

MEDICINE IN THE SOVIET UNION.

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This is an article about Medicine in the Soviet Union. It is meant to be a brief description of the Principles and Practice of Health in the Soviet Union as an example of a socialist state. I have purposely avoided any polemic as to whether a doctor is better off in the U.S.S.R. or in the Western countries; or whether better medicine is practised by a general practitioner or by a therapist^u (cf. later); or whether it is inadvisable to have a high percentage of women^u doctors (it is now considered that at least 50% of doctors in the Soviet Union are females); ^{nor is it intended to emphasize the} ~~and the~~ many other petty points that seem to bog down most articles written on aspects of life in the Soviet Union.

Obviously this critique cannot be built up on personal observations. In fact, it has been necessary to depend entirely on data and knowledge gained after perusing books, pamphlets and articles on the subject. It was the author's wish that it might have been possible to write from direct acquaintance with the land behind the so-called Iron Curtain, but of necessity he has had to rely on the impressions of others.

For the proper understanding and evaluation of Medicine in the Soviet Union it is necessary to examine briefly its historical development.

One cannot really divorce the growth of medicine from political, economic and social developments, as Medicine is an integral cog in the wheel of society in ^{the} U.S.S.R. The reader should bear in mind that Medicine is a reflection on the society in which it is contained, while it is at the same time dependent upon that society. To understand the Soviet Health system without some knowledge of socialism is like studying pschiatry without delving into psychodynamics !

Before the Revolution conditions in Russia were amongst the most appalling in Europe. The overall mortality rate was 30 per 10,000¹ (as compared with 14 in Britain, 15 in Germany and 13 in Norway) and the infant mortality rate was close on 250 per 1,000 babies ! These figures compare with those of some country areas in South Africa. At the same time the country was ravaged by waves of major epidemics, in 1914, 11,843,088 cases of infectious diseases were reported. (how many were not ?)

The pre-revolutionary Czarist regime was thus marked by an extremely poor state of general health. There was no State Health Programme and only the very privileged few could enjoy the medical facilities, inadequate as they were. This was indeed a miserable legacy for the new order of the Socialist State.

During the early years from 1917 to 1925, however, conditions in the Soviet Union remained rather static as the Revolution attempted to maintain itself; but after this, medical facilities and the progress of knowledge increased by leaps and bounds. ~~After this period,~~ ^{now} Medicine in the Soviet Union took on a completely new guise.

The Soviet Union ~~now~~ set about building and consolidating a new society in general. Just as there was a planned system in economy, agriculture, ^{and} building construction, so there was a planned system in the development of health services. In subsequent 5-year plans, the Soviet Health Services constituted a considerable ~~prop-~~ ^{or} portion of the general development. It was realised that the health of the individual and of the society was of major importance; ~~further,~~ that a healthy society requires healthy individuals.

The country itself, however, was not in a position to ~~ra~~ise the standard of therapeutic medicine immediately. It was perhaps thus forced into a position where it had to concentrate and devote all administrative machinery into the field of prophylactics of disease. Prof. Segerest, who was then Professor of the History of Medicine at the John Hopkins University, in his epic book ¹

summed up what was perhaps the current approach towards medicine:

- " 1) Medical services are free and therefore available to all.
- 2) The prevention of disease is in the foreground of all health activities.
- 3) All health is directed by Central Bodies with the result that health can be planned on a large scale.

The entire system is built upon the idea of prevention. Prophylaxis^{h a} is the foreground of all medical considerations. The Communist Party of the Soviet Union will base its Public Health system on a comprehensive series of health and sanitary measures aiming to prevent the development of disease."

