THE B.M.A. VISIT TO THE U.S.S.R.

BY

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At the invitation of the Ministry of Health of the U.S.S.R. and the Academy of Medical Sciences a party of seven, representing the British Medical Association, visited the Soviet Union from August 4 to 26, 1956. The party consisted of Sir Geoffrey Jefferson, who acted as leader, Dr. Mary Esslemont, Mr. Ian Fraser, Professor G. W. Pickering, Dr. Ralston Paterson, and myself, with Dr. Alexander Duddington as interpreter. It will be recalled that in 1955 a party of six Soviet medical men and women visited Great Britain as guests of the B.M.A.

Members of a delegation such as ours must receive impressions as medical visitors, as guests, and as tourists in the country visited, and these impressions are likely to have varied from member to member, since our experience and our spheres of work were all different. The following is an account of some of my impressions.

The Academy of Medical Sciences

In our capacity as medical visitors with varying interests we naturally tended to break up into two and sometimes three groups, though on a number of occasions we paid visits as a whole group. We were received at the Academy of Medical Sciences of the U.S.S.R. in Moscow by the President, Professor Bakulev, and some of his colleagues, who discussed with us the organization of the Academy. The Academy carries out its function of promoting and organizing medical research through three divisions—of Medical Biological Sciences; of Clinical Sciences; and of Hygiene, Microbiology, and Epidemiology. In each division are a group of institutes, as, for example, the Institutes of Pharmacology, Virology, Nutrition, Surgery, Chest Surgery, Neurosurgery, Therapy (Internal Medicine), and the Brain Institute. There are twenty-one institutes in the three divisions. Many are situated in Moscow, some in Leningrad, and the remainder in other cities of the Union. The Academy has 110 full members and 150 associate members. Full and associate members are elected by secret ballot by the Academy in full meeting from amongst the most prominent people working in the various fields, on the proposals of the institutes, the merit of the work done having been assessed by the Presidium of the Academy through an advisory committee.

Alongside the Academy with its institutes is the Ministry of Health, which also controls a series of institutes throughout the country. The Presidium of the Academy and the Scientific Committee of the Ministry of Health combine to draw up a five-year plan of research, laying down the main problems to be tackled and apportioning these between the two groups of institutes.

Atherosclerosis and Hypertension

Much active work is evidently going on of which we were able to see only a fraction, owing solely to limitations of time and place and in no way from any reluctance on the part of our hosts. Whatever we asked to see was open to us. In one laboratory after another we saw work going on on the experimental production of atherosclerosis by cholesterol feeding and similar means. The three who visited him in his laboratory in Leningrad were greatly impressed by Professor Anitchkov, who described experimental cholesterol-induced atherosclerosis as early as 1912 and has been working on the problem ever since. This fine

FIG. 1.—Professor Anitchkov in conversation with Professor Pickering in Leningrad.

old man, who, as he said, had survived two major wars and two revolutions, is evidently a first-class experimental pathologist and a teacher of the highest standard with whom it must be a privilege to work.

In the Institute of Therapy in Moscow Professors Mesnikov and Speranski are concerned with two lines of approach, amongst others, to problems of atherosclerosis and hypertension; in the former, the preventive or mitigating effect on experimental atherosclerosis of ascorbic acid and of sedatives such as phenobarbitone and chloral hydrate, and the aggravating effects of vitamin D, of cerebral stimulants, and of hypertension; in the case of hypertension, the production of stable hypertension in dogs by the induction of Pavlovian neuroses. They are developing their view that human hypertension in the initial stages represents a neurosis in the Pavlovian sense. This view is also the basis of work proceeding in the Medico-Biological Research Station at Sukhumi in Georgia (director, Professor Yudkin), which we were enabled to visit. Here a large colony of experimental monkeys is kept in which spontaneous stable hypertension is attributed to the spontaneous occurrence of neuroses and in which the experimental production of Pavlovian neurosis is followed in a proportion (unspecified) of cases by stable hypertension, and in others by what is claimed, less convincingly, to be myocardial infarction without coronary atherosclerosis.

