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PLAN FOR LONG-RANGE DEVELOPMENT OF
CZECHOSLOVAK PHARMACEUTICAL SERVICES

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FOREWORD

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Better public health as a Goal for the Pharmaceutical Services.

The Long-Range Plan of Pharmaceutical Services is the result of a critical analysis of the existing situation and activities in pharmacies; is based on an all-state plan for economic growth and the tasks that follow for public health.

The complete nation-wide analysis of all branches of pharmaceutical services was submitted at the National Congress of the Czechoslovak Communist Party, held 5-7 July 1960, during which the Third Five-Year-Plan was approved. The discussion dealing with the proposition of the plan concerns the whole nation, and everybody knows the concrete goals set for industry, agriculture, transportation, and construction. Nevertheless, it is necessary to review the main objectives set for public health:

1. Creation of healthy living conditions by strengthening hygienic-epidemiological services.
2. Perfection of ambulance and services pertaining to the obvod.
3. Augmentation of the number of specialists and supplementation of services by specialists.
4. Improvement of child and mother care and increasing the capacities of homes for infants and kindergartens.
5. Concentration of research, preventive medicine and medical care for the most important diseases; mainly tuberculosis, contagious diseases, blood circulatory diseases, neoplasms, chronic respiratory illnesses, rheumatism, diseases of the nervous system, and mental illness.
6. Increasing the number of health installations and hospital beds, construction of large new hospitals in Motol, Most, Znojmo, Poruba, Havirov, Bratislava, and Kosice.
7. Increasing the number of medical positions.
8. Augmentation of care for working women and young people.
9. Lowering of the mortality rate.
10. Enlargement and improvement of care in health resorts.

In order to carry out successfully these tasks, the use of medicines is necessary and goals for research and the production of drugs and pharmaceutical services should be established.

Three hundred twenty-two billion crowns are planned to be invested in the national economy during the Third Five-Year Plan. Some three and a half billion crowns are earmarked for the health plan proper, double of the sum spent in the Second Five-Year Plan. The development of our economy will not consist only of new investments, but mainly in increased productivity.

Long-Range Development of Pharmaceutical Services

Our main task of today is to create a long-range plan for pharmaceutical services, or a basis for such a plan, by which we must understand the following:

1. A plan for formation of a network of pharmacies and pharmaceutical installations.
2. A plan for workers having specialized education at university and high school levels, and for administrative and technical workers.
3. Norms for distribution of pharmacies, their equipment and installations for the purpose of assuring good pharmaceutical services and good work in pharmacies.

The circumstance that pharmacies finally have become health institutions, i.e., a part of OUNZ, and have ceased to be units of small trade, changes basically the mission of pharmacies and pharmacists. The latter cease to be distributors and sellers of medicines and assume the full responsibility of public health workers, i.e., the duty to serve the sick as well as the healthy, in their care for regaining or preservation of health, and the duty of providing and preparing medicines, corresponding to the present knowledge of science.

Task of Pharmacies

In accordance with his knowledge and abilities, the pharmacist's task is proper and speeds supply of medicines for the population. For the first time in the history of pharmacy, this clear and genuine task, devoid of capitalistic elements, is set for the pharmacists, and it will depend only on them whether they will carry it out or whether they will be replaced by other workers who will be able to accomplish it in a better way.

The care for man from his birth to his death will always be intensified. The prevention of disease, accidents, poisoning and other injuries to health is a huge and long-range task, for the solution of which we must wait for decades; medicines therefore will always be necessary for preventive, diagnostic and therapeutic purposes, and this in an ever-increasing manner as medicines become more perfected, diverse, specific, and the examining procedures become more and more complex.

In accordance with the new territorial arrangements and as a basis for the proposal for development of health services, the okres /district/ should be fixed as a main directing link in the system of national committees and as an independent territorial and also partially economic region with its own health service.

The future number of inhabitants, number of physicians, variety of health methods, etc.; all these should be taken into account when preparation of a plan is considered.

In our state we have altogether 118 okres (census of 7-1-1960) with 237 hospitals with 101,479 beds, besides other health installations with 27,590 beds, making a total of 129,069 beds available. The okreses comprise 3,319 health obvod [circuits] 427 health centers and 2,222 health centers of the obvod type. The hospitals, institutes and obvods have 21,354 medical positions. There are altogether 3,770 pharmacists in 1,413 pharmacies and other establishments for pharmaceutical services.

