the costs of health services. As such, the state took responsibility for simple and expanded reproduction in the area of health care. Health institutions did not have their own funds, and the salaries of health workers were set by federal regulations and were uniform for the whole country. As a rule, health workers were better paid than other employees with comparable qualifications, and physicians began to work at two payment levels higher than remaining experts with university training. The distribution of health workers was taken care of administratively and a systematization of workplaces in health services was done by authorized state organs.

7.1.3. The Phase of Transition to Self-management and Self-financing

This phase in the development of the health care system (1952-1960) was characterized by processes of decentralization, limited de-etatization, and the development of social management and self-financing in the health sector and health insurance.

Although to a certain extent it could be justified in the period until 1952, the condition of total etatization of health services quickly proved itself to be economically irrational. Thus, already at the beginning of 1952, important changes began to occur in the organization and financing of health services. At first, administrative relations continued to dominate the health service, although certain qualitative changes were occurring. These changes were in the following four basic directions:

1. Authority and financing were transferred from the federal and republic organs to the local communities with stress placed on decentralization to the level of the communes. While during the period from 1947 to 1951 local budgets contributed only 16.84% to total health-social expenditures, this share constantly rose between 1952 and 1960. By 1960 it amounted to 54.40%.

2. Social management was introduced into health

institutions which obtained an independent status. The system of budgetary financing was abandoned and in its place a system of self-financing based on payments for services was established. A particularly important element in this process was the granting of the formal right to health institutions to relatively autonomously set the prices of their services, to independently allocate revenues and to set personal incomes (with the agreement of communal bodies).

3. Differences among institutions based on their location in socio-political communities were abandoned.

Regardless of their size or character, financially independent and self-managing health institutions had the same financial and legal status, and all their relations with state organs were brought down to the level of the commune.

4. The entire organization of health insurance within the framework of social insurance was removed from the scope of state control and again obtained the character of an independent service with its own organs of social management. Financing of health services was transferred to independent funds with special sources of financial resources outside the budget.

In turn these developments have led to changes in the character of involvement and relationships of higher political-territorial units vis-a-vis the health services. The methods and sources for ensuring financial resources for the work and development of health institutions have radically changed. Responsibilities and competencies of communal authorities for the organization and coordination of measures in the area of health care have become much more complex.

With regard to authority in the health sector, the most important role was played by the commune which gained the right to found all health institutions from health stations, to out-patient clinics, to hospitals and health institutes. While responsibility for all basic matters related to health care was

transferred to the communes, after 1960 the district did retain the task of coordinating the work of the communes, giving initiative to intercommunal cooperation, and stimulating integration of manpower and material resources for the optimal functioning of health services on the territory of several communes. The functions of the republics and the federation were limited to normative regulation of the organization of health services, ensuring measures of common interest to the entire republic or federation,and providing for medical research activities and education and training of physicians. While the federation established general principles concerning the organization and financing of health care, republics were responsible for legal regulation within their territory and within the general guidelines set at the federal level.

7.1.4. The Phase of Total Autonomy of Health Institutions and Financing Based on the Principle of Income

Through legislation enacted in the early 1960s conditions were created for the total legal and financial autonomy of health institutions. Although the principle of self-financing had already been introduced into the health service in 1953, it in large measure could only be practically put into effect after 1960. Through laws passed in 1959 and 1960, the financial independence of health institutions was reinforced and the process of decentralization of health services advanced, thus strengthening the basis for development of self-management in the health service. The principle of independent financing was introduced into all health institutions and financing of these institutions approached that found in economic organizations. Special emphasis was given to the introduction of the category of income and its distribution. In this regard, the essential innovation was that the council of the health institution gained the right to independently establish the level of compensation for health services - prices of services (until then set by local authorities). Personal incomes of members of the work organization were ensured from the realized income of the health institution on the basis of its own statute on distribution of personal income. Moreover, each health institution formed its own funds identical to those in economic organizations

(the business fund, the reserve fund, the fund for common consumption).

This new social and financial position of health institutions reduced the jurisdiction of state organs mainly to supervision of the policy of resource utilization and to execution of certain administrative matters as mandated in specific regulations. All matters of a professional nature were transferred to health institutions and their various associations. The principle of self-financing and the practice of conducting business on the principle of income placed health institutions of all types in direct economic relationship to users of services: namely uninsured individuals, the health insurance funds, work organizations and socio-political communities.

The extension of health insurance coverage to all categories of the population including farmers and members of the free professions in 1960 was an important step in the direction of economic independence of the health services in relation to state authorities. Establishment of direct economic relations between health institutions and users of services was based on the reform of the health insurance communities. In place of the previous district social insurance institutes, communal institutes were founded which raised and distributed resources for the care of their insurees and which operated on the principles of self-financing and self-management. This was a necessary consequence of the policy orientation that communes satisfy needs in their territory based on material possibilities. Resources for health care of employed persons and their families were derived from a tax on wages within the framework of the communal social insurance institutes, whereas funds for care of farmers and their families came from contributions based on income and from fixed per capita payments within the scope of the communal farmers' insurance communities.

Each of the socialist republics is obliged to determine the level of mandatory health services and the manner of organizing health insurance communities (the principle of organization, size of the community and form of its association); to guarantee the solvency of these communities and the stability of their business

relationships with health institutions; and to develop forms of solidarity of insurees within a health insurance community and among communities.

Slaven Letica and Berislav Skupnjak

7.2. The Present Health Care System

The most recent phase in the development of the health care system in the SFR of Yugoslavia is characterized by efforts to integrate the health service in associated labor so that it will develop as an integral part of associated labor and in a functional relationship to it. The institutional structure for this integration are the so-called self-managing communities of interest. This phase in the development of the Yugoslav health care system began with the adoption of Constitutional amendments in 1972. The total concept and its legislative basis are contained in the Constitution of the SFR of Yugoslavia (1974) and the Associated Labour Act (1976).

Based on previous developments in the post-war period and in the context of these most recent legislative and constitutional reforms, the present health care administration and MPNHD in Yugoslavia consist of two parts which have quite specific functions and tasks in implementation of health development policy:

(1) "classic" (government) public health administration;
(2) self-managing public health "administration"

7.2.1. "Classic" (government) Public Health Administration

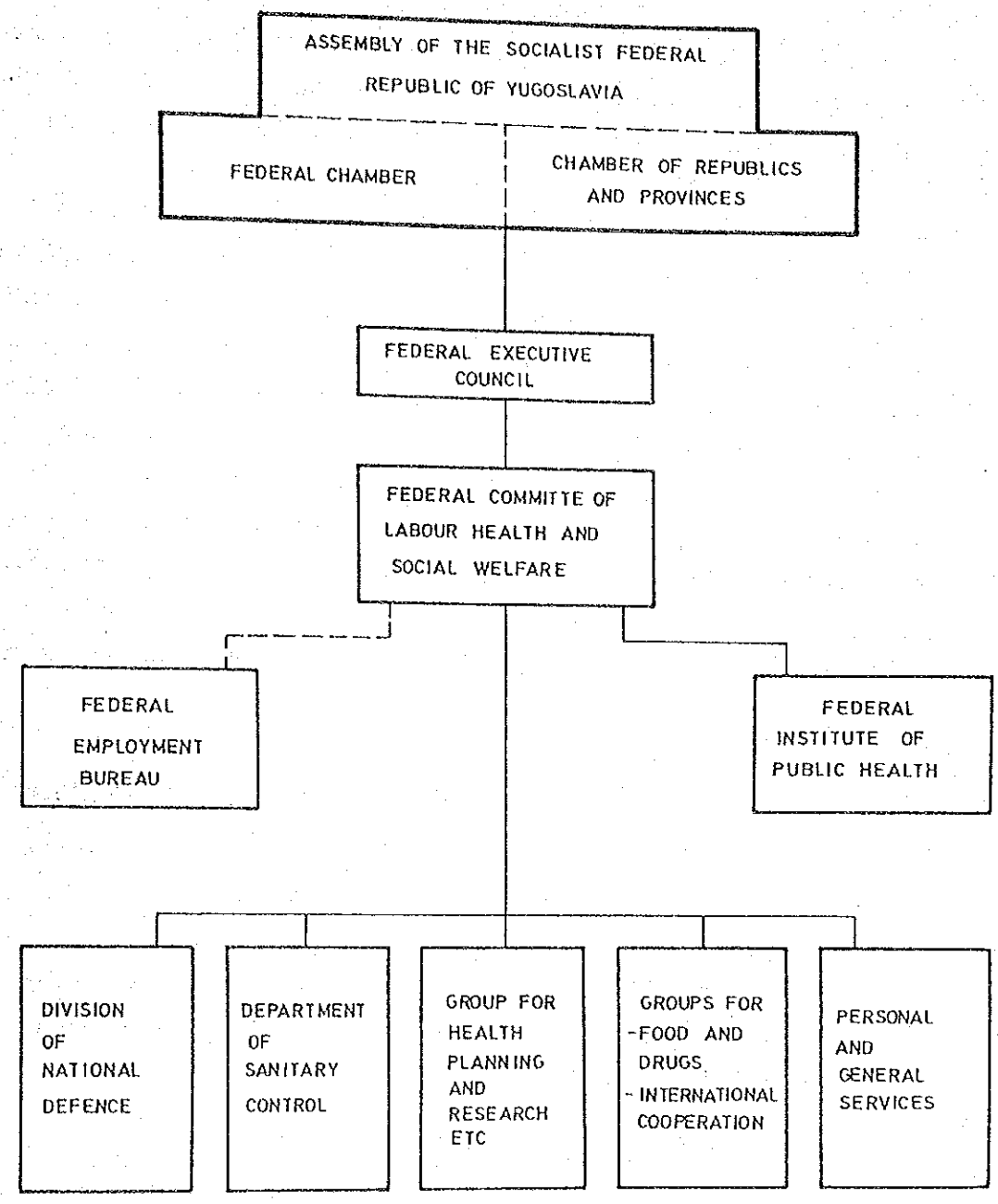
"Classic" (government) public health administration exists at three levels: (a) federal; (b) republic/province; (c) commune.

(a) Federal government public health administration

Due to the federal political system, functions of health administration at the federal level are highly restricted (see Figure 5)

Figure 5

FEDERAL HEALTH ADMINISTRATION



According to the Constitution, the duties of the Federation in relation to health are as follows: the protection of life and health by combating contagious diseases that endanger the population as a whole; marketing of medicines; conservation and improvement of the human environment of concern to the country as a whole and to the international community; regulation of the sale and transport of radioactive and other dangerous substances and transport of inflammable liquids and gases when this is the interest of the country as a whole; regulating the system of water management if it concerns two or more republics or autonomous provinces; and regulating the export and import of goods and services. These responsibilities are exercised by the Federal Committee for Labour, Health and Social Welfare of the Federal Executive Council. The Federal Institute of Public Health carries out specialized medical activities in the field of health, particularly those of collecting, processing and analysing statistical and other information. It studies the health status of the population, hygienic and epidemiological conditions, and problems in the protection of the human environment; follows the trends of contagious diseases and proposes measures for the protection of the population; and prepares the Yugoslav Pharmacopoeia and monitors drug consumption.

