Primary medical care in the Ukraine

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Introduction

THE starting point for this paper was a two-week study tour of medical care agencies in the Ukranian Republic of the Union of Soviet Socialist Republics which took place in September 1974. During our stay in the cities of Kiev and Kharkov we visited polyclinics, hospitals, an emergency-service station and various research and training institutes.

Rather than merely describe what we observed during these visits and record information supplied by our hosts we have chosen to set our experience in a wider framework of policy analysis using data obtained from published sources. The literature in question consists of text books, journals, and newspapers produced by Soviet printing houses in the Russian language. These are an essential prerequisite for any systematic analysis since Soviet documents issued in Western languages normally offer only the briefest and most flattering accounts of Soviet medical care.

At the outset it is necessary to make clear that the Ukraine is one of the 15 republics which together make up the Soviet Union. Though dwarfed by the Russian republic, the Ukraine comes second in population, and numbered almost 48 million at the beginning of 1972. With an area of 604,000 sq.km., it has a density of 79 persons per sq.km. Despite the fact that urbanisation and industrialisation are proceeding rapidly, as many as 44 per cent of Ukrainians are officially classified as living in rural areas. Roughly three quarters of the population are recorded as having Ukranian nationality, which makes them an ethnically distinct group different from the Russians (although they are all Slavs) in sociocultural traditions and language.

The physical context

Medical care in the Ukraine is organised according to the same basic principles as apply throughout the USSR, i.e. all units are built and run by the State which employs doctors on a full-time salaried basis, the service is intended to cover the whole population without exception and medical treatment is free at time of receipt. It should be added that a range of charges exists such as those for prescriptions, spectacles, false teeth and with various exemptions these are comparable to those operating in the United Kingdom, though on a less generous scale.

Expenditure on the health service is determined to a large extent through the well-known system of centralised economic planning by the State. Major policy objectives for the service are specified by the Central Committee of the Communist Party and the government in the context of their national plans for social and economic development.

Although the All-Union Ministry of Health in Moscow plays a key monitoring and supervisory role, each republic has its own Ministry of Health which is responsible for implementing national policies and devising strategies to meet specific circumstances and needs within its territory. Quantitative measures such as doctor/population ratios

show considerable variation for the different republics and it is likely that a similar variation also obtains in the quality of care received by patients.

Seeking first to determine how many units are providing primary medical care in the Ukraine, we immediately encountered a problem of definition. Many health service agencies bring together primary care and specialist outpatient treatment under one roof; the basic distinction in official statistics is between units which offer inpatient treatment and those delivering ' ambulatory-polyclinical care ' which for the sake of brevity we intend to call outpatient care. In 1970, the most recent year for which we have obtained data, the Ukraine had a total of 6,417 establishments in which doctors provided outpatient care.[1] Of these a small number—386—fell outside the system controlled by the Ministry of Health and apparently were under the jurisdiction of agencies such as the Ministries of Defence, Civil Aviation, and the Interior. It was evident to us that much new construction of all kinds was taking place in the Ukraine. Although cartoons criticize the length of time taken to complete hospitals and polyclinics, the stock of buildings increases year by year.

Types of unit

The units falling within the scope of the general health service vary considerably in size and function. But what the majority of them (4,753) have in common is that they are administered as one section of an institutional complex which includes the provision of inpatient facilities. According to the Soviet classification these institutions include hospitals of various types, maternity homes, and special dispensaries for treatment in such fields as tuberculosis, skin diseases, venereal disease, psychoneurology, and neurology.

It is interesting that the chief doctor reponsible for the hospital is also answerable for the outpatient unit, although there will often be a deputy who has on-the-spot responsibility for its smooth running. The concept of ' uniting ' a polyclinic to a hospital was first espoused in 1947–48, mainly on the grounds that this organisational form would foster continuity between preventive and curative medicine, improve the skills of doctors working in both polyclinics and hospitals, and give rise to better quality medical care for the population.[2] Incidentally, not all ' united ' outpatient units are situated within the curtilage of their hospitals; as we found on our visits, the buildings in question may be geographically separate.