Thus during the late 1920's it was thought that, the most important factor in the treatment of diseases was its prevention, this fact being mainly conditioned by the lack of doctors, hospitals, medicines etc., which did not allow a high standard of therapeutic medicine. The emphasis was thus laid upon prevention and the improvement of medical facilities. This was done through a number of media:

- 1) Food, clothing and shelter were ~~also~~ prerequisites for good health. It is hardly necessary to go into details on the raising of the basic standard of living in the last 40 years in the U.S.S.R.
- 2) All medical facilities were free and available to anyone and everyone. (To-day there is a slight modification of this: in some hospitals patients have to pay for medicines if they can afford it).
- 3) Central Control of Health

At the beginning of the Socialist regime all health control was vested in a Central body. In this way, although perhaps it allowed ~~from~~^{for} a certain degree of bureaucracy, the limited resources could be directed to the best possible usage. Since the rapid developments in the medical

fields which has taken place especially in the rural areas, this control has become decentralised, and each Autonomous Republic (there are 16 in all) has a large degree of autonomous control over its areas.

4) Popularising of knowledge concerning health.

It was fully realised that ignorance favours the spread of disease. Thus to propagate rapid dissemination of Public Health propaganda, Special institutes were organised: "Houses for the Enlightenment on Health". These are supervised by the Moscow Socio-Personal Institute of Health Education founded in the 1920s, and at the moment, number at least 355 throughout the country. However pedantic the name seems, much work is done in the problems regarding the provisions of facilities, physical training and sport, and proper regard of nutrition, sleep and rest. All members of the public catering establishment, municipal services and factories of the food industry must at least take a minimum course in the study of health and hygiene.

5) The use of sanatoria on a preventitive rather than a therapeutic basis.

These sanatoria are described as "a cross between nursing homes and high class hotels". They cater in the main for persons suffering from general debility but without any specific pathology, as well as persons recuperating from illnesses etc., There are now 284,000 beds in 2,178 sanatoria distributed in various parts of the Soviet Union.

6) One of the most remarkable advances made in prophylactic and therapeutic medicine is the rapid increase in the number of doctors. (2) and (3)

<u>YEAR</u>	<u>NO. OF DOCTORS</u>	<u>NO./10,000 PERSONS</u>
1913	20,000	1.5
1940	140,768	7.0
1950	247,346	14.0
1955	310,186	16.0
1957	346,000	

In addition 25,000 doctors graduate each year !

By the end of the 1930's the general framework of the health services of the U.S.S.R had been established, and the emphasis was now on the consolidation and development of this

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of this framework. It might as well at this stage to compare vital statistics of the U.S.S.R and some other advanced countries (The countries chosen to bear comparison seem (as far as is ascertainable) the most advanced countries in the field of medical development. ^{3,4,5}

MORTALITY RATES: PER 1,000 PERSONS

COUNTRY	INFANT	GENERAL
<u>U.S.S.R</u>		
1940	184	18.3
1954	60	8.9
1957	45	7.8
<u>U.S.A.</u>		
1936-38	54	11.1
1954	264	9.3
<u>ENGLAND & WALES</u>		
1936-38	56	12.1
1 954	24.9	11.7
<u>NORWAY</u>		
1936 -38	40	10.2
1954	20.6	8.5
<u>NETHERLANDS</u>		
1936-38	38	8.7
1954	20.1	7.6
<u>UNION OF S.A</u>		
1954 Coloured :	134.5	
Asiatic :	63.1	
European :	29.8	
African :	?	

TOTAL NUMBER OF DOCTORS

Number of persons/doctors

U.S.S.R	U.S.A.	E. & W	Norway	Un. of S.A
310,186	207,924	-	3,527	6,987
1:650	1:730	-	1:1,000	1:1,500

HOSPITALS & BEDS	U.S.S.R	USA	E & W	NORWAY	UNION of S.A
Number	23,397	6,956	6-	505	568
Number of beds	1,22570	1,604408	481,563	32,726	70,761
Persons/Beds	1:1,700	1:910	1:1,600	1:1,000	1:1,800

(Of the 1,604,408 beds in the U.S.A over 700,000 were in mental hospitals whilst these ^{numbered} about 120,000 in the U.S.S.R)

It is both difficult and dangerous to draw any conclusions from Statistics per se, particularly if they are not comprehensive, but they do give some indications. It appears that except for the number of doctors, the U.S.S.R is still slightly in arrears in general health conditions. What is indisputable however, is the rapid advance made in all fields of medicine in the last 30 years. It is indeed fantastic to see that in the space of 30 years, a nation of about 200 million people has apparently been converted

from one of the most backward to one of the most advanced countries in medicine and public health.

