USSR Letter

Changing pattern of Russian hospitals

MICHAEL RYAN

Although inpatient treatment figures so prominently in Soviet medical practice, little information is published about even basic characteristics of the hospital system. The annual abstract of statistics records only number of hospitals, total bed complements, and bed-to-population ratios for the 15 republics and the Union as a whole. Fortunately a more detailed picture can be assembled for the Russian republic (RSFSR), which is much the largest in respect of population and area. By combining data from two sources^{1 2} it is possible to identify major trends in the Russian republic over a period of nearly 30 postwar years.

Before discussing the time-series, however, one methodological pitfall must be cleared from the path. The data referred to in this article relate not to the totality of civilian units but only to those in what I have termed the main health service; thus they exclude hospitals that do not come under the aegis of the Health Ministry. Among the exclusions are facilities provided for staff of the railways, civil aviation, and water transport, as well as the notorious psychiatric prison-hospitals controlled by the Ministry of Internal Affairs.

A continuing increase

Turning now to table I, it is appropriate to comment first on a fundamental change that occurred between 1950 and 1978. A quite remarkable increase occurred in the total bed complement. Rising sharply from 573 000 to 1 669 000, the supply of beds expanded almost threefold. This growth rate becomes only slightly less striking when related to population; it can be

calculated that the bed-to-population ratio more than doubled from 5.6 to 12.2 per 1000.

Examining the trend in a comparative context, the Russian republic can be shown to have started from a far lower level of postwar provision than the English hospital service, which in 1949 had 10.4 beds per 1000 people. During the 1950s, however, the Russian republic was catching up rapidly, due to a crash programme that entailed makeshift arrangements and the subordination of quality to quantity. Having overtaken Britain during the 1960s, the Russian republic continued to make massive annual increases to its total bed complement at a time when a gradual "slimming down" process was occurring here.

Among the various categories of hospital identified in table I, only two failed to make substantial gains. The first comprises hospitals for invalids of the second world war which, not surprisingly, lost beds and declined from 2.6% to 0.6% of the total. A reduction also occurred in respect of the residual group labelled "other institutions." In the absence of definitional notes indicating their functions no reason can be given for the contraction.

During the 1960s an additional category came into existence. The construction of large children's hospitals in regional centres probably reflects a decision to increase the priority rating of medical care for infants and young people by creating centres of excellence containing a broad range of appropriate skills and elaborate equipment for use in diagnosis and treatment. Like the other regional units, they admit many patients from country areas (whereas "town hospitals" take relatively few).

The tendency towards specialised provision can be seen also in the case of dispensaries, which increased their share of beds from 2.9% to 7.1% over the period in question. In 1974, according to a secondary source, the USSR Health Ministry distinguished six separate types of dispensary for the following single-specialty areas: tuberculosis, venereodermatology, trachoma, psychoneurology, medicophysical culture, and goitre. An earlier classification also refers to oncology, the subsequent omission of which constitutes an unexplained puzzle.

Department of Social Policy and Social Work, University College of Swansea, Swansea SA2 8PP

MICHAEL RYAN, PHD, lecturer in social policy

TABLE I—Hospital beds in main health service of the Russian republic, 1950-78

Category of unit	No of beds (thousands)				As a percentage of total beds			
	1950	1960	1970	1978	1950	1960	1970	1978
Regional and republican hospitals	23.7	35.6	52.4	65.6	4.1	3.8	3.7	3.9
Regional children's hospitals	—	—	4.2	10.2	—	—	0.3	0.6
Town hospitals	154.7	312.4	410.8	474.9	27.0	33.2	29.2†	28.5
Hospitals for invalids of second world war	14.7	9.7	10.4	9.6	2.6	1.0	0.7	0.6
Specialised hospitals	65.1	92.9	136.6	172.2	11.4	9.9	9.7	10.3
District hospitals (of districts whose centre is in a town)	59.4	86.0	202.6	290.0	10.4	9.1	14.4	17.4
Maternity homes (in towns)	26.9	37.9	45.5	48.5	4.7	4.0	3.2†	2.9
Clinics of higher educational establishments and scientific research institutes	25.4	25.2	32.8	37.2	4.4	2.7	2.3	2.2
Psychoneurological hospitals*	44.4	90.9	143.4	172.7	7.7	9.7	10.2	10.3
Dispensaries (rural and urban)	16.4	45.1	94.8	117.9	2.9	4.8	6.7†	7.1
Rural hospitals of all types	140.9	203.5	269.8	269.5	24.6	21.6	19.2	16.1
Other institutions	1.4	1.5	1.4	0.7	0.2	0.2	0.1	0.04
Totals	573.0	940.7†	1404.7	1669.0†	100	100	100	100

* Apparently synonymous with psychiatric hospitals.

† These figures have been recalculated.

A shifting balance

By far the most striking change within the broad pattern concerns provision for country areas. Although their share of the republic's population has been declining, they still accounted for as much as 30% in 1978. Obviously they rely heavily (but not exclusively) on units in the category "rural hospitals of all types" and, as table I shows, beds in those units declined from 24.6% to 16.1% of the total.