b) Republic (province) government health administration

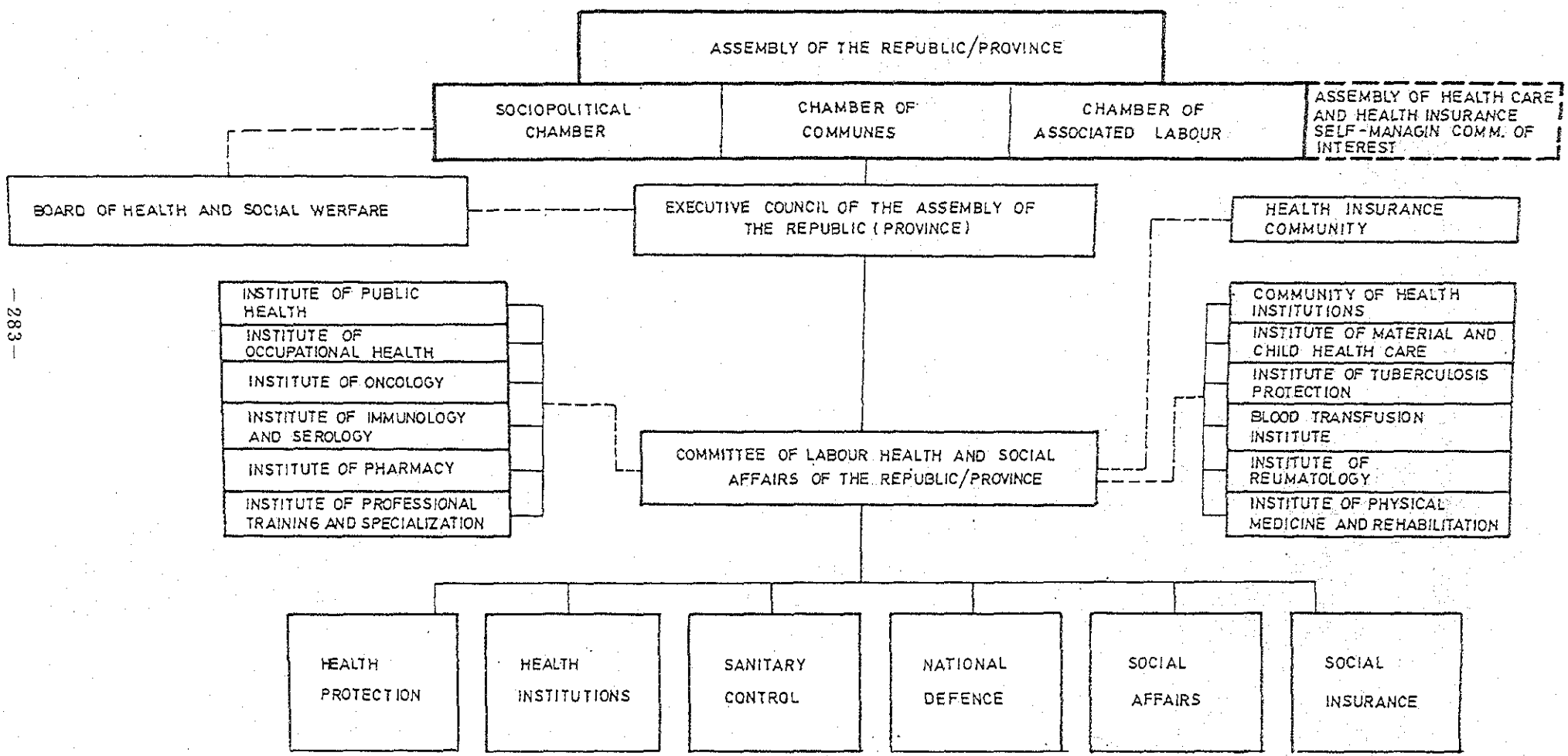
On the basis of their own constitutions, the republics and provinces determine more precisely the health rights of their citizens. In particular they regulate the principles, system and organization of health care and measures for the protection of the environment. Republic (province) government health administration has two major functions in the health development policy:

1) it makes laws on health insurance and health care, thus regulating approximately 80% of all rights to health care;
2) it assures that health development plans and policy are incorporated in plans and policy of economic and social development.

In addition, this administration has an important function in defining and carrying out professional supervision of work in health institutions. The structure of republic and provincial health administration is depicted in Figure 6

Figure 6

REPUBLIC AND PROVINCE HEALTH ADMINISTRATION

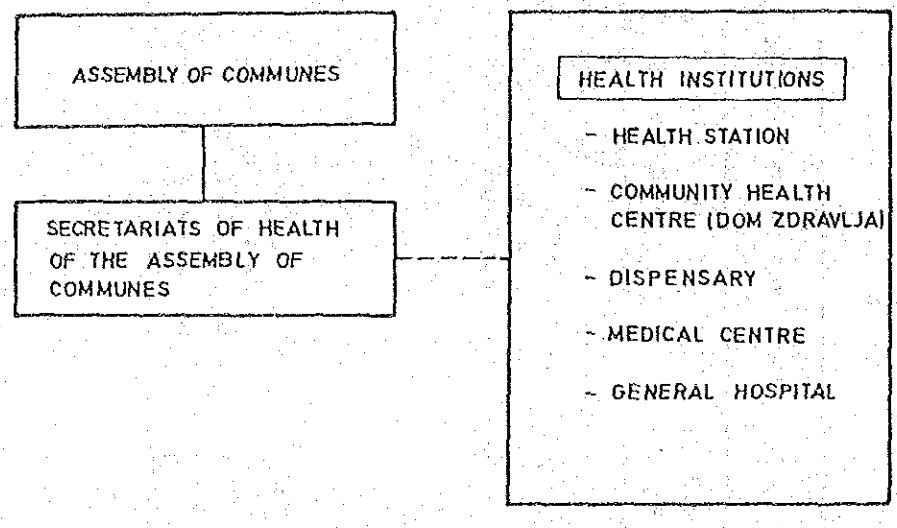


c) Commune government public health administration

At this level almost all functions in implementation of health policy are transferred from government health administration to self-managing public health administration. "Classic" commune administration has now only a few functions in establishing new health institutions, professional supervision of work in health institutions and incorporation of health policy into commune social policy (see Figure 7).

Figure 7

COMMUNE PUBLIC HEALTH ADMINISTRATION



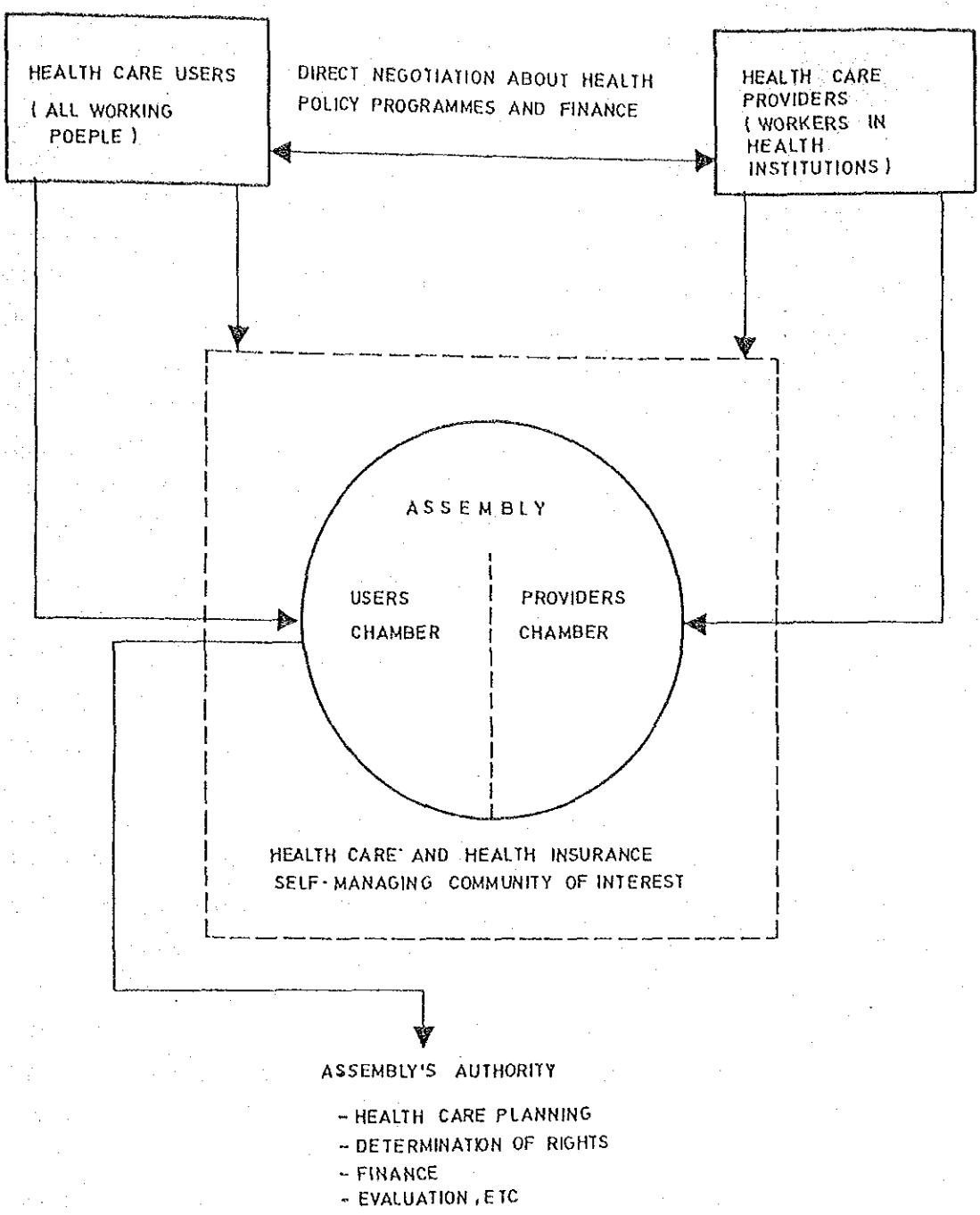
7.2.2. Self-managing Public Health "Administration": Self-managing Communities of Interest for Health Care and Health Insurance

The self-managing system of health policy stems from the idea that health care users (i.e. workers in work organizations) and health providers should make decisions in common concerning health development and health policy without the interference of administrative bodies. Health users and health providers create health policy in two ways:

- directly, through so called "direct relations" and
- indirectly, through their delegates in assemblies and other bodies of health care and health insurance self-managing communities of interest.

These direct and indirect relations between users and providers are illustrated in Figure 8

Figure 8



THE FOLLOWING SCHEMATIC DIAGRAM OUTLINES THE ADMINISTRATIVE STRUCTURE OF THE SELF-MANAGING COMMUNITY OF INTEREST.

Self-managing communities of interest for health and for other spheres (culture, education, science, etc.), were formed in 1975. Today they are in their second term of office which began in 1978 or 1979 (depending on the constituent republic/province concerned).

These communities replaced the previously existing health insurance funds, and they are designed to achieve the further socialization of health policy. The previous funds and communities were themselves mechanisms and organizational forms of the de-etatization and socialization of health policy. They were social bodies to which the earlier state competence was transferred. Their managing boards were made up of representatives of health workers, organs of socio-political communities, economic organizations and other associations, which made it possible to divest government organs of their functions in the sphere of health. However, this mechanism did not make it possible for those employed in the economy, social and other activities to exercise a substantial influence on the planning and financing of health services and to exercise control over integral health policy and the development of health services.

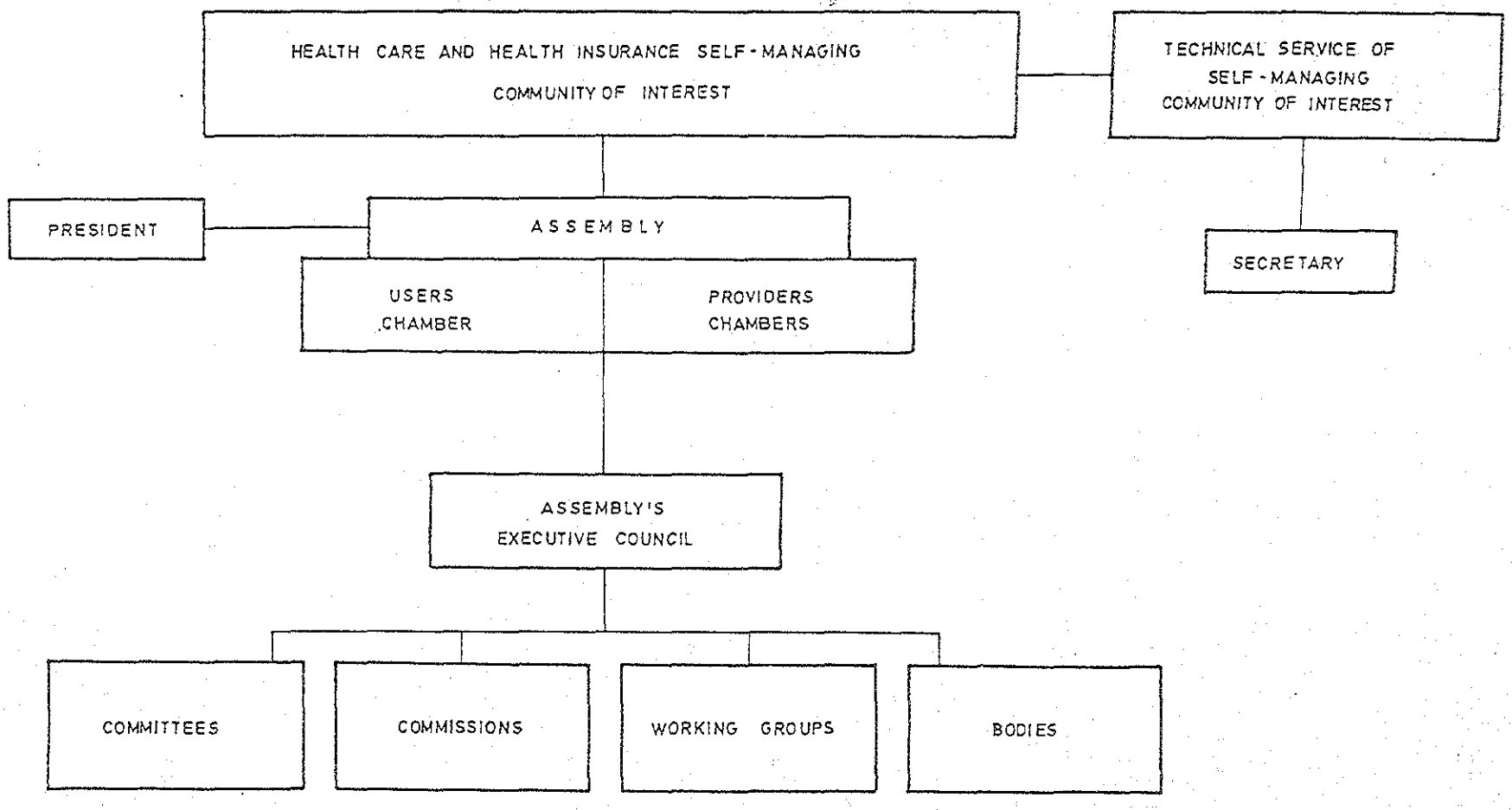
Thus, self-managing communities of interest for health care and health insurance were formed with a view to socializing health policy through the delegate system. (The delegate system is the means by which delegates are elected to legislative bodies at the communal, republic/provincial and federal levels and to health and other self-managing communities of interest). In order to achieve this, efforts had first to be made to find an appropriate organizational structure of self-managing communities of interest, and a suitable mechanism which would assure, on the delegate principle, that all employed persons and other actors could exercise an influence on health policy (see Figure 9). The assemblies of self-managing communities of interest for health have two chambers:

(1) a chamber of users - receivers of the results of health work, and

(2) a chamber of service providers - health workers.

Both chambers are constituted on the delegate principle: the chamber of service users is made up of delegates of economic and

Figure 9


HEALTH CARE AND HEALTH INSURANCE SELF-MANAGING COMMUNITY OF INTEREST
TECHNICAL SERVICE OF SELF-MANAGING COMMUNITY OF INTEREST
PRESIDENT
ASSEMBLY
SECRETARY
USERS CHAMBER
PROVIDERS CHAMBERS
ASSEMBLY'S EXECUTIVE COUNCIL
COMMITTEES
COMMISSIONS
WORKING GROUPS
BODIES

socio-economic development, health care potential, cultural and historical specificities, etc.). There may be variations between the constituent republics and provinces in the internal organization and structure of self-managing communities of interest.

Self-managing communities of interest for health work are founded as a democratic mechanism and organizational form which make it possible through negotiation and agreement to co-ordinate the needs of those employed in the economy and social and public services and the interests of those employed in health institutions, draw up plans and programmes and determine financial resources for the realization of such plans and programmes (resources to be allocated as a percentage of the income realized by enterprises and social and public services). In other words, self-management communities of interest for health work should make it possible that research plans and programmes are drawn up so as to contribute to the promotion and development of technology and production, the development of society in general, and the satisfaction of the development needs of health system itself. All this is accomplished through the conclusion of self-management agreements and social compacts determining the amount of financial resources needed for the realization of research plans and programmes. As a result, financing through budgetary allocations, i.e. through the appropriation of part of surplus-labour generated by direct producers in material production, should be replaced by agreed-upon financing of health development programmes adjusted to social needs (for example, the needs of long-term social development). This, in turn, means that since all those employed decide on the necessary financial allocations for health, whose purpose is to meet their special but also collective needs and general social needs, there will be no more expropriation of surplus-labour, and surplus-labour will become socially-useful labour.

In order to realize the principle whereby all employed persons should take part in the formulation and implementation of health policy, and in order to create conditions for meeting specific needs in a particular sphere, some constituent republics/provinces have, along with self-managing communities

other organization, and the chamber of service providers of delegates elected in health institutions. Members of both chambers are bound to act in accordance with instructions received from their delegations, i.e. from those employed persons whom they represent and to whom they are responsible for their work. All key decisions must be previously discussed in the delegate base so that all delegates - taking, of course, into account common social interest and needs - can in self-management communities of interest represent the interests of, and present proposals of, those working environments in which they were elected. The responsibilities of these assemblies include: health care planning, determination of rights, financing, evaluation, etc.

The chambers of self-management communities of interest for health work made decisions independently and together. If their decisions differ - either with respects to plans or programmes of work, or with respect to financial resources - the chambers strive to reconcile their different views and to reach agreed decisions. If the chambers fail to reconcile their views and reach a decision, the matter is decided by the assembly of the socio-political (territorial) community at the level of which the self-management community of interest involved operates. In addition, the assemblies of self-management communities of interest for health work have the status of a fourth chamber, with equal rights, of the assembly of the socio-political (territorial) community concerned, when matters bearing on health development are discussed and decided upon.

The unity of the Yugoslav socio-political system manifests itself also in the fact that the foundations of the institutional system of self-management communities of interest for health work are identical for the country as a whole. However, because of the sovereignty of the federal units in the formulation and pursuance of health policy, the constituent republics and provinces provide the territorial-political framework for the formation of self-management communities of interest for health work. Due to their specific conditions (the level of

for health work, by legislation created possibilities for the formation of units of self-managing communities of interest. Self-managing communities of interest have the status of legal entities (they draw up plans and programmes, have their own autonomous sources of finance, and decide on the distribution of their financial resources, etc.). In some cases, especially because they should by means of programmes make it possible to realize the strategic lines of social development and create a basis for a long-term and stable development of health they cannot reflect special interests which, built into special programmes, could provide a basis for the pooling of additional and thereby larger sources for health. Because of this, in some constituent republics/provinces units of self-managing communities of interest or basic self-managing communities of interest have been or are being formed for particular territories (commune or regions), economic branches (sectors) and/or programmes. These units and basic communities do not, however, have the status of legal entities and, as their name indicates, are only part of a bigger whole - a self-managing community of interest which is based in a commune.

Republican/provincial self-managing communities of interest for health work were formed either by law (Bosnia/Hercegovina, Montenegro, Kosovo, Serbia proper and Vojvodina) or on the basis of an agreement on their establishment concluded by those employed in the republic/province (Macedonia, Slovenia), or through the association of functional self-managing communities of interest (Croatia).

Republican/provincial and functional communities of interest have two chambers. Delegates to the chamber of service users and the chamber of service providers were elected according to a formula based on the number of employed. In all communities the chambers of service users were numerically stronger than the chambers of service providers. In the constituent republics and provinces in which basic communities had been founded, delegates to the chamber of service users of the republican community were elected at the commune level.

From this summary survey it can be seen that the constituent republics and provinces differ in their approach to

the system of self-managing communities of interest. This adds importance to the role played by the Council of the Association of Communities of Interest for Health in Yugoslavia, in which experiences are exchanged and ideas shaped regarding the further elaboration of the system, due regard being paid to the specific features of each individual region.

Berislav Skupnjak

7.3. The Health Development Planning System

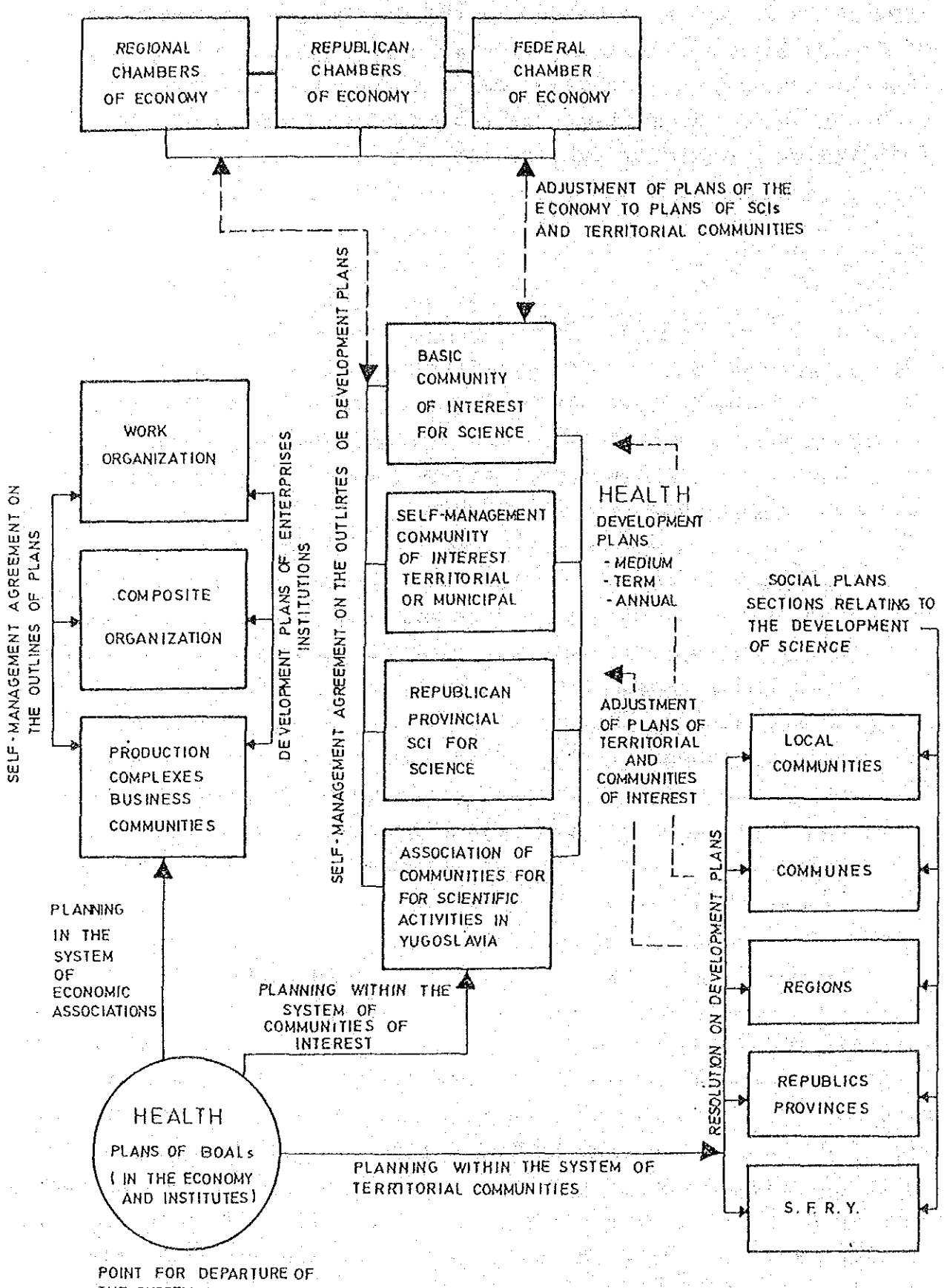
Planning is one of the fundamental constituent elements of the economic and political system of self-management (along with the market, self-management, social ownership, the right to work with social resources, income distribution according to labour input, etc.).

Planning is at the same time the basic regulatory mechanism of the process of a free exchange of labour and the development of health care. The point of departure for the overall system and process of health planning are the plans of basic units in the economy and social services (basic organizations of associated labour in the economy and social activities). Through a complex system of self-management agreements on the outlines of plans of economic associations, territorial units and self-managing communities of interest, the level at which health interests objectives of health are to be realized is determined.