A further point that can be gleaned from these figures is that facilities in the Soviet Union are increasing progressively. From 1950-1953 there was an increase of six thousand hospitals and 200 thousand beds, and by 1960 there is expected a further 28% (³400,000) increase on the 1955 figure. In the same period the no of persons employed in the Health Service increase from 2, 051, 000 to 2627,000 and the number of doctors from 247,346 to 310,186. The overall mortality rate dropped from 9.6 ^{per thousand} to 8.2 ^{per thousand}, and ^{the} infant mortality from 84 ^{per thousand} to 60 (In 1957 it further dropped to 45 !) The number of beds in sanatoria increased from 255,000 to 284,000.

HOW DOES STATE-ORGANISED MEDICINE WORK OUT IN PRACTICE IN U.S.S.R.

The basic organisation is that of "Polyclinic" which serves a particular area. Perhaps the most satisfactory way of describing such a Polyclinic is to summarise an article by Dr. S. Gattbieb "In a Moscow Surgery!"

He visited Moscow Polyclinic No 71. This served a population of 70,000, none of whom lived from than 2 kilometres distant from it. This ~~'General Practitioner'~~ geographical area was sub-divided into 19 areas. Each area was served by a 'General Practitioner' (Therapist in the U.S.S.R) who was therefore responsible for 3, ⁵500 persons (All these were over 16, those under 16 were served by a separate children's Polyclinic nearby.)

The personnel of this particular polyclinic were as follows:

Population served	-	70,000
Total No. of Doctors	-	96
G.P.'s	-	19
E.N.T	-	2
Gynae	-	5
Eyes	-	3
Neurology	-	3
Surgeons	-	5
Radiologist	-	3
Pathology	-	4
Dentists	-	11
E.C. graphy	-	1
Blood Trans	-	1
Urology	-	1
Eudocualogy	-	1
Consultant in charge of wards	-	1

Emergency rata Drs	-	11
Medical referee	-	3
Administrative Drs	-	4
Epideniology	-	1
Sanitary C.P.W.	-	6
Dermatology	-	2
Innoculation & Vacc	6	4
Gastroenterology		1
Residents in charge of wards		4

SALARIES (Roubles) Per month

Director	1,700
Specialist	1,200
G.P.	800

The therapist's average day consisted of a session at the surgery for 1-2 hours in which time the doctor saw about 8 patients, 10 minutes ^{being} spent on each. If any pathology was found, the patient was then referred to the appropriate specialist. The patient was permitted to ask to see the specialist directly and bypass the G.P. These specialists were always available contemporaneously with the G.P. In addition there was a clinicopathology laboratory, an X-Ray department and there were also 50 in-patients beds for cases requiring observation or investigations.

If the patient did not like the particular doctor assigned to him he was at liberty to choose one of the others. After the two hours in the surgery the doctor was then required to spend $3\frac{1}{2}$ hours in visits and general administrative work. On this particular day she had 5 visits which seemed to be a fair average. At her disposal was a chauffeur-driven car. These patients at home received any attentions that they required.

Other features of note were that there were 6 public health doctors and 4 epidemiologists who worked in close co-operation with the G.P.'s. (It is obligatory to be vaccinated against small-pox, diphtheria, typhus and tuberculosis. B.C.G. vaccine was given to all new-born babies unless definitely contra-indicated. The oral method was used with the infants and revaccination was done by scarification.

The essential features of the polyclinic were:-

- 1) All attentions were free and available to anyone and everyone
- 2) The public was served by on-the-spot physicians when required. All but the most intricate investigations could be carried out either at the clinic or in the patients home.
- 3) The preventitive side is always in mind: (Represented by 6 public

health officers) etc.

4) The average waiting time at the clinic was only 20 minutes.

RURAL POPULATION is served by a system of medical establishments run on the following lines. Every rural Soviet has a first aid centre, staffed with several doctors, assistants and mid-wives. These centres are numerous. There exist 65,000 of these rural medical establishments. They are an attempt to bring medical attention as near as possible to the rural dwellers. They act as a link between the peasants and the nearest hospital. An air ambulance service with helicopters also serves a useful function in this role.

