

50. In order to decrease the concentration of manpower in large cities and to increase the provision of services in smaller towns and villages, higher education has been decentralized by organizing a whole set of smaller medical schools (Tuzla, Split, Osijek, etc).

51. In order to increase the significance of primary health care all graduate physicians (at least in Croatia) are obliged by law to work as general practitioners for two years before starting any of the specializations.

52. Changes in teaching plans and programmes have also been directed towards emphasizing general practice and primary health care. New chairs of general practice and primary health care have been founded and more practical work is introduced in health centres and other GP consulting rooms.

53. A very significant activity of the educational and health policy is to change attitudes of all health workers towards preventive and primary health care. Communication problems and a certain lack of confidence undoubtedly exist between primary health care and clinical medicine. The need to change attitudes and bridge gaps in order to establish collaboration, confidence and consideration is felt on both sides.

54. In Yugoslavia, general practitioners have a prejudice concerning the hospital as the site of purely curative activities. However, hospital care in Yugoslavia and in the world is going through revolutionary changes. The times are long past when the hospital was a clean, isolated island of curative medicine. The modern hospital has taken over many activities from the field of public health and some hospitals have special departments for health care, statistics, social care and health education.

Hospital physicians are participating in an ever greater number in home treatment as well, either as general practitioners or consultants to GPs. By so doing they learn

about environmental factors causing disease which they could not encounter in hospital beds where the patient is isolated from his/her environment and is just going through one of the phases of the biological development of the disease.

Individual health education has been carried out by hospital physicians from the very beginning. Hospital physicians, along with nurses and other hospital health personnel, have also been engaged for a long time in group health education (e.g. group work with cardiac patients, tuberculosis patients, diabetics, rheumatic patients, ulcer patients, etc.).

55. Due to circumstances described in item 54, the success of the strategy of developing PHC depends to a great extent on motivating hospital health workers to accept the strategy of developing primary health care as their own strategy and as their own interest.

4.6. Policy of developing the population's health culture and popularization of medicine

56. In the Yugoslav self-managing system the success of every health development policy, as well as the primary health care development strategy, does not depend only on whether health workers and political decision-makers accept this policy but also whether the population accepts it as well.

In other words, the degree of community participation in health development decision-making and the community's actual political and economic power in decision-making are very significant. It suffices to mention that health institutions (hospitals, health centres, health stations) are mostly built with public subscription taxes. In decision-making, by means of referenda, the population has the right in determining the function, content of work and even the location of health institutions. About 24,000 people are directly - through the so-called delegate system - included in decision-making of programmes and resources of health care, while even more people are indirectly

included in financial decision-making of health services.

Informing the population about their health status and the realistic value of medicine and developing correct attitudes become decisive factors affecting the efficiency of health care. It should be pointed out, however, that due primarily to an inappropriate policy popularizing medicine, the population often has a more favourable attitude towards clinical health care than towards primary health care. This is because the press and especially the television mostly report on achievements in superspecialized diagnostics and surgery and very little on the general picture of health status, disease and health care.

57. The other problem of the relation between health policy and the population, closely related to the first, is self-care. The self-managing system, with a highly decentralized decision-making process offers great opportunities for developing different types of self-care (preventive and curative) activities. The relatively high general level of education of the population and their health knowledge are also a good basis for self-care activities. However, except in some morbidity groups in which there exists a self-care system (diabetics, alcoholics and partly hypertonics), results to date are unsatisfactory. Mass preventive actions are especially hard to put into practice (e.g. recreation, physical activities, anti-alcoholism and anti-smoking campaigns, environmental health actions, nutritional habits, etc.).

58. Reasons for this are obviously of a socio-psychological nature and are to the long-standing myth that health is something which is "provided". This, in turn, has created the conviction that health is the responsibility of the government, physician and health insurance and not of individuals themselves. To overcome this paternalistic delusion, long-lasting efforts are needed in changing individual attitudes which is very difficult in a collectivistically-oriented society*.