FIG. 2.—Pavlov's study.

At the Pavlov Institute of Physiology in Leningrad active work is going on in following up Pavlov's concepts of higher nervous activity, cortico-visceral relations, and the inheritance of acquired characteristics. Pavlov's own laboratory at the Institute of Experimental Medicine of the First Leningrad Medical Institute, where he worked till his death in 1936, is preserved as a museum of the great man, his study still containing the furniture and articles (even his breakfast dishes and mail) which were there on his last morning.

At the Brain Institute, under Professor Sarkisov, who broke his holiday in the Crimea to meet us in Moscow, there is interesting work on cerebral function and localization in dogs by means of electrodes implanted at different levels and maintained *in situ*.

Hospitals

We visited hospitals and saw work in operating theatres and wards. The hospitals we visited in Moscow, Leningrad, and Kiev were all 50 to 150 years old, though scheduled for replacement. The façades of some are handsome, others have little architectural merit. Many are designed on the sprawling multi-pavilion plan with rather unkempt grounds. The wards and their associated rooms—laboratories and offices—are clean, tidy, and brightly decorated with flowers and plants in greater profusion than we are accustomed to.

The wards—the biggest I saw had 20 beds—are more crowded than in British hospitals, but most have more accommodation for up-patients, who, for instance, have their meals at tables in the spacious central corridor of the ward unit. Ward furniture appears to be adequate without being lavish or specially modern.

Hospital staffing seemed to be on a generous scale so far as medical staff is concerned, but at the Botkin Hospital (a Moscow municipal teaching hospital of 2,400 beds in 28

FIG. 3.—Members of the B.M.A. Party with a monk at the monastery of Petchevski Lavra at Kiev. Left to right: Mr. Ian Fraser, Dr. Mary Esslemont, Dr. J. G. M. Hamilton, Dr. Ralston Paterson, and Sir Geoffrey Jefferson.

units) the ratio of patients to nurses was said to be 15–20 to 1. We formed the impression that many of the duties carried out by nurses in British hospitals fall to doctors in Soviet hospitals. We found it impossible to distinguish between women doctors, nurses, and orderlies in the hospital wards because no distinctive uniforms are worn.

The hospital patient population in general medical and surgical wards was similar, in respect of types of illness, to ours except for the almost total absence of elderly people with degenerative vascular disease and its consequences. True, there were many cases of myocardial infarction, but I doubt if we saw a single case of cerebral thrombosis. A home-nursing service based on the district polyclinics is available, and use may be made of this in regard to geriatric cases.

The general approach to treatment of the common medical and surgical conditions was similar to our own.

Anticoagulants are used for myocardial infarction, though figures illustrating results were not forthcoming; parenteral hexamethonium is used for hypertension but is in short supply, and the newer oral hypotensive agents are not available; emergency gastrectomy is carried out for severe bleeding peptic ulcers, and some surgeons, but not all, carry out immediate gastrectomy for perforation of peptic ulcers except in young patients; thyrotoxicosis is treated by thyroidectomy or by radio-iodine according to the preferences of the physicians or surgeons into whose care the patients happen to come.

We inquired and were freely told about the use of cadaver blood for transfusion. This is virtually confined to the Sklifosovski Hospital in Moscow, where it was introduced for human use by Yudin in 1932. Yudin's first patient, a suicide, is alive to-day. Blood is withdrawn up to six hours after death and stored for up to a month. This hospital uses more cadaver blood than blood from living donors, but there is still much objection to its use on the part of medical men generally, and most hospitals use blood from living donors supplied through the institutes of blood transfusion.

Local and spinal analgesia is generally used for major surgical operations, although modern, including British, anaesthetic machines are in occasional use in some clinics. Pre-operative medication seems seldom to include sedation. Some of us watched a youth with a long-standing oesophageal stricture undergo an operation for the provision of an artificial oesophagus from a length of jejunum by a transthoracic route under spinal and local analgesia. He had had no preliminary sedation and appeared to be in a state of considerable fright. Soviet surgeons have a very large experience of such operations, since oesophageal stricture is relatively common as a result of the swallowing, often by children, sometimes by suicides, of caustic soda or strong acetic acid, both of which were said to be common household materials. Incidentally, suicide by barbiturate poisoning is rare, because barbiturates are less used than here and doctors may prescribe only six doses at any one time.