The larger collective and State farms have local hospitals combined with dispensaries. Their staff consists of one or two doctors and several trained nurses.

The rural district centre has a larger hospital serving the entire district. This usually has an out-patient's department. In addition to hospital work the doctors conduct epidemiological work in the area under their charge. This hospital usually consists of surgical, intestinal diseases, gynaecological, pediatric and infectious diseases departments, as well as a sanitary-epidemiological station.

For the more complex illnesses, every regional centre has a hospital with all the special departments. These are complete highly qualified medical establishments. In 1955 there were 2,500 spread throughout the Soviet Union.

WHAT IS THE LOT OF THE ORDINARY DOCTOR ?

The doctor in the Soviet Union does not seem to attain the same relative prestige as is bestowed upon him in the Western countries. Science and engineering are the professions in the Soviet Union today. Whether the preponderance of women is the cause or the effect of this (probably the latter) the fact is without question of some importance in the evaluation of medical services in the U.S.S.R today.

After a doctor has qualified from the Medical school, he is completely in the services of the state for three years.

While his own wishes are usually considered he can be sent out to any district to do his "internship".

It is not possible to compare directly the salaries of doctors in the U.S.S.R. with other countries. Allowances must be made for a number of factors. The hours are shorter, the security offered ^{is better} (I.E. a regular job at any time and a pension), etc..

The scale for an ordinary doctor is from 670 roubles (£55+) to 1200 roubles per month ⁷. Specialists get more while professors and Directors of Medical Institutes can get up to 5000 roubles a month. Here again the emphasis is on the scientific workers.

It is interesting to compare these figures with those of other workers in the U.S.S.R. Miners earn 2000 rising to 7000 roubles a month. Unskilled workers earn 400 roubles a month.

Purely from the materialistic point of view, it appears that doctors in the western world are better-off, but there is ample compensation in the better working hours (6 hours per day), the security, the pensions, the fact that students not only pay no fees, but are paid a stipend, and so on.

After 25 years service or when the doctor reaches 55 he or she is entitled to a pension of half the salary at that time. She or he can go on working if so desired.

The family doctor in the true sense does not exist to any degree in Soviet Russia. More often than not the mother attends one clinic, the father another and the children a third. By all reports however the doctor-patient relationship is one of mutual respect.

In the Soviet Union there are no ethics peculiar to the Medical profession, as medicine is no longer a trade, but a public function of the State in which no financial considerations interfere with the relationship between physician and patient. The great majority of all regulations written in the Western code of ethics become meaningless and superfluous.

Where the question of fees is removed, the relationship between patient and doctor is purely a humane one. A large part of these codes consists of regulations enforcing fair business practice. The practice of medicine in the Soviet Union thus becomes a true social service.

a service given by the doctor to all who need it without restriction or reservations.

ABORTIONS in the Soviet Union ^{Page}

In 195~~4~~⁵ the Soviet Union Health Authorities decreed that abortions once again should be legalised.

In 1920, the Commissariat of Public Health had decreed that:

1. Any such operations (abortions) were to be permitted free of charge in hospitals.
2. Only a Doctor was entitled to carry out an abortion.

Their reasons were "The moral heritage of the past and difficult economic conditions of the present still force a section of the women to submit to this operation."

Whilst the above policy was official, the Authorities actively campaigned against the idea of procuring abortions.

In 1936, there was a complete reversal of the policy: abortion is "allowed only in those cases where the continuation of pregnancy endangers the life or threatens serious injury to the health of the woman ...". It must be realised that abortions were legalised in 1920 as an unavoidable evil under the conditions prevailing at that time. In 1936, it was felt that these conditions had changed radically. The material well-being and cultural level of the population had advanced, and Societies for caring for mother and child had been provided.

Around 195~~4~~⁵, the Authorities once again reversed the legislation. Again abortions were legalised (but not encouraged) under strict medical conditions, i.e. in a Hospital by a Doctor. The reasons behind this were:

- (1) It was for the mother to decide whether she would have the child or not.
- (2) Since, in spite of abortions being illegal, they still were being done, it was felt that they might well be legalised.
- (3) The illegal abortions were procured by inadequately trained persons under poor conditions and if abortions are being performed willy-nilly, rather let them be done by Doctors in a Hospital.