Explication of that trend must take account not only of straightforward urbanisation but also of the policy of developing what official accounts term hospitals of districts whose centres are located in towns. These have a mixed catchment area and over the decades have admitted a large proportion (normally about 40%) of their patients from the rural hinterland. Between 1950 and 1978 their share of the total bed complement increased from 10.4% to 17.4%, which confirmed them as the major element in the supply of inpatient care for the countryside. By virtue of their associated polyclinics they play an important part in the care of outpatients as well.

The greater prominence assumed by these hospitals is also evident from the growth in their numbers—from 648 to 1209 between 1950 and 1976. By contrast, there are now fewer hospitals of districts centred on villages and fewer *uchastok* hospitals (which serve geographical subdivisions of districts). The latter group, though still very sizeable, declined sharply from 6367 to 5011 units over the 20 years 1956 to 1976. Many buildings no longer required for their original purpose have been adapted for alternative uses—as outpatient ambulatories or departments of district-centre hospitals.

Size of units

Another long-term trend that attracts attention is the increase in the average size of Russian hospitals. This can be interpreted as one of the practical consequences of the injunction—frequently used in planning documents—"to develop and improve the material base of the health service." For the Russians, apparently, ever larger hospitals are an essential prerequisite to the achievement of an unquestioned objective: the further development of highly specialised technocratic medicine with its heavy emphasis on biological and physiological functions.

An increase in the average bed complement has occurred in all five categories of hospitals for which published data are available (table II). In some cases this process has been helped by a policy of amalgamating units where appropriate and possible.

Perhaps the least expected point to emerge from table II is that "town hospitals" have a quite limited capacity; they are not the equivalent of a district general hospital in Britain. So as a broad generalisation it may be said that the totality of Russian hospitals, far from making up a single pyramid with *uchastok* hospitals as the bottom tier, form a structure with two separate bases, both of which comprise numerous small or relatively small units. At the top of the structure, admittedly, the regional and republican hospitals are very sizeable; in 1978 they contained an average of 791 beds each.

TABLE II—Numbers and average bed complement of hospitals in the Russian republic, 1970 and 1978

Category of unit	1970		1978	
	Units	Average No of beds	Units	Average No of beds
Regional and republican hospitals*	87	603	83	791
District-centre hospitals of districts whose centre is in a town†	994	191	1123	247
Town hospitals	2484	165	2348	201
Psychoneurological hospitals	247	581	274	630
District-centre hospitals of districts whose centre is in a village	653	109	623	140

* Excluding regional children's hospitals.

† This category consists of the vast majority but not all of the units identified in table I as "district hospitals (of districts whose centre is in a town)."

The multiplicity of small units in both urban and rural areas is to be explained, at least partly, by an arrangement that severely limits the potential for rational planning of resources. Thus managers of industrial enterprises, collective farms, State farms, and so on have the right to construct health facilities (including ward blocks) if they can meet the capital costs from their own funds. These units then become, as it were, unsolicited gifts for the local health service, which is responsible for running them. There is ample evidence in print to show that senior medico-bureaucrats consider that this freedom runs counter to the dictates of efficiency and economy.

Volume of work

The changes in the pattern of hospital provision can be viewed from a second and complementary perspective—that of work load as measured by number of patients admitted a year. When admissions are related to population, a predictable finding emerges: the corollary of an increasing bed complement has been an increasing percentage of people admitted to hospital. At present the hospital admission rate for the Russian republic is roughly twice as high as the rate for Britain, which may be regarded as eloquent evidence of differences between health care strategies in the two countries.

In addition to rates for the Russian republic as a whole, it is possible to obtain separate figures for, respectively, urban and rural areas. These show that a remarkable turnabout has taken place over the postwar decades. In 1950 only 8.2% of the rural population entered hospital as against 14.6% of townsmen (table III). The gross inequality of access was soon remedied, however, and by 1978 the rural rate had jumped to 25.6%, which well exceeded the urban rate of 21.5%.

TABLE III—Hospital admissions of urban and rural population in the Russian republic, 1950-78

Year	Urban (%)	Rural (%)
1950	14.6	8.2
1960	20.0	16.5
1970	20.6	21.7
1980	21.5	25.6

Official comment on the current disparity runs as follows: "This phenomenon is natural and is accounted for by the fact that a significant number of rural inhabitants are hospitalised for highly qualified medical care in urban curative-prophylactic institutions." While true so far as it goes, that statement should not be lightly accepted as a full explanation.

In rural areas the annual average number of outpatient contacts with doctors (as opposed to paramedical staff) is substantially fewer than in towns for various reasons, including the shortage or absence of doctors in remoter settlements. This fact provides firm ground for postulating the operation of a "substitution effect," whereby inpatient investigations and treatment take the place of ambulatory care. Hence it seems reasonable to conclude that additional hospital beds are a less urgent requirement than an improved outpatient service in rural areas and more qualified doctors with an undivided responsibility for that type of work.

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(Accepted 19 May 1982)