Undergraduate and Postgraduate Education

In learning about medical education in the U.S.S.R. we were somewhat handicapped by the fact that universities and medical schools were on vacation at the time of our visit. Medical delegations would in future be well advised to avoid the holiday month of August. In Moscow the medical schools were divorced from the university in 1930, and this separation has, I think, taken place in all the cities. The medical schools are under the direction and financial control of the Ministry of Health, as are many of the institutes of postgraduate education, though postgraduate education and training is conducted also in the institutes of medical research of the Academy of Medical Sciences. Great emphasis is laid on postgraduate medical education and each doctor must attend for three to six months at a postgraduate institute on the completion of his first three years' work after qualification, years spent under supervision. He is encouraged to specialize at this stage. If he does so his period of postgraduate work will be longer. If he does not specialize, or only in a broad field, he will take refresher courses after further periods of three, five, or seven years. Attendance at postgraduate courses does not entitle a doctor to an increase in salary, but it does facilitate appointment to higher posts. The pattern of postgraduate education is planned by the Central Postgraduate Institute in Moscow, with which the independent postgraduate institutes of the various constituent republics of the Union co-operate.

In Moscow the two undergraduate medical schools have an annual intake now of 500 students each, of whom 250 are in each of the two faculties of medicine and hygiene. The medical course is one of six years. About 10% of the students leave the school for one reason or another at

the end of the first year, but each school expects to graduate about 450 annually. Examinations are all oral, though "plenty of written case records are required." The Moscow hospitals seem to provide 1,400 beds for undergraduate medical teaching. About 65% of the 300,000 fully qualified medical practitioners throughout the Union are women, and the proportion amongst medical students is even higher and is rising.

Courteous and Hospitable Reception

The impressions gained in our capacity as guests were of the most pleasant. We were treated with the greatest possible courtesy, consideration, and respect. Everything possible was done to make our visit comfortable and profitable, and our own wishes were met whenever possible. We were received on the day after arrival by the Deputy Minister of Health, Professor Zhdanov, himself an associate member of the Academy of Medical Sciences, who gave in English a most concise and succinct account of the organization of medical services and education in the U.S.S.R., and who gave a cocktail party (at 2 p.m.!) for us on the day before our departure. The opportunity of this latter occasion was taken to present to the Deputy Minister a small gift in the form of an old map of Russia of the time of Peter the Great. Our party were received at the Academy of Medical Sciences of the U.S.S.R. by the President, Professor Bakulev, and nine of his fellow-academicians, who, besides giving us an account of the structure and functions of the Academy and its associated institutes, entertained us to lunch when the official B.M.A. gift was presented—a chairman's hammer and block made from the wood of a mulberry tree which grew in the garden of Charles Dickens's house in Tavistock Square on the site of which B.M.A. House now stands. The gift evoked much interest and some amusement, but at the Deputy Minister's farewell cocktail party Professor Bakulev told me that in the interval he had already been able to quell a disputatious meeting of the Academy with its aid.

The meal with which we were regaled by our hosts at 11 a.m. on the Sunday morning of our arrival in Leningrad was probably the most extraordinary Sunday breakfast any of us has ever had. It was a five-course meal more allied to dinner than breakfast, with wine, vodka, and brandy, though we were expected to have the ordinary hotel lunch about two hours later. Throughout the visit, however, there were no formal evening banquets. We regarded this designed omission as a kindness on the part of our hosts, for we were thereby able to avoid much of the fatigue which this form of entertainment entails and which so exhausted the Soviet guests of the B.M.A. in 1955.