It should be interesting to see the effects of this new legislation on the incidence of abortions.

MEDICAL EDUCATION

The present set-up in Medical Education differs little from that in our own Universities. Medical students spend six years at the Medical School with much the same pre-clinical and clinical approach as is employed elsewhere. It is only in the last few years that this system has been adopted. The History of Medical School shows an interesting evaluation.

In 1930, for the first time, the Medical Schools were split off from their parent universities and came under the control of the Minister of Health. At that time the length of the course was from 4-4½ years. It seemed that the idea was to get as many as possible doctors in the shortest possible time. Apparently realising that quality at least was as important as quantity, the course was increased to 5 years. The last two years being clinical. During these two years students had to specialise in one of the following:-

- a) Medicine and Surgery
- b) Sanitation and Hygiene
- c) Paediatrics

The first three years were identical for all students, but the greater emphasis was placed on the respective fields adopted by the student.

This system persisted until 1955 when the course was increased to six years and equal emphasis was allotted to all the subjects i.e. the undergraduate specialisation was replaced ^{on} by the broad outlines of the system employed in the medical schools in the west.

A detailed analysis of the curriculum is set out below.

SEE SPECIAL SHEET

Some points of interest are:

There is a strict six hour day, six-day-a - week working time for the first five years and the sixth year has not less than five hours a day. This constitutes thirty six hours a week, reasonable by any standard.

Latin has become a compulsory subject.

Principles of Marxism, Leninism, Political Economy and military training are included in the course.

Of greater interest is the question of fees. It is believed in the Soviet Union that if higher education is to be opened to all, it is not enough to offer it free of charge. The rationale behind this is that while a student is preparing himself to be a doctor, he is doing potentially useful social work and the least that society can do is to support him in his studies. Further, this ensures that entrance to a medical college is based on academic qualifications and is entirely independent of family income or support. To this effect, not only is all teaching ~~etc~~ free, but the students are given a stipend sufficient to support themselves.

The relative proportion of male and female medical students is interesting. In the 1930's about 70% of the students were females but now apparently the number of males seems to be increasing and the proportion of male to female is now 50^{to}50.

POST GRADUATE STUDIES

After graduating, the doctor is in the service of the state for three years. After this time, he is at liberty to specialise.

There are three stages through which he must pass: a) He spends ~~at~~ about six months in specialised clinics and hospitals, b) He then enters one of the eleven institutions for raising medical qualifications. About 16,000 pass through these every year.

The course is from three to nine months, c) The doctor is then required to spend three years in the particular branch in which he wishes to specialise, in such a hospital and subsequently is a specialist.

It appears that for teaching it is necessary to get a higher but more academic degree: Doctor of Science and Candidature of Science. These require the writing of a thesis which the doctor must be prepared to "publicly defend".

More than half (of the total of 27,000) the number of scientific workers in medical schools, research institutes, hospitals and medical administrations hold the degree of Candidature of Science.

The startling number of medical school candidates is close to 25,000 a year, whereas before the Revolution there were approximately 2,000. In England the comparable figures are about 2,500 a year today and 1,400 a year at the beginning of the century.

I have tried, albeit superficially, to give a picture of the principles and practice of medicine in the Soviet Union. There are many aspects, such as the field of medical research, their approach to psychiatry, etc, which in themselves could serve as useful subjects for discussion and which I have not been able to touch upon.

It is unfortunate that in the past there has been so little contact in the medical fields between Soviet Russia and the Western countries, but today there is a much closer interchange of experiences and ideas and this can only lead to profit on both sides.

In conclusion I would say that although the practice of medicine in the U.S.S.R. is essentially similar to that in the Western world, the principles behind Soviet medicine are different - the primary task of medical personnel is the prevention of disease: financial interests in no way cloud the practice of medicine whilst the doctor is a doctor solely for the convenience of the ordinary man-in-the-street, and not for himself.