The complex system of planning health activities is shown in Figure 10. The legal and political objectives of the system and practice of planning health activities provide for the adjustment of development plans (long-term, medium-term and annual) to the needs of the economy, polity and society. The achievement of this aim of development of the system and practice of health planning in Yugoslavia is confronted with the problem of a generally poorly developed practice of socio-cultural, economic and technological development. According to an investigation conducted in the Socialist Republic of Croatia (one of the most developed constituent

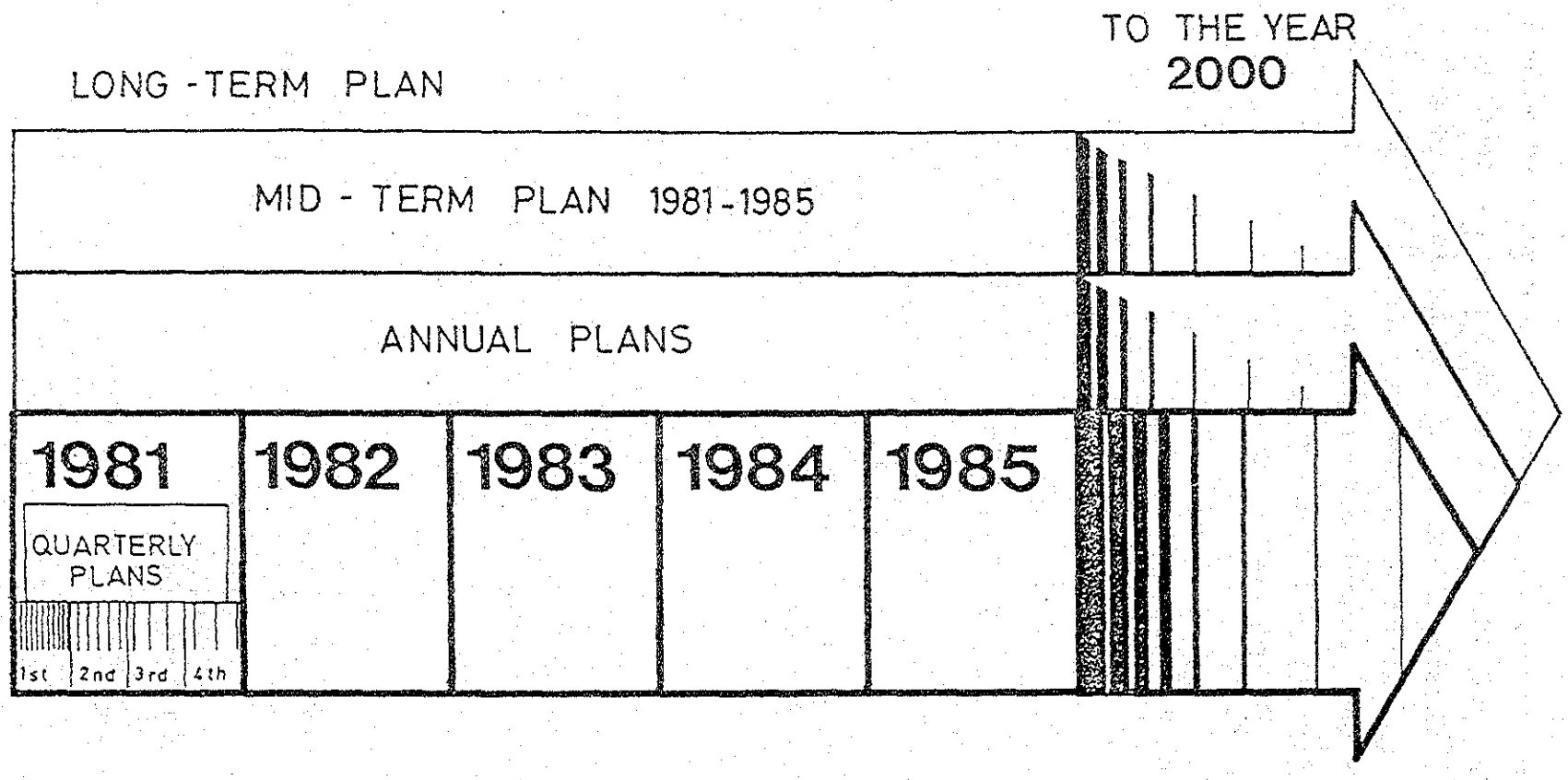
Figure 10

SYSTEM OF HEALTH PLANNING IN YUGOSLAVIA



republics), in 1977 only 6 per cent of enterprises had long-term and 49.8 per cent medium-term development plans. However, the first experience in the medium-term planning of development at the level of self-managing communities of interest, communes, regions, constituent republics/provinces and the Federation are indicative of positive trends.

THE TIME FRAME OF PLANNING



Slaven Letica

8. HEALTH CARE EXPENDITURES AND FINANCING OF SERVICES

8.1. Health Care Expenditures

In Yugoslavia, statistics on health care expenditures are actually expressed in terms of three separate statistics: (1) health institution expenditures, excluding pharmacies, (2) expenditures of pharmacies and (3) health care expenditures for services provided outside health institutions (treatment of Yugoslav citizens abroad, travelling expenses which patients collect from insurance associations, expenses for artificial limbs, devices and aids).

In 1981, current health care expenditures (only expenditures under (1) and (2)) totalled 4.7 percent of GNP, or 115 US dollars per capita. The share of health care expenditure in GNP has constantly risen from 2.0 percent in the 1950s to 5.74 percent in 1978, but after that it began to drop. Health care expenditures have come under the control of an administrative cost-containment policy exercised by self-managing and administrative bodies at the republican level. Current health care expenditures for health institutions for the period from 1975-1981 are presented in Table.

TABLE 1 Current Expenditures for Health Institutions as Percent of GNP and in US Dollars, 1975-1981

Year	Current health care expenditure as percentage of GNP	Health care expenditure in constant 1980 U.S. dollars[a]
1975	5.69	105
1976	5.62	107
1977	5.59	114
1978	5.74	124
1979	5.53	127
1980	5.13	119
1981	4.71	110

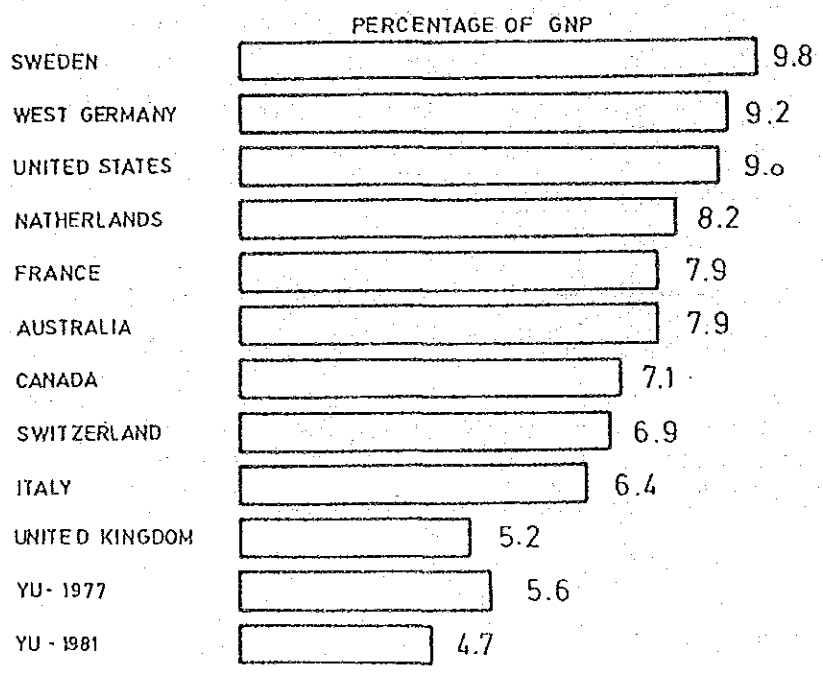
[a] Original data in constant 1972 YU dinars; exchange rate assumed 7.3395.

Source: Statistical Yearbook of Yugoslavia, Federal Statistical Office, Belgrade, various years.

Although it is problematic to make comparisons of health care expenditures at the international level because of the different purchasing value of national currencies and exchange rates we shall present some figures for illustrative purposes (see Graph 9 and 10.) As can be seen, health expenditures in Yugoslavia as a share of GNP and in absolute amount are lower than in many countries of Western Europe and North America.

GRAPH 9

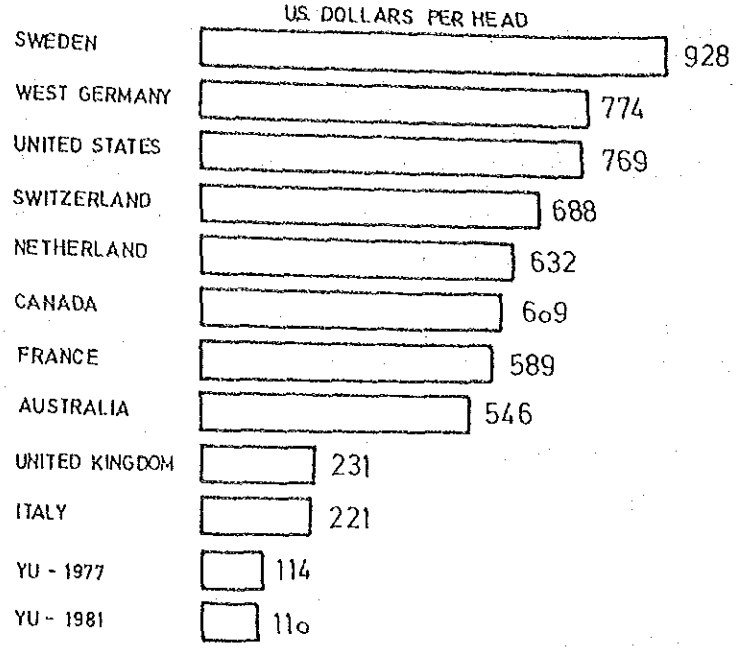
TOTAL HEALTH-CARE EXPENDITURES (PUBLIC AND PRIVATE) AS A PROPORTION OF GNP IN 1977



Source: Maxwell, 1981, p. 38.

GRAPH 10

TOTAL HEALTH-CARE EXPENDITURES (PUBLIC AND PRIVATE, CAPITAL AND CURRENT) IN 1977



Source: Maxwell, 1981. p, 35

8.2. Financing of Health Services

8.2.1. Current Health Care Expenditure

In Yugoslavia, health care services are financed from various sources. Health institutions are largely self-financing, with funds divided among the following sources:

- about 80 percent by means of a free exchange of labour[1] through self-managing communities of interest for health care and health care and health insurance (health insurance associations);

[1] This method of a free exchange of labour is described in section 8.2.3.

- 10-15 percent on the basis of self-management contracts with work organizations (for provision of specific health services for workers in work organizations);

- about 3.0 percent are direct patient payments (for examinations, cost-sharing, etc.);

- about 1.0 percent are budgetary-government payments for health services provided for specific groups of patients (war veterans, the indigent, etc.); and

- about 2.0 percent are from other sources of finance.

Actual data on sources of finance for health institutions in 1981 are shown in Table 2.

TABLE 2: Sources of Finance for Current Health Care Expenditures in 1981

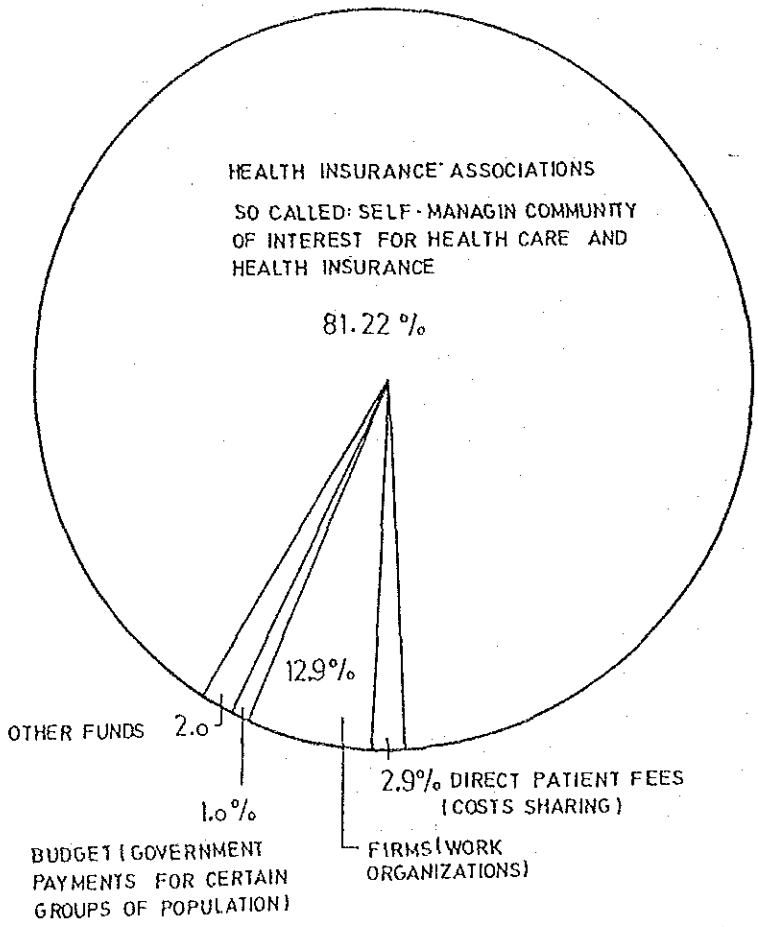
Sources of finance	YU dinars (in 000s)	Percentage
Self-managing communities of interest (health insurance associations)	71,770,3	81.2
Work organizations	11,381,4	12.9
Direct patient fees	2,602,3	2.9
Government payments (budget)	841.5	1.0
Other sources	1,774.2	2.0
Total	88,370.5	100

Source: Statistical Yearbook of Yugoslavia, Federal Statistical Office, Belgrade, 1983, p. 354.