We were accommodated most comfortably in good hotels and our city journeys were all made in large limousines which were at our disposal at all times. We travelled from Moscow to Leningrad by first-class night sleeper train, and from Leningrad to Kiev, to Sochi on the Black Sea coast, and back to Moscow by scheduled air-line planes. We expressed great keenness to visit the Medico-Biological Research Station at Sukhumi in Georgia in order to see the experimental work on monkeys. In order to spare us a night in the moist heat of Sukhumi and a very tiring double journey over tortuous roads, a special plane was chartered for us. At Sochi we were given ample opportunity of basking in the hot sunshine and bathing in the warm sea. Sochi is a resort, one of many, with 59 "sanatoria," which are combinations of convalescent establishments and holiday hotels. They are medically staffed and equipped with provision for physiotherapy, etc., together with laboratories for clinical investigation. The laboratories did not seem to be very actively employed, though they were proudly displayed. We lived in privacy and luxury in the Metal Workers' Sanatorium, which could take 350 "patients." Many of the other sanatoria are of comparable size. The patients, apparently selected on the recommendation of the medical authorities at their homes, come from all parts of

the Union, and the normal stay is 28 days, during which time they become tanned to the colour of mahogany. The Soviet citizen is a great sun-worshipper.

A Few General Impressions

So much has been written recently about the tourist impressions of the U.S.S.R. that little fresh can be added. Moscow as a city did not attract me. Apart from the varied and, from some angles, breath-taking beauty of the buildings of the Kremlin and a few other handsome buildings of more modern construction, the general style is utilitarian. The main streets are enormously wide and the traffic is not yet dense enough to fill them. The traffic is sufficient, however, to make the crossing of these wide streets a considerable adventure. Taxis and private cars travel fast, and, as all use of horns was forbidden in Moscow from August 1, a sharp look-out was necessary. The usual metropolitan story was told that the only people knocked down in the streets are visitors from outside Moscow.

Leningrad, on the other hand, is a most handsome city. The many fine buildings of its two hundred years as a capital are preserved and cared for. The Nevski Prospect is one of the finest streets in the world, sign-posted by the beautiful golden needle spire of the Admiralty. The art galleries and museums in Moscow and Leningrad are full of priceless treasures on full display and are crowded with eager visitors of all ages.

The citizens' pride in their country and its "achievements" is evident on all sides. Streets and public places (but not lavatories) are kept scrupulously clean and free from litter by women street-cleaners using fan-shaped brooms which are often short-handed and require the user to bend double. The smoker does not tread his cigarette stub on to the pavement. Receptacles for litter are numerous and are assiduously used so that there is little or no trash to be swept up.

Back streets, however, tend to be narrow and mean, though also clean. The housing problem is still immense in spite of a vast amount of new domestic building in the form of blocks of workers' flats ranging in style from four- to six-story concrete masses to ornate multi-story towers. People still live in wooden shacks resembling hen-houses. Building, however, is going on everywhere we visited.

I have already been asked the question many times, "Are the people happy?" This, of course, is impossible to answer. The street crowds are not vivacious and the impression of stolid drabness is accentuated by the poor design of both men's and women's clothes and shoes. In spite of the very high place held by artists in the scale of values, and in spite of the magnificent and brilliant use of colour in public spectacles such as sports and physical culture displays, there is little evidence of interest in and use of colour in women's clothing. Conversation with ordinary people was free, animated, and serious, and we found no sign of fear on their part in talking to foreigners. We were all struck by the evident health and well-being of the children, who, however, were shy and unresponsive to our doubtless elephantine overtures. Since nearly all married women have jobs outside their homes their young children are of necessity cared for during the working-day from a very early age by strangers in crèches, where no doubt their appropriate education is begun. We saw no evidence of the supposedly harmful effects of separation of the infant from its parents, although admittedly we had no opportunity for a close study of the psychological balance of the children.

The overall impression remains of a courteous, hospitable, and very friendly reception by people, of all types, who were interested and active, devoted individually and collectively to peace and the development of their country and its life, avid for education, interested in the arts, proud of their technological and scientific progress, but withal slightly bemused by the complications of this age of technology.

The illustrations are from photographs taken by Dr. Alexander Duddington.