At the end of 1958 there were altogether 174,012 persons employed in public health, of whom 23,071 were physicians. The ratio of inhabitants to physicians is 590 to one. The long-range plan counts on an increase in the number of physicians, so that by 1975, there will be one medical doctor for each 300 inhabitants. The number of physicians will have increased from the present 23,000 to 49,000. Appropriate sanitary equipment will correspond to this development, and pharmaceutical services will be commensurate with this development in their scope and quality. The increasing number of facilities and services will not become proportional in size to the development, but rather by better use of all latent reserves, consisting of better organization of work and better technical equipment of pharmacies in spite of the much slower increase of workers; the number of pharmacy workers together with the number of pharmacies is supposed to increase by approximately 3.5% during the third Five-Year Plan. This means that the number of inhabitants corresponding to one pharmacy and taken as approximately 10,000, will not change in spite of the constant trend in increase of inhabitants within the state, estimated to become 15 million by 1975.

The pharmacy of the okres will have an important mission to the governing function of the ONV, and the position of a pharmacist of the okres will be that of a responsible worker for a flawless pharmaceutical service. The pharmacy of the okres will be the best equipped pharmacy in the okres, and it will be both able and obliged to render services in the widest sense of the word. It will also help pharmacy workers in finding their training. It will be entrusted with further task for the okres and the land. This means that the planning of space for the pharmacy will be in accordance with its needs and in compliance with the norms for designing of pharmacies, and that it will be well equipped with all the supplements necessary for the performance of the most qualified pharmaceutical work in the largest sense. Furthermore, the pharmacy will have the necessary number of specialist, health, technical, administrative and auxiliary workers for both day and night service.

This is a picture of our pharmacy of the okres, a prototype from which pharmacies of lower categories should derive (down to administratively smaller entities: uzemi, oblast, obvod) as well as pharmacies of higher categories and specialized pharmacies: pharmacies of the kraj, of the institute, and similar types.

A good idea is to imagine a prototype or a model of a good pharmacy of the okres, corresponding to a larger town of the okres with an institute

of public health of the okres, and eventually with an institute of public health of an establishment, a hospital and other health installations, and to determine the scope of work of this pharmacy of the okres.

This prototype would include:

1. Spatial outfit and arrangement according to type C of the so-called sectional norm.

2. Scope of work of the following magnitude:

a) Preparation of medicines according to physicians' prescriptions
b) Dispensation of mass-produced medicines
c) Preparation of injection and infusion solutions for the hospitals of the okres or hospitals of several okreses.

d) Analytical activity for the control of incoming medicines, control during operations, control of outgoing medicines. Furthermore, analytical activity for checking pharmacies upon suggestions of the pharmacist of the okres; the preparation of reagent solutions and dyes for its own consumption as well as for the consumption of the hospital.

e) Technological activity in the galenic laboratory for the preparation of medicines for the hospital on a larger scale, new forms of medicines requested by departments of hospitals and research.

f) Work in warehouses for medicines, sanitary material and packing.

g) Administrative and book-keeping jobs.

h) Training for seminars, political, and specialized training for workers of all categories, library work in an appropriately endowed pharmaceutical library of the okres, informative activity for all pharmacies of the okres.

i) Cooperation with physicians in hospitals and in obvods, information of physicians about supplies, composition, usage, dosages and counterindications of medicines.

Apart from this, all workers should participate in public and cultural activities and have spare time for their own education.

In order to make the pharmacy of the okres a center to which all physicians and pharmacists of the okres would turn with confidence and to forward the conviction that the obtained information and advices would be fast, correct and at the level of modern scientific knowledge, the pharmacy must be accordingly equipped and supervised.

The tasks of the pharmacy are plentiful and the pharmacy workers must distribute them among themselves, as nobody can be a specialist in all branches. This means that in addition to the head of the pharmacy, there must be there available: Two to three pharmacists who prepare the formulations; one or two pharmacists for handing out mass-produced medicines and for the information of physicians, i.e., pharmacists possessing extensive knowledge of the composition of medicines, their pharmaceutical-dynamic effect and a knowledge of synonymous preparations. These should have at their disposal handbooks, card indexes and other documentation which would enable them to answer physicians' inquiries and wishes in a fast and reliable manner; one pharmacist-analyst, possessing good knowledge of preparing reagent solutions and dyes for the use of clinical departments in hospitals; one or two

pharmacist-technologists possessing good knowledge of all incompatibilities, the preparation of sterile medicines, aerosols for inhalation and external use, preparation of bandages, ointments, creams and emulsions, so they would qualify for close cooperation with physicians working in therapeutic research.