When compared with other countries, it is evident that public sources of finance predominate and direct user payments are minimal in Yugoslavia (see Graph 11, 12 and 13).

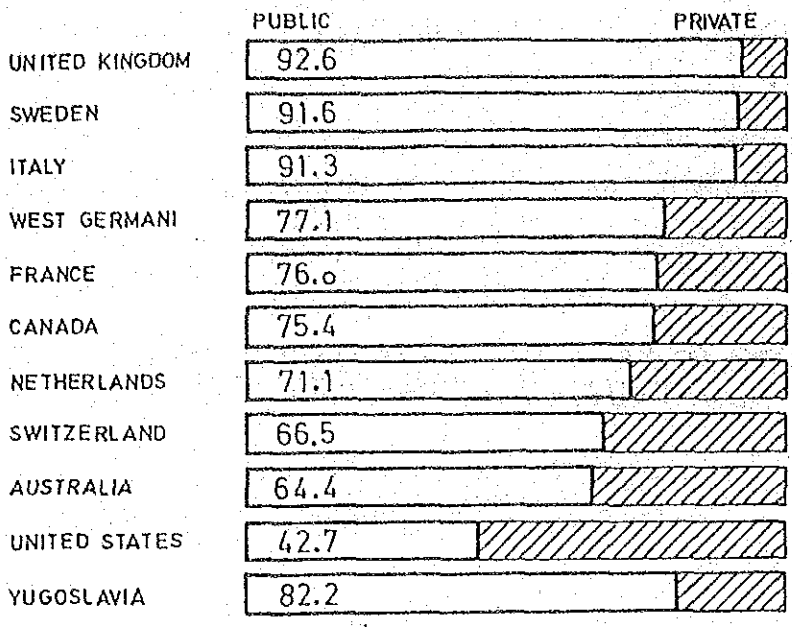
GRAPH 11

SOURCES OF FINANCE FOR CURRENT HEALTH EXPENDITURE IN YUGOSLAVIA IN 1981



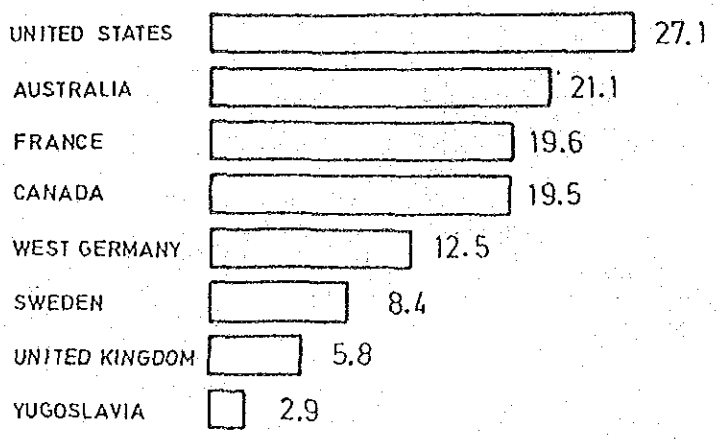
GRAPH 12

SOURCES OF FINANCE FOR HEALTH-CARE EXPENDITURES



GRAPH 13

DIRECT PAYMENT BY CONSUMERS IN 1975 EXCLUDING VOLUNTARY INSURANCE (PERCENTAGE OF TOTAL HEALTH-CARE EXPENDITURES)



8.2.2. Capital Health Care Expenditures

Capital health care expenditures make up about 10-15 percent of total health care expenditures. Table 3 summarizes capital health care expenditures for 1981. Although health institutions formally participate in capital health care expenditure with 64.1 percent, it has to be pointed out that a large amount of finances actually comes directly from health care users. In Yugoslavia, the vast majority of health institutions have been constructed through referenda organized for residents of one or several communes to make a decision whether this or that kind of health institution is needed and how much money they are ready to invest in its construction. If more than 50 percent of voters approve the construction of a new health institution then for a certain period a certain percentage of their personal income is paid intc the account of this health instituion , which is also consideral to be an investor. Referenda as the practice of making decisions concerning construction and financing of health institutions have many advantages but also some drawbacks. On the one hand, they provide for democratization of the processes of health-related political decision-making. On the other hand there is the risk that health institutions will be constructed which might be needed locally but are quite unnecessary for the rest of the country.

TABLE 3: Sources of Finance for Capital Health Expenditures in 1981

Sources of finance	Millions of dinars 1981 Investments in buildings, equipment, etc.	Percentage
Funds of health institutions	6,277	64.1
Bank and government (federal, republic, local) credits	2,484	25.4
Federal funds and funds of other government bodies with no obligation of repayment	1,033	10.5
Total	9,795	100

Source: Statistical Yearbook of Yugoslavia, Federal Stastical Office, Belgrade, 1983 , p. 187.

8.2.3. Free Exchange of Labour as a New Approach (Method) to Health Services Financing

Instead of the classic methods of the market and/or budgetary financing of health care services, for the last ten years a new approach or method of financing health services has been employed in Yugoslavia. It is called a free exchange of labour. Here we shall give a brief explanation of this new method's objectives and procedures.

The concept of a free exchange of labour is a synthetic legal-political and economic term which denotes a plan-based (non-market and non-state) model of economic relations between educational, scientific, health, cultural and other institutions in the sphere of social activities, on the one hand, and institutions (enterprises and other organizations) which finance and make use of their results of labour, on the other hand, This is an original term denoting relationships in the conclusion of agreements on projects to be carried out and evaluated, relationships which are not of a supply-demand, nor for that matter, of a budgetary character.

The constitutional concept of a free exchange of labour has two major political-legal and economic principles:
- The principle of the social character of income, according to which income is not only the result of labour of workers in manufacturing plants but also of workers in social institutions (employed in social and public services); therefore it is necessary to formulate basic criteria and scales in order to define how much workers employed in social institutions contribute to the value-added generated in material production.

- The principle according to which workers in material production shall directly control the overall income generated by them.

Since the 1974 Constitution was promulgated, the concept of the free exchange of labour has been constantly extended through the following major legal acts:

1. The Associated Labour Act (1976)
2. The Resolution on the Free Exchange of Labour (1979)
3. Republican health laws.

This iterative legal-political definition of the foundations of the new system has expanded the two constitutionally-defined basic principles and criteria to include a whole array of economic and scientific-cognitive criteria.

Here we present the set of criteria which should be met by the new system of health care financing in Yugoslavia on the basis of a free exchange of labour:

1. The principle of equal socioeconomic status of health workers and other workers in associated labour (workers employed in other activities, first of all business and manufacturing);

2. Long-term and stable relations;

3. Equal rights of service providers and users in decision-making processess;

4. Formulation of working and development programmes covered by medium-term plans;

5. Formulation of medium-terms plans referring to health requirements and other relevant interests and of basic criteria and scales for income earning (and evaluation of work of health institutions);

6. Medium-term plans on the kind, scope and quality of health services;

7. Medium-term plans on resources for expansion of the material base of labour in health care (facilities, equipment);

8. Definition of health services quality indicators;

9. Definition of indicators of the contribution made by health workers to the growth in value added in material production;

10. Definition of indicators of the contribution made by health workers to the growth of productivity in social activities and overall development of society.

The procedural-self-management process for establishing relatinns in the free exchange of labour should chronologically evolve as follwos:

1. Health service providers and users make an agreement on the basic criteria and scales for the free exchange of labour, which regulates both in principle and in detail all economic relations in the exchange of labour;

2. Health service users specify their planned (medium-term and annual) health and development needs;

3. On the basis of stated users' needs, health institutions propose the conclusion of an agreement on the outlines of plans regulating specific obligations for a planned period.

8.3. Composition of Health Care Expenditures

8.3.1. Composition by Resources

Yugoslav health institutions, like others all over the world, spend the lion's share of their finances on personal incomes (salaries (see Graph 5).

The composition of health care expenditure in resource terms in Yugoslavia is somewhat different from the approximate composite picture given by Maxwell[2] for ten developed Western countries (see Graphs 14,15,16 and 17)

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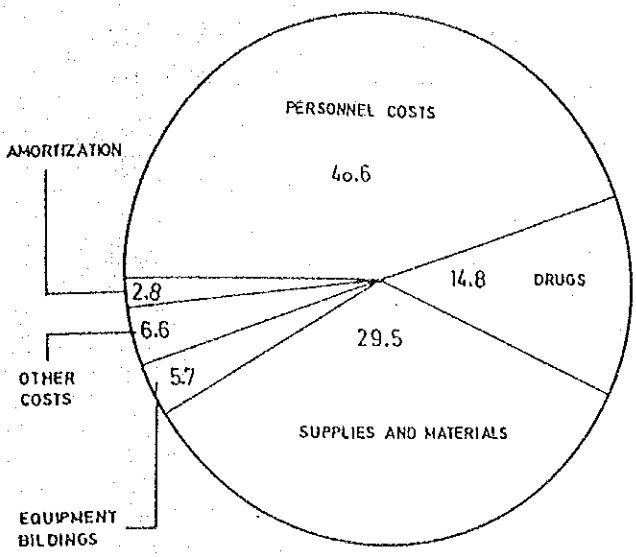
[2] Maxwell, 1981, p.70.

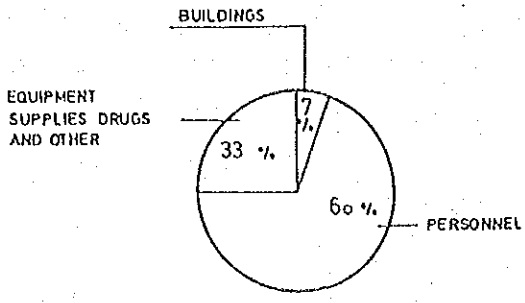
GRAPH 14

COMPOSITION OF HEALTH-CARE CURRENT EXPENDITURES IN RESOURCE TEAMS IN 1984



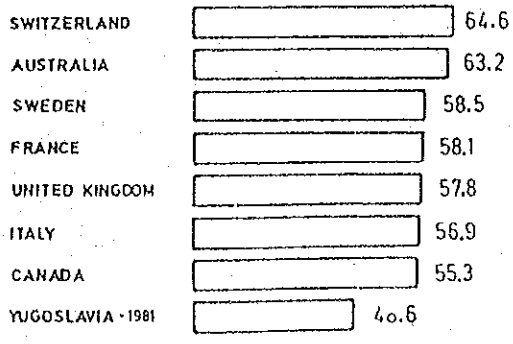
GRAPH 15

COMPOSITION OF HEALTH-CARE EXPENDITURES IN RESOURCE TERMS (APPROXIMATE COMPOSITE PICTURE)



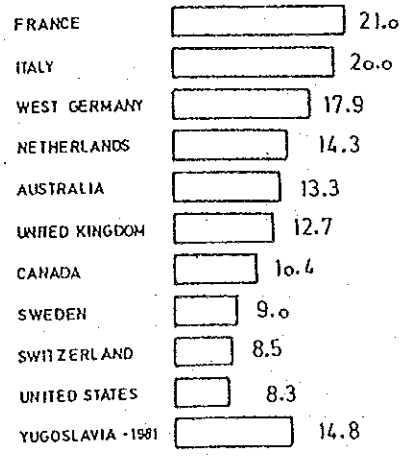
GRAPH 16

PERCENTAGE OF TOTAL HEALTH-CARE EXPENDITURES (INCLUDING CAPITAL) SPENT ON MANPOWER IN 1975



GRAPH 17

EXPENDITURE ON PHARMACEUTICALS PRESCRIBED AND OTC AS A PERCENTAGE OF TOTAL HEALTH-CARE EXPENDITURES IN 1975

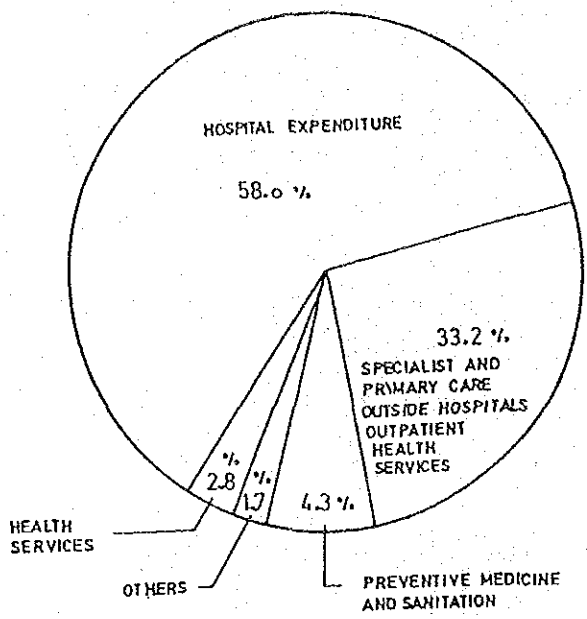


8.3.2. Composition by Services Provided

The structure of current health care expenditure by types of health services is shown in Graph 18 and 19). As can be seen, hospital services account for over half of expenditures, while outpatient primary and secondary care services represent about one third of all expenditures.