Among the remaining 1,278 units, which are ' non-united ', as many as 433 were no more than medically staffed health points located in industrial enterprises (there are also many staffed not by doctors but by paramedical workers). Moreover, a further 165 of the units were dental surgeries. The residual group included paediatric polyclinics, adult polyclinics, women's consultation centres and facilities at health resorts of which there are a number on the Black Sea coast.

In the previous paragraph reference was made to industrial health points and it should be noted that, on a completely different scale, the provision of both outpatient facilities and hospitals at the place of work is a well-developed feature of Soviet medical care. In the city of Kharkov our study group had the opportunity to visit examples of these units—the 500-bed hospital and associated polyclinic which served a large tractor factory employing about 40,000 workers. Interestingly enough, the capital costs of such buildings are met not from the government health budget, but from the resources of the enterprises they serve.

Despite advantages, this arrangement has given rise to wasteful duplication of services in small units. In an attempt to prevent this, the Government issued an order in 1968 which indicated that works' hospitals should contain not less than 300–400 beds and

that, where necessary, enterprises should pool their funds for the construction of jointly-owned units. To judge from one comment in a recent speech by the All-Union Minister of Health, the tendency to go it alone still persists in some areas; he condemned the attitudes implicit in the phrase " It may be a poor thing, but it is our own." [3]

The link between industrial health facilities and labour discipline is too obvious to be missed. Indeed the duality of a doctor's role in this context is implicitly admitted in one textbook. " These establishments " the authors state, " are organised with the object of bringing medical care nearer to the workers and most effectively reducing illness involving temporary loss of fitness for work." [4] Reductions in work days lost due to illness are reported from time to time in the medical press and are presented as indicating the efficiency of the doctors concerned. (We saw wall-charts which recorded changes over a period of years.) One does not need to be especially imaginative to appreciate the pressures on staff to achieve annual improvements in what could reasonably be termed productivity ratings.

The fragmentation of primary care

Another major unit is the standard so-called ' territorial ' polyclinic serving the adult population living in a defined area of a town or city (i.e. those adults who do not receive medical care at work). In Kiev we visited the polyclinic section of hospital No. 22 which served a population of 47,000 divided up into 20 microdistricts (*uchastki*) each containing about 2,000 or 2,500 persons. The most important advantage of this subdivision is that it makes possible the arrangement whereby one polyclinic doctor carries responsiblility for the general oversight of one microdistrict which, according to the official norm, should contain 2,000 adults. The same organisational concept is encountered in industrial polyclinics where there should be 2,000 workers per ' workshop ' microdistrict, except in the chemical, coal, and oil-refining industries for which the norm is 1,500 persons.

However, the microdistrict doctors of an adult polyclinic are by no means the equivalent of a British general practitioner. They are specialists in what the Russians call therapeutics, a term which can be rendered as general medicine. The therapeutists (*terapevti*) form the largest single group of doctors in adult polyclinics serving either a district or an industrial establishment; doctors who staff cardiorheumatology, endocrinology and infectious disease clinics are also members of the therapeutics department. According to one authority, the staff of that department treat about half of all patients attending a polyclinic.[5] The remaining patients will receive treatment from other outpatient specialists working in basic fields such as surgery, ENT, and ophthalmology. Some patients will be referred by their microdistrict therapeutist while others will proceed directly (via the registration desk) to the doctor in question.

Many paediatricians are also microdistrict doctors and the populations which they serve consist, on average, of 1,000 children below the age of 15. The extent to which adult and paediatric microdistricts are coterminous is unclear. However, it is evident that a sizeable proportion of paediatric outpatient (and inpatient) facilities are physically separate from units serving adults. In two further specialties, T.B. and obstetrics and gynaecology, the microdistrict concept figures to some extent in the organisation of work.