There should be altogether about nine workers of university level, everyone of whom should be well acquainted with one of the others' specialties so that he could replace the other during illness or vacation. Furthermore, one of the workers should be personally active in the commission of the okres for collection and growing of medicinal plants; he should be a pharmacognosist.

On the whole, this pharmacy does not differ from the pharmacy of the type U₂. The pharmacy of the okres can therefore be the pharmacy of the institute or a public pharmacy.

In the future there will exist pharmacies of the institute, as every hospital with more than 500 beds should also have a pharmacy. All pharmacies will in time become pharmacies of the institute and the sale of medicines for cash will represent but a complementary activity of a pharmacy, comparable to the activity of the hospital or ambulance for uninsured people.

The idealized prototype of a new okres that originated after the combination of approximately three old okreses, will include from 100,000 to 120,000 inhabitants; it will have altogether three hospitals in three cities (there are okreses with as many as five relatively large hospitals); it will have from 30-40 health obvods (circuits) with 50 health centers of the obvod type and ten of the okres type. In the okres there will be, besides the main okres pharmacy already described, 10-11 obvod pharmacies, at least two of which will be located in the old okres towns, linked with the hospitals of the okres type, but somewhat less well equipped. Let us call them okres pharmacies of type B. The rest of the pharmacies will be of the obvod type.

The number of pharmacies and the number of pharmacy workers must correspond to the size and density of the population, to the number and quality of the sanitary equipment, and to the number of physicians active in the public health service.

Let us suppose we transfer the long-range plan of 15 years to the present; in other words, we assume that no revolutionary discoveries in healing of diseases will have taken place, and that the state of health of the inhabitants of today will keep its good trend towards constant improvement and prolongation of human life. Then the situation of the area of a new okres of today will look as follows:

One single pharmacy will serve 10,000 inhabitants, two-three health obvods, 15-20 physicians, serving an obvod.

In the described okres there will be one main pharmacy, two-three pharmacies of the okres type of today, and provided with continuous service, and eight pharmacies of the obvod type.

We must always remember that as a consequence of territorial reorganization, the health care as well as the pharmaceutical care must improve and must not become impoverished or deteriorate. Hence there will be no closing down or reduction of the number of pharmacies.

Furthermore it should be ascertained that every pharmacist not working in the main pharmacy of the okres, should work at least one month every three years in a main pharmacy in order to get acquainted with the organization of the whole public health service at the level of the okres, new ways of work, new medicines, etc. During his absence from the pharmacy, he should be replaced by the pharmacist of the pharmacy of the okres, who would have the opportunity of getting acquainted with the problems of a small pharmacy and would have the chance of contact with physicians of the obvod. There should be one surplus pharmacist available in the main pharmacy of the okres in order that these tasks and other unexpected ones could be carried out (we shall see further that he would replace some 30 pharmacists of the neighboring pharmacies of the obvod).

The service of the pharmacy would therefore include the following workers:

Table 1.

	Main pharmacy of the okres, type C	Pharmacy of the okres, type B	Pharmacy of the obvod, type A	Dispen- saries	Total
No of Pharmacies (units)	1	2	8	6	17
No of workers univ. level					
Head of pharmacy					
Representative	1	2	8	-	11
Group leader	1	2	4	-	7
Assistants	5	4	4	(4x0.3)	13
	11	9	16	-	36
Bacchalaureates	11	12	6	6	35
Administrative & Accountants	2	2	1	-	5
Lower & helpers	3	4	8	-	15
Total	27	27	31	6	91

If we multiply these numbers of an ideal okres by one hundred (not all of the 113 okreses will have the same distribution of personnel and there will be also okreses of lower kind), we shall get:

Pharmacists	3,600	To date	3,770
Intermediate health workers	3,500		1,867
Administrative workers	500		?
Temporary officials	1,500		1,805
Total	9,100		7,742

There were 4,585 pharmacists in Czechoslovakia in 1958, including those in pharmacies, industry, research and in other institutions and sectors. It should be emphasized that the number of inhabitants will increase by 1.5 million and the number of physicians by more than 100% (49,000 in lieu of 25,000). Percentagewise it would appear to be the following:

	To date
Some 120 pharmacies with 10-12 pharmacists -- 8%	9%
Some 240 pharmacies with 4-6 pharmacists -- 17%	11%
Some 1,120 pharmacies with 1-2 (or 3) pharmacists -- 75%	79%

Summary

Neither the net of equally spread health institutions nor the net of pharmacies and their endowment match the great accessibility and high level of health care in our state. It is necessary therefore to build up a net of pharmacies, to spread them properly and to equip them materially with personnel, and to make sure that they are at a highly specialized and high ideological level for all workers.