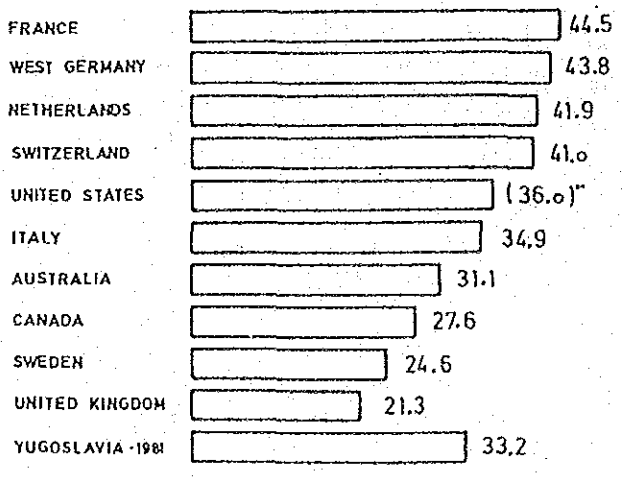
GRAPH 18

COMPOSITION OF CURRENT HEALTH-CARE EXPENDITURE BY TIPES OF HEALTH SERVICES IN YUGOSLAVIA IN 1981



GRAPH 19

EXPENDITURE ON SPECIALIST AND PRIMARY CARE OUTSIDE HOSPITALS AS A PERCENTAGE OF TOTAL HEALTH-CARE EXPENDITURE (1975)



Donna Parmelee

9. RELATIONSHIPS BETWEEN HEALTH PRACTITIONERS AND PATIENTS[1]

In every society, the relationships between health practitioners and patients are influenced by both macro-and micro-social factors. On the one hand, macrosocial factors refer to aspects of the wider social context which have been discussed in earlier chapters with specific reference to Yugoslavia (e.g. the legal, political and economic institutions which characterize self-managing socialism; health service organization). On the other hand, an analysis of microsocial factors which influence medical practice would take into account the "social positions" occupied by both patients and practitioners. That is, one would want to consider the influence of such social positions as age, sex, race, occupation, class, geographic location, etc. of both patient and practitioner on the medical encounter. Furthermore, as illustrated in Figure 1, such social positions may influence earlier and later stages in the illness process (e.g., onset of illness, outcome), regardless of whether an ill person actually seeks professional medical care.

Against the backdrop of the macrosocial context discussed in the previous chapters, in this chapter we would like to focus on the microsocial processes in the relationships between health practitioners and patients in Yugoslavia. Unfortunately, these microsocial processes have not yet been subject to extensive sociological study. However, it is possible to make some general observations on the influence of relevant social positions on accessibility of health care and on the patient-practitioner relationship.

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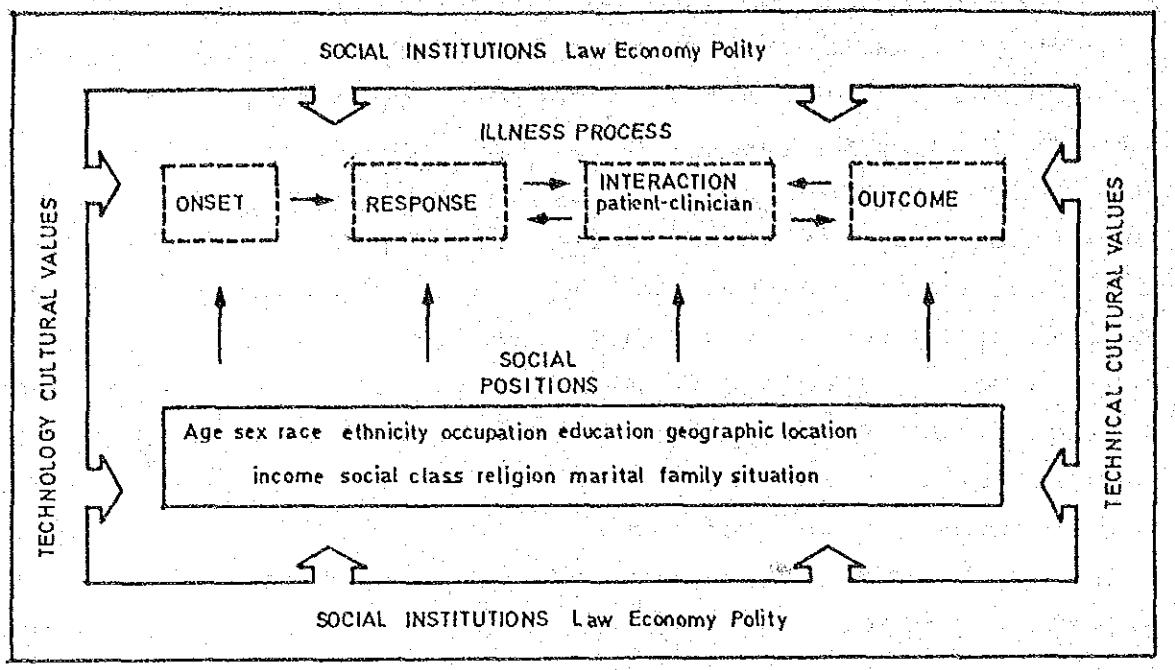
1 An earlier version of this chapter appeared in D.E.Parmelee G. Henderson, and M.S. Cohen, "Medicine under socialism: Some observations on Yugoslavia and China". Social Science and Medicine, 16, 1982, pp 1389-92.

FIGURE 1

A SOCIAL MODEL OF THE ILLNESS PROCESS



Source: Reiker, P.P. and Begun, J."Translating social science concepts into medical education a model and a curriculum".
Social Science and Medicine, 14a, 1980
p.p. 607-12.

9.1. Gaining Access to Care

For the Yugoslav who seeks professional medical care, the usual point of entry is the primary care physician in a local health centre ("home of health") or in a school or workplace clinic. For more specialized consultations and treatment on an outpatient basis, the general practitioner or other primary care physician makes referrals to a polyclinic attached to a general hospital and staffed by a wide range of specialists and subspecialists. The patient normally returns to the primary care physician for prescriptions or hospital referral.

As discussed above, the 1974 Yugoslav Constitution prescribes that "everyone shall be entitled to health care" (Article 186). However, in Yugoslavia (as in all other societies), this goal remains somewhat elusive. Although the country's commitment to mandatory health insurance and to increasing the supply and improving the distribution of health personnel and facilities has made health care more accessible to the population, there are still financial and organizational barriers to obtaining care, in general, and higher quality care, in particular. Thus, despite significant improvements in health status and health care delivery in the post-war period, there continues to be differential access to care depending on the specific "location" (social position) of the sick person in Yugoslav society.

In this regard, decentralization of health administration and financing has had direct consequences for the problem of accessibility. While it can permit a closer fit between health service delivery and local needs and greater participation of users and providers in health care decision-making, there have been tradeoffs in the form of persisting inequalities given the country's uneven economic development (see Chapters 2 and 3). Despite redistribution of a portion of locally-derived health monies via republic and provincial solidarity funds, residents in wealthier and usually urban areas have easier access to higher quality care than do their counterparts in the poorer, mostly

rural areas. Under such a decentralized arrangement, wealthier communes can generate a larger pool of health funds from which to finance more comprehensive care and more modern and better equipped and staffed facilities.

Accessibility of care does not only depend on whether one lives in a more or less prosperous commune. Another factor is employment status. With industrialization as one of socialist Yugoslavia's key development objectives, greater priority has been given to providing mandatory health insurance coverage as well as special facilities (industrial outpatient clinics) for workers in the socialized sector. It was only after the late 1950s that health insurance was extended to farmers (who have remained largely in the private sector) and to other privately employed (craft workers, professionals, private restaurant and hotel owners, etc.). Even then , benefits provided without payment at the point of delivery[2] have usually been more comprehensive for those covered under workers's insurance with corresponding implications for easier access to care. It is significant to note, however, that trends towards equalization of benefits for workers and farmers during the 1970s are beginning to erase some of the differences in accessibility to care related solely to employment status.

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2 At least since the early 1960s, many communal insurance associations (self-managing communities of interest after the 1970s) have introduced modest "out of pocket" charges in order to rationalize utilization and to address problems of deficits in health insuracne funds. Such "paritcipation" (participacija) fees apply to prescription drugs and to various other health services (e.g. specialist examinations, house calls, abortions for nonmedical reasons, etc.). To date, there is no evidence that these charges represent a significant financial barrier to accessibility of care. However, in the context of the current economic crisis, it would be useful to study whether some social categories are differentially and adversely affected by even modest direct payments.

Finally, ease of access to health care in Yugoslavia may be limited by what is commonly referred to as "bureaucracy". As in all societies with a national health insurance program, there are certain formal procedures governing where and how a sick person obtains care. To illustrate, although a sick person in Yugoslavia is not necessarily assigned to a specific general practitioner, he/she is still required to have a referral ticket from the GP to obtain specialist care. Or, to keep health funds within the commune, insurance associations have made it more difficult for their beneficiaries to seek care outside the local service area (e.g. by requiring signatures from three physicians rather than one for referral outside the commune with full reimbursement). However, as elsewhere, various informal means are sometimes used to bypass such bureaucratic barriers and therefore enhance the accessibility of care. For example, it is not that uncommon for people with "connections" to obtain care wherever and whenever they choose. Similarly, although illegal and despite many attempts to discourage the practice, bribes in the form of money or gifts may also give certain Yugoslavs an advantage over others in getting care.

9.2. The Patient-Practitioner Relationship

In this section, we shal
patient-practitioner relationship in the Yugoslav setting. In contrast to other socialist and capitalist societies, Yugoslavia has not attempted to train physician-substitutes or extenders (e.g., barefoot doctors, feldshers, physician assistants, nurse practitioners). Thus, the most important practitioner or clinician to consider is the physician. While decentralization and self-management have to some extent democratized decision-making between users and providers of services concerning health policy and planning issues, the relationship between patient and physician is still largely hierarchical. Patients continue to defer to the "professional mystique" and expertise of physicians

who have retained considerable prestige in Yugoslav society, notwithstanding low personal incomes relative to physicians in many other countries or occasional campaigns to equalize their status with other workers. Furthermore, disproportionate recruitment into medical school of children of experts, managers and administrators only serves to reinforce this pattern.

However, this is not to say that physicians are in complete control in face-to-face interactions with patients. For one thing, the organization and financing of health care place certain limits on what is possible. For example, to control costs, some communal insurance associations have attempted to restrict the number of drugs which are covered by insurance funds, a practice which can have definite implications for physicians' prescribing habits. Patients as well are not entirely without bargaining power in the patient-practitioner encounter. Thus, with a crowded waiting room of patients, it may be the easiest course of action for the physician to give in to patient demands for sick leave certification or specialist exams. In addition, the use of bribes and connections also tends to shape the physicians' decisions apart from purely medical criteria.

Finally, we would make one further comment on the patient-practitioner relationship in Yugoslavia. In our discussion thus far, we have interpreted the giving of money of gifts as "bribes", as something given by a patient to persuade or induce the physician to do something the patient desires or simply as a means to get around the "system" more easily. However, based on our observations in Yugoslavia, they can also serve the function of a gratuity; that is, something given without claim or demand on the part of the patient. Thus, despite the fact that their care was covered by health insurance, it was not uncommon for patients to give something to physicians or other health workers out of gratitude for services provided. Whether this reflects some sort of underlying principle of reciprocity in the patient-practitioner relationship or merely another way to insure against future health needs is something which requires further study.

