

SOME ASPECTS OF MEDICAL CARE IN THE U.S.S.R.

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As a participant in the World Health Organization Seminar on Medical Care, which was held earlier this year in the Soviet Union, I had the opportunity of observing certain characteristic features of the Soviet system of medical care which, in some respects, render it quite unique. It is the purpose of this article to describe some of these features.

With the advent of Soviet power in Russia exactly fifty years ago, the State assumed the responsibility for safeguarding and improving the health of the people thus ensuring a State approach to Public Health and the medical services. On the threshold of the advent of Soviet power, certain principles had been proclaimed, and these formed the bases for the establishment and development of the Soviet Health system.

The five major principles were:

1. That public health and medical services were to be made available to all.
2. That these services were to be provided by very highly qualified personnel.
3. That the accent on all measures in these fields was to be on prevention.
4. That these services were to be free of charge at all levels.
5. That there was to be extensive participation of health volunteers.

Availability and accessibility of medical services

The task of providing a medical service for a population of 230 millions scattered over an area covering nearly one-sixth of the earth's surface is an enormous one, to say the least. However, in the comparatively short span of 50 years, the Soviet Union has succeeded in setting up

a fully functional and integrated network of medical services ramifying throughout its immense territory. Of course some medical services had existed before this time, and the Russian school of medicine had made its important contributions to medical thought and knowledge. But, while Russian medicine had reached a high level at the beginning of this century, its availability was almost wholly restricted to the large towns and cities, and it therefore remained relatively inaccessible to the masses of the population outside these perimeters. The problem, therefore, was to extend the services outwards to the vast rural hinterland and, at the same time, to mould the services into an integrated functional system. The success of this gigantic task depended above all upon a realistic appraisal of the problems involved and a plan of action capable of being effectively executed. It is to the credit of Soviet planners that they established a sound order of priorities which formed the framework for the development of their system of medical care and the high standards they have achieved.

As a start, first priority was given to the provision of elementary forms of first aid in those areas where medical services were non-existent and, concomitantly, to instruct the people in the rudiments of hygiene and health care. It was appreciated that this goal could not be achieved with the limited number of qualified medical personnel then available. In the circumstances, a new corps of so-called paramedical personnel was set up. These were put through a concise and intensive course of basic medical training and then were sent out to work in all the districts of the territory. They were assigned particular areas in which to operate. This apportioning of areas of responsibility in the field of medical care has remained one of the

characteristic features of the Soviet health system. Even to-day these paramedical personnel are still operating throughout the Soviet Union, although their standards of training have risen considerably.

The paramedical team found on an average State or Collective farm consists of a trained general purpose nurse (*feldscher*) and a midwife. They operate on the farms from medical points which are bungalow type buildings consisting of three or four rooms where they examine patients, give first aid, lecture on health matters and dispense medicines.

The next step was the setting up of small cottage-type hospitals (*Uchastock* hospitals), of between 15 and 30 beds. These hospitals were sited so as to be within reasonable distance from a number of first aid points. Their function was mainly that of supervising the work carried out in the *feldscher*-midwife post and to provide a centre for medical, surgical, obstetric and infant care. Here minor forms of surgical intervention were carried out; illnesses which required hospitalization were catered for; pregnant mothers were offered maternity facilities and children were hospitalized. These hospitals also became the centres for public health activity in the area.

These district or *Uchastock* hospitals together with the *feldscher*-midwife posts formed the first link in the chain of medical care. There however remained a large gap between the facilities available and quality of medical care in these hospitals and those obtaining in the larger and more sophisticated city (or *Oblast*) hospitals. The establishment of a half-way hospital was therefore the next step. The administrative set-up whereby districts (*Ushastocks*) were congregated into regions (*Rayons*) and rayons into municipalities (*Oblasts*) provided the right setting. *Rayon* hospitals were established within the framework of the existing administrative pattern. These hospitals with a bed capacity of 300 to 500 offered a wide range of facilities, with departments for various specialities. Major operations were carried out and specialized treatment given.

