, and only pulmonary cases and infected children are accepted. No case of non-pulmonary disease is accepted. Children from eight to fifteen years are admitted. I saw several children with bilateral pneumothorax induced. It was "rest day" at the Sanatorium and the sun was at its brightest. There was a pianist on the staff who trains the children who are fit in song and dance. An open air stage, children lined up, and a delightful programme was promptly performed. A graceful dance—part of a ballet—a march—a string band, all entered into it with a joyful abandon!

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We had lunch, and on leaving I was presented with a bouquet of gorgeous flowers, while a happy Medical Officer was surrounded by cheering children.

The care of the infected child—so will the incidence of disease in the adult diminish! Truly we can learn as we travel.

The Communications were illustrated by lantern slides.

After thanking the speakers for their valuable accounts of their visit to Russia, the President (*Mr. W. J. Stuart*) said—We have had a most interesting evening. The question of transfusion with cadaver blood has focussed our attention on one of the most interesting things on the medical or surgical side which we could hear of from Russia. I suppose very few people really know what is going on in that country.

A Russian Polish Jew recently came to see me as a patient. His home had been in Russia before the War, and I had a most interesting conversation with him. We have not heard much to-night about the expense of living, but this man told me that visitors are charged large sums, and he himself—when on a visit home—had gone somewhere in a taxi and was charged ten shillings. Next day he did the same journey, as a native, and the taxi only cost him fourpence. He had left twenty-five pounds of English money with his sister, whose home was in Russia, and she, having bought something at one of the stores, offered some of this money in payment, and he had heard that she had been sentenced to five years' imprisonment for having this money in her possession. These things make one think. This man also said that the Government cared only for the young people—keeping them and educating them, so the older people were going to evening schools because otherwise they had a way of vanishing. I don't suppose any of us knows exactly what is going on there, or what effect that wonderful, huge country is going to have on the world afterwards.

Meeting—1st December 1937.

Mr W. J. STUART, President, in the Chair.

The following were admitted Members of the Society :—J. Colin Caird, M.D., M.R.C.P.Ed.; John G. Kininmonth, M.D., M.R.C.P.Ed., D.R.Ed.; E. R. G. Kirkpatrick, M.B., Ch.M. (Syd.), F.R.C.S.Ed.; Albert John Webster, M.B., Ch.B., F.R.C.S.Ed.