If we sum up the whole study in this sense, we come to the following conclusion:

1. In principle there should be three types of pharmacies:
 - a) The okres type (called above main okres type).
 - b) The municipal type (corresponding to the okres type in former towns of the okres and called central in large towns).
 - c) The obvod type in smaller towns and in obce [parishes?], and other pharmacies in large towns that are not mentioned under a) or b).
 - d) Dispensaries which should, as heretofore, form a part of some pharmacy. They would be headed independently by an intermediate health officer, but should be under the supervision and health responsibility of a pharmacist who would visit the dispensaries, control and adjust their activities and keep up direct contact with neighboring physicians. In addition to these pharmacies there would exist:
 - a) Internal pharmacies for institutes designed only for the internal need of an institute. By institute is to be understood, as well as an independent institution with beds, an independent institute of public health equipped with a pharmacy, located within the area of the establishment or in the center of the establishment.
2. Distribution of personnel and the equipment of pharmacies.

The pharmacies must be materially and technically equipped in such a way that they can fulfill their mission in all its scope. The work of a pharmacy of the okres has already been described. The amount of work in a municipal pharmacy does not differ by the quality of services, but only in scope, and in the fact that the pharmacy will not possess an independent analytical or technological branch (as long as it is not needed by the supplied hospital), but it should have among its employees a pharmacist-technologist or analyst, so that the cooperation between the pharmacy and physicians, as well as with the hospital, will be of the best quality.

The amount of work of a pharmacy of the obvod will be similar as far as the quality is concerned, but the pharmacy will not have a continuous 24-hour service; it will have a limited assortment of specialties and medicines (as needed by active physicians in the respective obvod). The assortment is approved by the respective pharmacist of the okres and by the director of the OUNZ and is revised every year. Plans for changes of assortment are suggested by the head of the pharmacy or by specialists of the okres physician.

The issuing office will store only a limited assortment of specialties according to the wishes and suggestions of the physician of the obvod. In larger issuing offices, where it will be necessary to secure also a minimum technical equipment, a complete pharmacy service will be instituted in the way that a pharmacist from the original pharmacy will have to work several hours per week every other day or twice weekly.

The pharmacies of the type of the institute will be at the level of the pharmacies of the okres as far as their equipment and amount of work is concerned or even at a higher level (e.g., they will store gases used for anesthesia, special supplies of surgical and sewing material, X-ray films, EEG and EKG papers, X-ray diagnostics, various antibiotics, cytostatics, foreign made medicines, etc.).

3. Distribution of space for pharmacies.

A certain norm regarding the design of pharmacies should be compulsory for all pharmacies of the okres, and norms for equipment and installment of pharmacies of all three types should be worked out and published, or at least recommended. It must be pointed out that even a norm that has not been approved, or a mere plan of a norm, is a stimulating force and serves as a guide for the work of pharmacists and economists.

4. Documentary endowment of pharmacies.

The documentary equipment of pharmacies of today is entirely insufficient, antiquated, of little use and cannot be of any avail for the improvement in specialized qualification of pharmacists and as a basis for a correct and expedient information for physicians. It is necessary to work out rapidly a graded and at least recommended norm for the equipment of documentation by the following means:

- a) Books and handbooks
- b) Specialized journals
- c) Directions regarding the work and responsibility of the pharmacist (tariffs, price lists, etc.)
- d) Card indexes and listings of new domestic and foreign made medicines (card indexes must be up to date).
- e) Political and specialized literature.

5. Cooperation with physicians.

The pharmacists have to initiate in the future a very close communication and cooperation with the physicians, take part in their consultations and render news and communications from their field. It will be

necessary to increase constantly the ideological and specialized level of the pharmacists. Therefore it will be necessary to constitute in agreement with ZV, ROH, OUNZ, [abbreviation not explained in source], a pharmaceutical commission or a section which would care for a seminar, specialized and political training in collaboration with the nearest main section of the JEP.

It is possible that the given long-range program will seem too ideal and insufficiently motivated. Many further reasons are in favor of it, however; reasons that will be evident after the discussion.

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- END -