Cases which could not be dealt with

in the *Uchastock* hospitals were referred here and specialists from these hospitals visited the *Uchastock* hospitals either to deal with difficult emergencies or to deliver lectures and demonstrations to the staff. The important links in the chain of hospital care ranging from the small district hospital to the large city hospital were thus established, and the people felt that medical care was being brought nearer to them and therefore became both more accessible and more acceptable.

One other problem was that of staffing these hospitals. A policy was formulated whereby each graduate, having completed his medical training at the State's expense, had to spend the first three post-graduate years in a district hospital after which he could move inward towards the larger hospitals. This centripetal remigration of post-graduate doctors is still in force to-day.

Concomitantly with the establishment of these basic forms of medical service and the training of paramedical personnel great efforts were made to increase the numbers of medical graduates. If figures count for anything, the Soviet Ministry of Health states that in 1941 Russia had only 23,000 graduate physicians and 25,000 hospital beds. Today, the Soviet Union has 523,000 physicians and 2,100,000 hospital beds excluding the 330,000 Sanatoria beds.

Besides the establishment of the basic grades of general hospitals, provision was also made for dealing with the hospitalization and treatment of specific diseases such as tuberculosis, infectious diseases, etc.

With the better understanding of the pathological conditions affecting people at different ages, indifferent occupations, etc., we next find the development of specialized centres of medical care. Thus we find the setting up of children's hospitals, adult and children's polyclinics; women's clinics; specialised institutions for the study and treatment of particular diseases, e.g. rheumatism; skin and V.D. clinics; metabolic disease clinics; and health education centres.

In conjunction with the Trade Unions,

hospitals have been set up where workers are given specialized preventive and curative treatment according to the particular occupational hazards and diseases.

The problem of providing medical aid to the patient at the bed-side and with the least possible delay has been achieved by the setting up of an independent emergency service in most cities which is a model of sheer efficiency and organization. The problem of accidents is being tackled along the now established pattern of providing for first aid points as close as possible to danger spots and connecting these to Central Units where specialized care is provided.

If one were to summarize the present facilities for medical care available to the Soviet family unit these would include:

For the mother and child: Ante-natal care and facilities for delivery in hospital (there are 230,000 maternity beds or 1/1000 population); post natal care which includes visits by pædiatricians and nurses on the 2nd day after the mother's return home from hospital; doctor calls twice at home in the first month; from the second month the mother takes her baby to polyclinic once a month in the first year (contact with pædiatrician amounts to 12-14 times). In the second year the child is seen at the polyclinic once every three months; in the third year once every six months, and from the 4th to the 7th year, once a year. The school examination at 6 or 7 years is carried out by a pædiatrician and other specialists, e.g. E.N.T. and ophthalmologists. There is a yearly school medical examination by the school doctor. The child also receives all the necessary immunizations at the polyclinic. BCG is given in the 1st week of life and booster doses at 7-12 months and 12 years of age. Von Pirquet testing is carried out twice yearly up to 12 years.

The urban woman also has a domiciliary medical care service, facilities to attend at the general polyclinic; women's consultation clinics where gynæcological problems are dealt with and where health education talks are given both to pregnant and non-pregnant women; preventive screening for cervical carcinoma is car-

ried out at these centres.

The husband enjoys the facilities offered at the adult polyclinic as well as those available to him in virtue of his occupation, including all preventive measures, such as annual mass screening, facilities for vacation leave at health resorts, overnight sanatoria, etc. If he is certainly suffering from a chronic disease he will be placed under the "dispensarization" scheme whereby he is actively followed up according to a personal medical programme. He may even be hospitalised as a preventive measure. Chronic bronchitis patients, for example, may be hospitalized during an epidemic of influenza as a preventive measure.