The demand for primary care

According to the All-Union norms, which were reached on the basis of local surveys, the totality of urban outpatient facilities should cater for an average of ten attendances per person per year. The most up-to-date figure for actual attendances in the Ukraine relates to 1968 and shows that 10·61 attendances were made per person.[6] The expected distribution of visits by specialty, the All-Union norms, are recorded in table 1.

TABLE 1
NORMS FOR THE DEMAND FOR OUTPATIENT CARE IN URBAN AREAS
(issued by Ministry of Health of the USSR)

Specialty	*Attendances per person per year*
Therapeutics	2·5
Surgery	1·4
Obstetrics and gynaecology	0·8
Paediatrics	1·3
Psychoneurology	0·4
T.B.	0·3
Dermato-venereology	0·4
Ophthalmology	0·5
E.N.T.	0·4
Dental surgery	2·0
Total	10·0

Source: Barkman and Rodov. (1972). P. 143. *Upravlenie Bolnitsei, Meditsina: Moscow.*

This total includes two attendances for dental surgery. In addition about half the attendances are accounted for by health checks and periodic follow-up examinations for specific diseases—procedures which receive great emphasis in the Soviet system of medical care.

Establishments

A somewhat elementary but important observation is that quite large numbers of doctors are employed in a polyclinic. Table 2 records the average number of established posts for various categories of outpatient units in the USSR as a whole for the years 1965 and 1969.

TABLE 2
AVERAGE NUMBER OF DOCTORS' POSTS PER OUTPATIENT UNIT, USSR 1965 and 1969

Type of unit	1965	1969
Urban polyclinics		
attached to hospitals	27·0	29·5
unattached to hospitals	25·0	28·0
Polyclinics of rural district hospitals	12·0	17·0
Rural units unattached to hospitals	1·9	2·0
Dispensaries		
urban	12·0	13·0
rural	6·0	6·0

Source: *Sovetskoe Zdravookhranenie* (1971) No. 6, p. 5.

With nearly 30 established posts, the typical urban polyclinic is a far cry in this respect, as in others, from a British health centre or group practice. Moreover, as the table reveals, the average number of posts has increased in all types of unit, even over such a short period of time. An especially marked increase—from 12·0 to 17·0 posts—was registered in polyclinics attached to rural district-centre hospitals (an example of which our study group visited in the village of Zmiyov some distance from Kharkov).

To embark on a detailed account of how establishment standards are reached would be beyond the scope of this article. However, interested readers may wish to consult an authoritative account, fortunately available in an English translation, by Dr G. A. Popov, then Deputy Director of the Planning and Finance Department of the

All-Union Ministry of Health.[7] Staffing standards appropriate to the various types of unit are given in that book and table 3 records (from a different source) the basic ' ready-reckoner ' for urban polyclinic establishments, which was issued by the USSR Ministry of Health (1968).

TABLE 3

ALL-UNION BASIC STAFFING STANDARDS FOR URBAN POLYTECHNICS PER 10,000 ADULT POPULATION (aged 15 and over)

Specialty	*Posts*
Microdistrict therapeutists	5
Surgeons (including traumatology and orthopaedic surgeons and urologists)	1
Otolaryngologists	0·5
Neuropathologists	0·5
Ophthalmologists	0·6
Endocrinologists	0·2
Dental surgeons	4
Total	11·8

Source: Barkman and Rodov (1972). P. 151, *Upravlenie Bolnitsei, Meditsina: Moscow.*

It will be seen that a total of 11·8 posts are allowed per 10,000 adults and that five of them are for microdistrict therapeutists (which agrees with the above-mentioned norm that a microdistrict should consist of 2,000 adults). In addition to the data shown in this table, the planners of a new polyclinic take account of various guidelines for staff posts. For example, there should be one post for a therapeutist in cardio-rheumatology and one for a specialist in infectious diseases for every 50,000 adult persons. As to diagnostic services, there should be one radiology post per 25 consulting doctors and 0·5 posts in the ' functional diagnosis ' and electrocardiography rooms per 20–50 consulting doctors.