MLADEN MITAK

10. SPECIAL SERVICES AND PROGRAMMES IN PRIMARY HEALTH CARE[1]

10.1. Basic Sanitation and Environmental Pollution Control

The main tasks of the public health and epidemiological service provided by institutes of public health, medical centres and primary care centres are to take measures for the prevention and control of communicable disease and ensuring the safety of the environment.

In 1978 there were 444 hygiene-epidemiology units, 22 independent institutions and 43 institutes of public health in medical centres and other institutions, employing 318 specialists in preventive, medicine, 157 general practitioners and trainees, 116 chemists, 75 sanitary engineers, 522 medical technicians and 1346 other health workers.

10.2. Communicable Disease Prevention and Control

Epidemiological and other health measures for the prevention and control of communicable diseases are administered by primary care centres and institutes of public health.

Tuberculosis is controlled by specialized units of primary care centres (antituberculosis dispensaries) and by institutes for chronic pulmonary diseases and tuberculosis, which are engaged in prevention, early detection and outpatient treatment.

Our approach in the fight against tuberculosis (which is in line with World Health Organization recommendations) is not based on specialized services and sporadic large-scale actions only. This so-called "vertical" approach has been replaced by a "horizontal" one, in which tuberculosis prevention is integrated into the general health service. Thus, all health workers, and especially general practitioners

[1] Data in Tables 1-12 are from: Statistical Yearbook of Yugoslavia, Federal Statistical Office, Belgrade, various years.

TABLE 1 :
Tuberculosis services

	1962	1972	1980	1981
Dispensaries (organizational units)	347	438	475	481
Health workers				
Specialists	216	368	388	390
General practitioners	52	52	75	78
Workers with secondary and high school education	645	1 197	1 422	1 446
Workers with elementary school education	316	184	89	76
Consultations (in 000)	849	3 374	3 383	3 355
Serial examinations (in 000)	256	3 227	3 084	2 770
Patients with active tuberculosis (31.XII)	200 383	98 484	56 398	51 274
Newly discovered active cases of tuberculosis	39 544	23 244	16 645	16 717

In 1981 there were 481 institutions for the treatment of tuberculosis, employing 390 specialists, 78 general practitioners and trainees and 390 nurses and 1522 other medical personnel.

The number of consultations was higher than three million , and there were more than 2,700,000 serial examinations. In 1981 active tuberculosis was registered in 51,274 patients, with 16,717 cases discovered that year.

10.3.

skin and venereal diseases

Skin and veneral diseases are controlled by specialized units of primary health care centres, medical centres and hospitals (skin and veneral dispensaries) which are engaged in the early detection, prevention, outpatient treatment and sometimes in the social therapy of the sick. There the first contact between the patient and the physician is established. In addition, diseased persons may be also sent to special hospitals or for rehabilitation.

TABLE 2:
Services for skin and venereal disesases

	1971	1981	1982
Organizational units	142	104	107
Medical personnel			
Specialists	101	151	154
General practitioners	5	5	5
Trainees	-	12	10
Workers with high school education	140	38	36
Workers with secondary school education		191	196
Workers with elementary school education	37	8	9
Consultations			
with physician	1 054 233	1 540 169	1 562 720
with other medical personnel	450 738	639 006	608 210

There were 107 units in the service for skin and veneral diseases in 1982, with 154 specialists, 5 general practicioners, 10 trainees and 241 other medical personnel. In the same year, 1,500,000 consultations with physicians and 600,000 with others were registered.

10.4.

Laboratory Services

The primary health care centre in each commune has a small laboratory equippedfor basic biochemical analysis (haematological, lipid, urine and protein analysis). The equipment of these laboratories varies and consequently the number and types of analysis which can be done. Usually, laboratories in more distant regions perform more different analysis than those in larger centres where more complex analysis are carried out in hospitals.

In the regions there are larger laboratories belonging to the Institute of Public Health, which cover a number of communes; the medical centres also have laboratories. In the republics there are large laboratories, also belonging to the Institute of Public Health.

TABLE 3:
Laboratory services in SFRJ

	1971
Organizational units	1 639
Employees-TOTAL	7 491
Medical personnel	
Specialists	274
Other physicians	119
Pharmacists	369
Chemists	250
Other personnel with university degree	179
Nurses-technicians	733
Medical technicians	4 992
Others	575
Non-medical personnel	
Administrative	296
Technical	1 216

10.5.

General Medical Services

General medical service is the place of first contact with patients. In addition to medical protection, prevention, some hygienic and epidemiological activities, the general medical service may carry out minor surgical interventions, laboratory analysis, systematic examinations, specific care of workers, and group work with chronic patients, as well as with the disabled, aged, etc.

Methods characteristic for a primary health care are that of a dispensary, i.e. active, complete and permanent care of the sick and healthy individuals of a specific population. A characteristic which should be especially emphasized is application of a doctrine of integrated (integral) medicine - this is of manifold importance. This doctrine requires that all aspects and techniques in prevention, therapy and rehabilitation not be separated neither in the conception of health problems, or in the analysis of health status or intervention. It also means that health problems should not be separated from working, family, psychological or social problems. Moreover, a number of consultative specializations should coordinate their approach with the needs of individuals and their situation.

Historicaly, immediately after 1945 the services were first nationalized and united under a centralized governmental system. The health and social insurance systems were developed.

After a short period following the Soviet pattern, the tradition of integrated primary care continued. In 1952, a new type of health centres was promoted with a core group of general practitioners and a set of dispanseries to deal with tuberculosis, MCH, etc.

To support and strengthen the position of general practitioners in 1959, a possibility of vocational training for them was legalized and a status of "specialist in general practice" established. Some differences developed in different parts of the country, in part because the speed of development was different, and also because there is a permanent tension between these two concepts: one pushing for an integral approach (health centres built around different types of general practitioners) and the other for a disintegrated approach (polyclinics and health centres as working places of specialists of different medical disciplines).

TABLE 4:

The major groups of physicians in PHC (1980)

	Number of physicians	Percent with vocational training (specialists)
General practitioners	6 198	20.1
Occupational health	2 467	38.5
Maternal care	848	87.3
Child health	1 639	58.8
School health	1 134	46.9

TABLE 5:

Typical general practitioner in Yugoslavia

*Working hours	6-7	(Average proportions)
*Medical staff		
Physician	1	
Nurse	1	
Public health nurse ("Patronage")	1	
*Population covered by one team	1800-4000 people	
*No of patients daily	25-60	
*Home visits per day	1-6	

There is an referral system connecting general practitioners with hospitals, but only exceptionally general practitioners will actively participate in the treatment or other procedures during the patient's stay in the hospital. The hospital polyclinics are at present the most aggressive part of the health service system developing rather fast and spending every year a bigger proportion of resources. In some of the biggest towns this is a sum which is more than twice as much as for all primary health services. One of the major problems is how to stop this development which is very expensive and is introducing impersonal, discontinuous and fragmented and often unnecessary care. According to the system at present the population has no regular direct access to specialists, but the primary care physicians have to refer patients. However, this regulation is not strong enough to stop the specialist "consultant" services from growing out of proportion.

TABLE 6:

General medical care

Year	1962	1972	1980	1981
Organizational unit	2 848	3 789	4 135	4 151
Physicians				
General practice	4 055	4 056	5 128	4 718
Medical workers with secondary and high school education	4 063	8 344	14 308	15 000
Medical workers with elementary school education	5 110	2 308	1 331	1 106
Consultations				
Total	56 194	62 212	81 898	83 049
First	27 066	27 540	35 895	37 196
Repeated	29 128	34 672	46 003	45 853
Home visits (in 000)	2 062	1 839	1 523	1 549

There were 4 151 organizational units in 1981 employing 4 718 general practitioners. The number of consultations was 83 049 000, and the number of home visits was 1 549 000.

10.6. Maternal and Child Health Services

10.6.1. Women's Health Care Services

The services for the health care of women, covering both preventive and curative outpatient care, are provided by primary care centres and medical centres.

TABLE 7:

Maternal health services

	1962	1972	1980	1981
Dispensaries and guidance centres (organizational units)	560	1 325	948	958
Medical personnel				
specialists	352	372	740	742
general practitioners	305	144	108	100
workers with secondary and high school education	286	1 344	1 989	1 999
workers with elementary school education	958	442	152	119
Consultations in gyneacology clinics, guidance centres for pregnant women and for family planning (in 000)				
Total	2 133	5 095	8 576	8 694
Women pregnant for the first time	280	316	463	479
In gyneacology clinics			2 540	2 586
In guidance centres for family planning	713	1 795	321	341
"Patronage" home visits (in 000)				
To pregnant women	83	179	191	184
To women lying-in	189	445	484	458
To other women	42	115	272	307

There were 958 units in 1981, employing 742 gynaecologists, 100 general practitioners and trainees, 1,999 midwives and nurses. The number of consultations was 8,694,000. (See Table 7).

10.6.2. The Child Health Care Service

The child health care service provide outpatient care for preschool children, These are also provided by primary care centres and medical centres.

The child health care is mostly provided by dispensaries, which have three basic functions: 1/ to provide medical treatment to sick children and to decrease the infant mortality, 2/ to provide medical supervising of children of a certain area, and 3/ to provide medical education.

The number of dispensaries increased after 1950, and especially the number of guidance centres for infants and small children at primary health centres. The network of these institutions in the period 1951-1965 increased substantially(more than three times: physicians - index 360, nurses - index 368, medical workers with elementary school - index 366).

TABLE 8:
Health care of pre-school children

	1962	1972	1980	1981
Dispensaries and guidance centres (organizational units)	627	1 328	1 177	1 237
Medical personnel				
Specialists	452	458	964	956
General practitioner	558	563	675	739
Workers with secondary and high school education	924	2 106	3 089	3 135
Workers with elementary school education	822	270	154	127
Consultations at guidance centres and clinics (in 000)	5 196	10 755	14 563	15 489

There were 1 237 units in 1981 employing 956 paediatricians, 739 general practitioners and trainees and 3 135 nurses. The number of consultations was 15 489 000.

10.6.3. School Health

TABLE 9:

Health care of school children and school-aged children

	1962	1972	1980	1981
Clinics and polyclinics (organizational units)	365	647	696	723
Medical personnel				
Specialists	307	279	532	574
General practitioners	345	412	602	669
Workers with secondary and high school education	551	1 074	1 794	1 879
Workers with elementary school education	315	93	64	49
Consultations (in 000)	3 394	6 329	9 180	9 651
Systematic medical examinations (in 000)	626	696	903	905
Control medical examinations (in 000)	168	381	488	502
Home visits (in 000)	69	46	40	46
Consultations with parents (in 000)	233	191	220	228

These services are also provided by primary care centres and medical centres. In 1981 there were 723 units, employing 574 specialists, 669 general practitioners and trainees, and 1,879 nurses. There were 9,651,000 consultations and almost 1.905,000 systematic medical examinations.

10.7. Dental Health

In 1981 there were 3 322 units employing 6 684 stomatologists, 972 dentists, 4 799 dental technicians, 2 802 dental assistants and 1 785 nurses.

Dental services are provided by primary care centres and medical centres. Their function is to prevent and treat mouth and tooth diseases, as well as to provide emergency services.

TABLE 10:
Dental Health Services

	1962	1972	1980	1981
Organizational units	1 659	2 554	3 291	3 322
Medical personnel				
Stomatologists	943	3 561	6 314	6 684
Dentists	1 548	1 580	1 062	972
Dental technicians	1 817	3 705	4 611	4 799
Others	2 515	4 264	6 718	6 845
Consultations (in 000)	13 008	18 193	23 933	24 522
Completed treatment (in 000)				
Tooth removal	3 934	5 661	5 998	5 961
Filling	3 234	6 397	9 564	9 562
Prosthesis	2 773	926	1 394	1 340
Others	4 186	4 113	8 518	8 593

The number of consultations in 1981 was 24 522 000.

10.8. Health Care of the Elderly

Health care of the elderly is organized at all levels: from primary health care, home visits and social organizations, to hospitals.

The GP in the primary health service is "the first contact" for an elderly person. The GP takes care of clinic and home treatment, as well as community - health nurse, and home care and suggests if lay help at home is needed. In a way, he is a medical advisor in all health--related situations and in usage of all forms of health care: from primary prevention and hospital treatment to complex rehabilitation and accommodation in old people's home .