Facilities are also being provided for adolescents to see specialists at polyclinics with whom they can discuss their problems and who give them advice.

As far as the rural population is concerned we have already mentioned the *feldscher*-midwife posts, the *Uchastock* hospitals and the transport facilities available to convey patients by road or by air to wherever is necessary for them to obtain the best possible medical care.

The figures given by the Soviet Ministry of Health regarding the present strength of their medical establishments show that there are 20,000 hospitals; 25,000 polyclinics; 3,200 specialized clinics; 20,000 women's and children's polyclinics consultative centres; 30,000 health posts in factories; 90,000 *feldscher*-midwife posts in rural areas. There are 23.9 doctors per 10,000 population and 96 hospital beds per 10,000 population.

Medical care

by very highly qualified personnel

The desire to provide a medical service by highly qualified workers has developed almost into an obsession for specialization. It is practically true to say that Soviet Medical Schools do not produce "doctors" but "specialists". This obsession for specialization at every level is perhaps best reflected in the fact that the term "general practitioner" is considered to be practically a "dirty" word.

An undergraduate pursuing the six year medical course has to decide, as early as the third year, which of the three main medical fields he is going to enter, viz., adult medicine or pediatric medicine, or hygiene and sanitation. During the last three years the undergraduates pursue intensive clinical work within their chosen field of study and graduate as therapists, pediatricians or hygienists. An experimental scheme has been introduced at the Pavlov Institute in Leningrad whereby undergraduates in the "adult medicine" stream are given specialized training in medicine, in surgery or in obstetrics and gynaecology according to their choice of speciality. Thus on completion of the six years' course a graduate, because of the specialized training received during his undergraduate period, is considered to be a "specialist" in the wider sense of the word.

After the mandatory three year period of service in a peripheral hospital which practically all graduates have to undergo, the doctor has every opportunity to specialize further within a narrower field. Thus, for example, a graduate "specialist" surgeon can, after his three years post-graduate field work, pursue further studies in a narrower field of surgery, say in E.N.T., ophthalmology, orthopaedics, etc.

Of course, the implication of all this is that there is no such thing as a general practitioner or a family doctor. The family unit is attended to by an array of "specialists" in the narrower or wider sense of the word. Naturally there must, in the normal course of events, be a doctor-of-first-contact and the burden does fall either on the paediatrician or the therapist who would then either deal with the case himself or else refer the patient to another specialist.

In a sense, Western medical thought seems to be wading towards a similar if not identical state of affairs, the only difference being that whereas in the West one finds a spectrum of shades and the situation is still very hazy, in the Soviet Union the position is more clearly defined. There is much to be said for and against

the Soviet stand in this question. However, the more liberal and flexible approach being adopted in various leading Western countries towards this question is perhaps best likely to produce a satisfactory formula in the long run.

Accent on prevention

The prophylaxis and prevention of disease is the basic philosophy guiding all thought in the field of public health services in the Soviet Union. It is based on the materialistic understanding of the relations between the organism and the environment and the recognition of the decisive influence of social conditions on the origins of diseases and their influence upon the moral and physical health of the population. Soviet medical thought considers the prevention of disease as the most dynamic form of preserving and developing public health generally.

The term prevention is taken in the widest possible sense. It is not taken to signify simply the prevention of disease but also the prevention of the exacerbation of pathological conditions already existing. The practical form given to this latter concept is the system known as "Dispensarization".

"Dispensarization" is a system whereby persons suffering from certain types of diseases are actively followed up in accordance with a worked-out programme embracing both therapeutic measures and improvements in environmental conditions. Besides, certain groups of persons who are considered "at risk" in the wider sense of the word are also placed under "dispensarization" to discover the occurrence of disease at as early a stage as possible. At present 30.3% of the population are covered by "dispensarization". These include:

- All children up to 3 years of age.
- Children attending nurseries and kindergartens.
- Students of secondary and higher educational establishments.
- Juveniles in employment.
- Workers in hazardous occupations.
- Persons suffering from rheumatism, cardiovascular diseases, hypertension,

C.N.S. disorders, diabetes, gastric and duodenal ulcers, tuberculosis, cancer and venereal diseases, glaucoma.