A revealing light on Soviet medicine is cast by the requirement for doctor-physiotherapists—0·5 posts per 15–30 consulting doctors. From that statistic alone one can deduce that physiotherapy figures largely in outpatient care and on the basis of our own observations we can confirm that a large amount of space and equipment is allocated to Germanic-style physical therapy, the value of which seems highly questionable. It is doubtful whether the machines for heat, vibration, and other treatments are anything more than the apparatus of white magic.

Rural medical care

The inadequacies of rural health services have long been recognised as a cause for concern, and in recent years the government and communist party have taken determined action to improve the service. Considerable progress has certainly been achieved in the Ukraine and its Minister of Health, Dr V. D. Bratus (whom we had the good fortune to meet) appears to have given a vigorous lead in implementing the party's objective of raising rural health care to the levels obtained in towns.

A key feature of the Ukranian strategy for medical care in the countryside is the development of district-centre hospitals and their related polyclinics. At the end of 1971 there were 472 such hospitals; their average size stood at 212 beds and it is intended that they should be expanded so as to contain 250–300 beds. In connection with outpatient services alone, rural microdistricts are in the process of being defined for populations which for the most part will fall into the 6,000–8,000 range.

The nerve centre of a rural microdistrict is the ambulatory (*ambulatoria*) which

includes a clinical laboratory, physiotherapy, and dental rooms. The medical cover is provided by a therapeutist, a paediatrician, and a dental surgeon, who are supported by paramedical staff. It is intended that there should be close co-operation with the local cottage hosital, where one exists, and with the feldsher and feldsher-midwife post.[8] A feldsher, it should be explained, is a kind of half-trained doctor (or super trained nurse) who in rural areas is the patient's first contact with the health services.

A major objective of the current programme is to ensure that the task of initial diagnosis falls increasingly to qualified doctors—a concern which stands in marked contrast to thinking in some British and American circles. The progress being made towards this end receives publicity in the medical press; one of the most recent accounts relates to the region of Lvov in the western Ukraine. There the number of visits to medical ambulatories rose from 1·6 to 3·2 per rural inhabitant over the years 1970–1973, while attendances at feldsher-midwife fell from 2·9 to 2·1 per person. During the period 1974–76 it is intended to open a further 22 ambulatories which will enable microdistricts to be created in the remaining areas of the Lvov region.[9]

Training for specialisation

A fairly self-evident implication of some of the points already touched on in this article is that the Soviet Union has a large and increasing medical work-force. Indeed, at the start of 1973 the country had as many as 29·4 doctors per 10,000 persons and by the end of 1975 expects to have an improved ratio of 32·5 per 10,000 persons. Expressing the figures in another way, there will then be one doctor (a term which includes dentists as well) per 308 persons—in purely quantitative terms a truly colossal achievement.

We were interested to discover that for many posts the working week only contains about 35 hours. This may be linked to the fact that, at the present time, as many as 72 per cent of all Soviet doctors are women (a large proportion of whom will have family commitments). As a consequence of the short working week it is possible for doctors to hold more than one post and the possibility of holding a second post is explicitly mentioned in many advertisements for vacancies.

As might be easily inferred, the fragmentation of primary care is based upon a belief in the superior technical competence of the specialist over the generalist. This belief was very clearly expressed by the All-Union Health Minister, Professor B. D. Petrovsky in a speech which he made a few years ago. "The progress of health protection in its current stage," he said, " is directly linked to specialisation which reflects the basic spontaneous development of modern medicine. Specialisation in respect of therapeutic, surgical, and other forms of medical care is inevitable since it is impossible to çonceive that only one doctor with a broad profile could fully guarantee highly qualified care of patients suffering from a variety of illnesses which are frequently complicated to diagnose and treat".[10]

Specialisation, we discovered, is not something that begins after graduation; it is an in-built feature of undergraduate courses. At the Kharkov Medical Institute we formed the impression that all intending students must apply to one of the three faculties —medicine, paediatrics, and environmental health, each of which provides its own self-contained six-year course.