10.9. Mental Health Services

Mental health services, organized on a dispensary basis, are provided by medical centres and primary care centres. Of 340 units engaged in providing these services, 44 are mental health institutions, 13 are institutions for alcoholism, and 253 are psychiatric clinics. In 1978 the outpatient services employed 305 specialists, 38 general practitioners and trainees, 363 nurses and 167 other health workers.

TABLE 11:

Organizational Units and Personnel Employed in Mental Health Institutions

	1971
Organizational units	222
Mental health dispensaries	27
Dispensaries for Alcoholism	8
Neuropsychiatric Outpatient Stations	176
Medical personnel - total	252
Specialists	95
Other physicians	10
Medical workers with high school education	26
Medical workers with secondary school education	117
Medical workers with elementary school education	4
Non-medical personnel	
Administrative	47
Technical	29

10.10. The Cancer Control Service

Oncological care is organized at three levels, the first being general practitioner. Generally, the cancer control service includes measures for the prevention of malignant diseases, early detection and health education. It is provided by dispensaries attached to primary care centres, medical centres and hospitals.

Oncological care is already provided in the primary health service (general medicine, occupational health, dental care, school medicine, children care).

General practitioner participates in the prevention, early detection, diagnostics, therapy, rehabilitation, follow-up and medical education of inhabitants, as well as in a social care.

In 1978 there were 80 cancer control institutions employing 155 physicians in various specialties, 60 general practitioners and trainees, 224 nurses and 241 medical technicians.

10.11. Occupational Health

Occupational health services are provided by independent dispensaries for occupational medicine and dispensaries attached to primary care centres and medical centres.

TABLE 12:
Occupational health services

	1971	1981	1982
Organizational units	1 019	1 501	1 552
Medical personnel			
Specialists	399	1 016	1 152
General practitioners	858	1 412	1 519
Trainees		281	291
Medical workers with high school education	69	486	545
Medical workers with secondary school education	1 240	3 204	3 407
Medical workers with elementary school education	371	173	157
Non-medicine personnel - total	666	261	332
Psychologist		85	100
Social workers		53	63
Others		163	168

In 1982 there were 1 552 units, employing 1 152 specialists in occupational medicine, 1 519 general practitioners and trainees, 3 097 nurses and health workers with advanced education and 157 health workers with primary education. There were some 21 633 643 consultations.

10.12. Health Education

At the level of the commune, health education is carried out by a small group of health visitors attached to each primary care centre. In each region there is a health education department in the Institute of Public Health. At the republic level there are institutes of health education.

Manpower and equipment needed in health education are not completely satisfactory at present. Basic educational methods are lectures and science - popular films in addition to published materials (booklets, leaflets, newspapers, journals).

Special emphasis is given to health education in schools, since this is the best age and place for a meaningful and continuous work on promotion of health education of a population.

10.13. Emergency Services

These are provided by primary care centres, medical centres, and independent health organizations, institutes or first-aid stations. Their task is to provide urgent medical care in situ and during transport to the appropriate health centre.

In 1978 there were 159 units employing 83 specialists, 427 general practitioners and trainees, 827 nurses and medical technicians, and 248 health workers with primary training.

10.14. Pharmaceutical Services

There are independent pharmacies in primary care centres and medical centres.

In 1978, there were 1,623 units employing 3,203 pharmacists, 3,394 pharmaceutical technicians, 374 pharmaceutical laboratory technicians, and 262 nurses and medical technicians.

Karmela Krleža-Jerić

11. HEALTH MANPOWER DEVELOPMENT

11.1. Education and Training of Health Workers

Education and training in Yugoslavia is considered a social obligation, and thus there are no tuition fees[1] for study at the primary, secondary and undergraduate levels. Tuition is paid, however, for postgraduate training.

Education and training of health workers are organized in middle and high schools and in medical, stomatology and pharmacy faculties.

In the immediate post-war period there were also two and six-month training courses for midwives and lower schools for nursing in order to address the problems of an acute shortage of health manpower. These two programs were subsequently discontinued as the general level of education of the population and the numbers of more highly trained health workers increased.

All health science schools come under the administrative jurisdiction of republic/provincial Committees for Education and Culture, although programs are developed in collaboration with the health sector. This multisectoral approach is assured through Self-managing Communities of Interest for Professional Education in Health which actually draw up programs. These Self-managing Communities of Interest include

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[1] All health science faculties accept foreigh students who pay minimal tuition fees.

representatives of institutions (as "users") and of health science schools and faculties (as "providers") who together decide on the organization, financing, curricula, enrolments, etc. of health science schools and faculties.

11.1.1. Supply of Health Science Educational Institutions

The number of health science schools and faculties increased substantially in the post-war period.

Moreover, in line with general policies of decentralization and equalization of educational opportunities, there have been significant improvements in the distribution of educational institutions throughout the country. Thus, for example, immediately after the war there were only three medical faculties (in Belgrade, Zagreb and Ljubljana); by 1980 there were Medical Schools scattered throughout all Republics and Provinces in 12 locations (Belgrade, Zagreb, Ljubljana, Skopje, Sarajevo, Niš, Novi Sad, Rijeka, Priština, Tuzla, Kragujevac and Banja Luka). The middle schools of nurses are even more widely distributed at the regional and subregional levels.

11.1.2. Admission to Medical Faculties

Due to a great interest and need for high quality personnel, Medical Faculties use a so-called entrance examination to select among those students seeking admission. These examinations are designed to assess the knowledge of chemistry,

biology, physics and attitudes towards medicine. Generally, students are 18 years old when they enter the Medical Faculties, and have completed secondary school. Sometimes students are admitted without completion of secondary school but in that case they must pass additional examinations.

11.1.3. Curricula at Health Science Educational Institutions Specialization and Continuing Education

The curricula of Yugoslav health science schools and faculties are similar to those found in other European countries with some noteworthy exceptions. In particular, Yugoslav institutions include subjects such as self-management, marxism, political economy and national defense in line with our specific socio-political system. Furthermore, at least since the time of Andrija Štampar in the 30's and especially in the post-war period, medical faculties have given special attention to social medicine, hygiene and ecology.

Table 1 summarizes the curricula at Yugoslav medical faculties. Training leading to a diploma in medicine lasts a minimum of 5 years, plus one additional year of practical training (internship) to be fully licensed. In recent years, most graduate physicians (general practitioners) have gone on to pursue specialist training which lasts between 3-4 years. At least in some republics, general practitioners must initially do compulsory work in primary health care before specialization

in one of the 31 possible areas. Programmes for most specializations include one year of theoretical postgraduate training. The same postgraduate training, if continued for one additional year, may lead to a Master's and eventually Doctor's degree.

Lectures, seminars, refresher courses, professional meetings and journals, participation in congresses and conferences, etc. are organized for continuing education. Health workers and institutions are obliged to follow those programmes in order to keep up with health, medical and organizational innovations. These are organized by the School of Public Health, Medical Faculties and professional associations.

In spite of minor specificities, the educational programmes of middle schools and faculties all over Yugoslavia are similar and their diplomas are approved throughout the country. There are also continuing educational programmes for middle level health workers, although generally these are somewhat less formally organized than those for physicians.

11.1.4. Students Enrolled in and Graduates of Health Science Educational Institutions

In Table 2 we present data on the number of students enrolled in Yugoslav health science schools and faculties during 1982/83 and on the number of graduates from 1945-1982 and in 1982.

TABLE 1: SUMMARY OF CURRICULA AT YUGOSLAV MEDICAL FACULTIES[a]

TYPES OF SUBJECT	BANJA LUKA	BELGRADE	LJUBLJANA	NOVI SAD	NIS	RIJEKA	SARAJEVO	SKOPJE[b]	TUZLA	ZAGREB
Theoretical/ preclinical	1900	1950	1820	1860	2135	1620	1900	2220	1906	1440
Clinical	1926	1905	2005	1920	1690	2124	1880	2530	1998	2399
Hygiene and public health	198	280	300	225	255	396	234	60	198	301
Marxism & socialism	120	93	90	210	120	120	120	180	120	120
Other, non-professional subjects	324	165	240	240	180	300	180	180	302	300
Total Hours	4458	4393	4570	4450	4380	4560	4322	5170	3524	4560

a) we have not included Medical Faculties in Kragujevac and Pristina since we received incomplete data.

b) incomplete data (two subjects missing)

Table 2: Students Enrolled in Yugoslav Health Science Schools and Faculties (1982/83) and Graduates (1945-1982 and 1982)

	NUMBER ENROLLED 1982/83	GRADUATES 1945-1982	GRADUATES 1982
Faculties			
Medicine	19,061	48,381	2,854
Dentistry	5,093	11,092	576
Pharmacy	2,911	8,558	500
Medical High Schools	4,381	18,400	1,314

Source: Statistical Pocket Book of Yugoslavia, Federal Statistical Office, Belgrade, 1984, pp. 137-14o.

11.2. Employment of Health Workers

In the immediate post-war period, health workers were administratively assigned to positions in health institutions given pressing health needs (e.g. rampant infectious diseases). However, in line with the development of self-management, administrative assignement was soon replaced by a system of open competition among unemployed and employed health workers for advertized positions. An expert committee reviews the professional qualifications of all applicants for a given position. Other criteria used in the selction process include academic performance, previous

experience and the like. The workers' council of the health institutions makes the final decision on employing a new worker.

11.3. Health Manpower

The health labour force in Yugoslavia has the following characteristics:

1. The supply of health workers has increased signficantly in the post-war period (see Table 3). For example, there was one physician for 9,oo4 inhabitants in pre-war Yugoslavia, while in 1981 the ratio was 1:669.

2. There is a relatively satisfactory population-to-physician ratio compared to other European countries. For example, in Yugoslavia, there was 1 physician per 669 inhabitants in 1981 (see Table 4).

3. There is a relatively large regional variation in the distribution of the health labour force (eg. in 1982 there were 473 inhabitants per physician in Slovenia and 1,294 in Kosovo (see Table 5).

4. There is an unsatisfactory relationship between the number of physicians and other health workers (e.g. in 1981 for every physician there were only 3.6 advanced, middle or lower medical workers such as nurses, technicians, etc. see Table 3).

11.4. Professional Associations

There is a Yugoslav Medical Association which includes physicians and stomatologists, with branches in all the republics and provinces. Most of the work of the Association is done in so-called sections where members meet in groups according to specialization (e.g. pediatrics, primary health care, etc.)

Table 3: Health Manpower in Yugoslavia, 1953-1981

Year	Physicians	Dentists	Pharmacist	Advanced and middle workers	Lower medical workers
1953	7,426	183	2,398	8,830	14,581
1965	16,340	1,835	3,310	30,737	29,582
1970	20,369	3,041	3,627	48,422	23,315
1975	26,264	4,795	4,554	78,523	16,804
1980	32,850	6,772	5,164	106,628	12,866
1981	33,514	7,095	4,658	107,374	11,611

Source: Statistical Yearbook of Yugoslavia, Federal Statistical Office, Belgrade, 1983.

Table 4: Population in Various European Countries

Country	Year	Population per physician
Yugoslavia	1981	669
Austria	1978	471
Belgium	1978	444
Bulgaria	1979	415
Czechoslovakia	1979	379
West Germany	1978	500
Hungary	1979	415
Norway	1977	540
Poland	1979	529
Rumania	1979	705
Sweden	1978	497
Switzerland	1979	410
Great Britain	1977	750

Sources: Statistical Yearbook of Yugoslavia, Federal Statistical Office, Belgrade, 1980-82; Statistical Yearbook of Public Health and Health Care in SFRY, Federal Institute of Public Health, Belgrade, 1982.

Table 5: Population per physician in Yugoslavia by republic and province, 1962 and 1982

	Population per physician			Index (Yugoslavia = 100)	
	1940	1962	1982	1962	1982
Yugoslavia	9004	1429	529	100	100
Bosnia and Herzegovina	-	2936	745	205.5	140.8
Croatia	-	1211	462	84.7	87.3
Kosovo	-	4184	1294	292.8	244.6
Macedonia	-	1668	561	116.7	106.0
Montenegro	-	1716	657	120.1	124.2
Serbia Proper	-	1153	442[a]	80.7	83.6
Slovenia	-	1048	437[a]	73.3	82.6
Vojvodina	-	1310	499[a]	91.7	94.3

[a] According to 1981 census

Source: Statistical Pocket Book of Yugoslavia, Federal Statistical Office, Belgrade, 1984, pp. 153.

or interdisciplinary or other interests (e.g. oncology). There are also sections for medical students and retired doctors. These associations play an important role in continuing education, creation of postgraduate curricula, health planning, giving initiatives for development of the profession,etc.

Pharmacists and nurses have their own respective professional associations.