The "dispensarization" is carried out by the district therapist or pædiatrician at the polyclinic. As far as the work-load is concerned one polyclinic therapist can cover dispensarization for 100-120 patients. Dispensarization of patients suffering from tuberculosis, cancer, V.D. is done at special centres.

The persons "at risk" are examined at regular intervals varying from once a year to not longer than once every three years. If a person is found to be suffering from a disease for which he is to be "dispensarized" he is thoroughly investigated both as regards the nature of his disease and the environmental factors which may have been the cause of his complaint. In the latter respect investigations are carried out by the sanitary and epidemiological authorities into the sanitary conditions of the person's dwelling and working conditions. The results of the clinical and sanitary investigations are then appraised and a "dispensarization" schedule is worked out for the person concerned. This schedule consists in an active follow-up programme whereby the person is invited to call at the polyclinic regularly for check-ups, health education talks including advice on diet are given to him and preventive or curative drugs are prescribed. These drugs are free of charge. The person may attend the polyclinic individually or as part of a group of persons suffering from the same complaint. The relatives of such persons are invited to attend the group discussions to enable them to be of greater assistance to the patients. Besides attending the polyclinics, such persons may be given treatment at Sanatoria and other resorts, additional vacation leave, lighter work or improvement in their living conditions. The jobs selected for patients under "dispensarization" may be either temporary or permanent according to their conditions.

At present all persons above 12 years of age are screened annually for tuberculosis; persons over 30 years of age are screened annually for cancer or precancerous lesions, and workers in especially hazardous industries are screened once or twice a year for occupational diseases.

The aim of the "dispensarization" is to preserve and to strengthen the health and the working abilities of all those groups being followed up. The efficiency of the system is ultimately gauged by the absence of disease or the extent to which sick people recover full health or, in the case of patients suffering from chronic ailments, the absence or frequency of exacerbation of their complaint.

The goal which the Soviet "dispensarization" system aims to reach is that of providing an annual physical examination for the entire population to discover any conditions requiring treatment or continued observation, and to follow-up all patients having such conditions.

Free Medical Services

The goal of providing a completely free medical service such as that obtaining in the United Kingdom when the National Health Service was first introduced has not yet been fully achieved in the Soviet Union. While most medical services are free, medicines, except those given under the dispensarization scheme, are still subject to a nominal charge, and charges are still levied on such things as spectacles and dental prostheses.

It may be surprising to learn that there are facilities for private consultations. Patients can obtain the advice of specialists on a private fee-paying basis. However, the number of people doing so is so small that this aspect of medical care is totally insignificant in the overall scheme of the Public Health services.

The extensive participation of health volunteers

It is quite true to say that without the extensive participation of the so-called health volunteers it would not have been possible to establish and develop the Soviet system of medical care. This army of volunteers draw from all sections of the population, and which includes the Red Cross and the Red Crescent, participates actively in most aspects of the public

health services. They play an important role in such matters as the recruitment of blood donors, persuading patients to attend regularly for check-ups and treatment, giving group talks on public health questions at places of work, in parks, on housing estates, etc., distributing health propaganda leaflets, and generally assisting the public health authorities in every possible way.

Every year the Soviet Ministry of Health organizes a Public Health Day on the same lines as the World Health Orga-

nization's World Health Day. A particular aspect of public health is chosen as the central theme and a programme of activities is worked out starting some months before and culminating on Public Health Day. The programme includes talks and discussions over the radio and television, in schools, at health centres, articles in the press, specially prepared feature films in cinemas, etc. The great interest shown by the people at large and the success of this yearly venture are due, by and large, to the work of the health volunteers.