Incidentally, the curious separation of paediatrics from medicine can probably be explained by reference to the high priority assigned to medical care for children during earlier periods of health service development. In the sixth year of training, under the *subordinatura* system, a student will start to specialise even within the faculty; for example those training in medicine may specialise in therapeutics, surgery, or obstetrics and

gynaecology. Needless to say there are various opportunities for gaining further specialist training at postgraduate level.

It can be argued that even where various specialists share responsibility for primary care, they can still obtain considerable clinical satisfaction if they are permitted to treat their own patients in hospital. In the Soviet Union, however, microdistrict doctors do not enjoy such opportunities (although it is official policy that they should undertake a spell of hospital work at regular intervals). The lack of access to beds is compounded by the practice of relinquishing clinical responsibility to the hospital to a far greater extent than obtains in Britain. It appears that even comparatively minor ailments such as tonsillitis are admitted to hospital and a child who has suffered from pyrexia for only 24 hours will be admitted as a matter of routine even though his condition may resolve spontaneously. Of course early recourse to hospital is more likely in a country such as the Soviet Union where—by British standards—living space is cramped and overcrowding is frequent.

The role of the microdistrict doctor

So what is left in the hands of a microdistrict therapeutist, given the importance of other outpatient doctors and of the hospital? As for curative medicine, her workload consists predominantly of diagnosing and treating infections of the respiratory tract, diseases of the cardiovascular system and of the digestive and respiratory organs. As for the prevention of disease, we found that health education, health checks and periodic follow-up examination of former patients figure large in her time-table.

It also seems clear that many microdistrict therapeutists have a watching brief for the general level of morbidity in their areas and, partly by means of home visits, become well acquainted with the socio-economic circumstances of the local families. " For more than 20 years," wrote one such doctor, " I have worked in one and the same microdistrict in the Moskvoretskaya district of Moscow; I know every block of flats there and many families stretching over two or three generations. It makes me glad to be conscious of my usefulness to ordinary decent people and to see day by day that one's efforts really bear fruit." [11]

However, there can be no doubt that considerable anxiety exists about the role and status of the microdistrict doctor. This is not surprising as in a number of areas of the USSR the percentage of unfilled posts is high and that a significant proportion of microdistrict posts are filled by paramedical staff such as feldshers. In 1973 it was reported that during the previous seven years, the increase in posts for microdistrict therapeutists and particularly for paediatricians had lagged behind or only just kept pace with the increase in the USSR's urban population while the increase in other specialties had outstripped it.[12]

It seems doubtful whether Soviet doctors are challenging the basic strategy whereby specialists provide primary care. But the need to enhance the status of microdistrict doctors is increasingly recognised. For example, the Ukranian Minister of Health recently stated: ". . . it is necessary to make the work of the microdistrict doctor more interesting and more feasible . . ." [13]

Solutions to the problem vary and there are those who favour an arrangement whereby, within reasonable limits, this doctor could be assigned a number of hospital beds to which he could admit his own patients. Nevertheless, the mainstream of current thinking appears to be that he should develop his responsibilities vis-à-vis other specialists, becoming in some sense a counterbalance to them. One example of this school of thought is provided in the following quotation. " The microdistrict doctor must bring together and evaluate the specialists' combined findings. He alone can have comprehensive information, knowing better than others the anamnesis of the illness and the

patient's life history, his occupational path, style of living, psychogenetic factors and so on."[14]

On the basis of this evidence it seems justified to infer that a body of opinion is emerging which favours transforming the microdistrict therapeutist into someone rather like a generalist who exercises continuing responsibility for his patients. If that is correct, the Soviet planners may one day learn lessons from general medical practice in the United Kingdom.

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