* Only socio-psychological reasons can explain the fact that self-care activities give better results in individualistic, especially protestant, societies. The historically-bred conviction that the individual is the one who should protect his/her own health for the time being gives these societies certain advantages in implementing self-care policy.

5. CONCLUSION

59. This presentation of basic public health problems of Yugoslavia and strategies and policy for their solution is by far not the entire picture of the health development policy in Yugoslavia. To understand these specificities one needs to know the self-managing system of planning and functioning of health services and health policy. The explanation of those problems, however, exceeds the purpose of this paper.

The authors, however, hope that the reader has been given at least a rough picture of the manner in which health problems are solved in Yugoslavia.

APPENDIX

APPROACH AND METHODOLOGY FOR DEFINING PREVAILING
HEALTH PROBLEMS AND THE STRATEGY FOR THEIR SOLUTION:
EXPERIENCES AND LESSONS FROM SR CROATIA - YUGOSLAVIA

I. INTRODUCTION

1. Having accepted the basic principles and goals of the WHO Strategy of HFA/2000, many countries have tried to define their own HFA/2000 strategies in the last 10 years.

2. Yugoslavia (to be more precise, SR Croatia) is one of the countries which has defined a long-term health development strategy (by the year 2000) applying some general methodological principles presented in HFA/2000 strategy and MPNHD methodology. In 1981 two studies were published in Zagreb under the common title "Health Care in the Socialist Republic of Croatia - Development, Present Situation, Prospects". These studies applied HFA/2000 strategy and MPNHD methodology in order to formulate health development objectives strategy and policy in S R Croatia until the year 2000 (strategy to reach the goal of "Health for all"; strategy based on development of primary health care as the main focus of the country's health system).

II. Information on Elaboration of the Studies under the Title "Health Care in the Socialist Republic of Croatia - Development, Present Situation, Prospects"

3. General information. These studies were elaborated

during the period from 1978 - 1981, and were published as two volumes of encyclopedia-size, one having 580 and the other 290 pages.

4. Main objectives. There were five main objectives:

- Collection, systematization and publishing of all statistical data and other information on health, health care and medicine in Croatia and Yugoslavia;

- Analysis and evaluation of changes in the population's health status, health care and medicine from 1945 to 1980;

- Identifying of prevailing health problems and priorities for the period 1980 - 2000;

- Formulation of a general health development strategy until the year 2000;

- Formulation of specific health policy measures until the year 2000.

5. Research organization. These studies were planned, executed and published in three years (1978-1981). The Republic Ministry (Committee) of Health and Socialwelfare was the sponsor and financed the entire project. Prof. Dr. Boško Popović, then Minister of Health, was in charge of the research project. A timetable for completion of this research is given in Figure 1.

6. Research team. To provide for the multisectoral nature of the research as well as representation of various health institutions from all regions and districts, a large planning core group was formed, consisting of 230 doctors, epidemiologists, economists, nurses, sociologists, etc. The core group structure is given in Figure 2. Such a core group structure was intended to

provide for the group members to contribute to the planning and managerial process for health development until the year 2000 in three different ways:

- a) intellectually through identification of health problems and formulation of health development policy;
- b) ensuring support in implementation of health development strategy and policy (participation of a large number of health professionals should have guaranteed that the chosen health development strategy was their own choice, and not the Ministry will);
- c) financially, indirectly or directly (Since the research budget was restricted, the participation of representatives from various health institutions might have ensured additional financial support, if necessary).

The 230 research workers were divided into eight large core groups and about forty sub-groups (for detailed information, see Figure 3). A broader editorial board with 12 members and a smaller 3-member editorial board (Prof. Dr. B. Popović; Mr. S. Letica, Msc.; Prof. Dr. M. Škrbić) coordinated the research activities and ensured that the research methodology was followed. The editorial board made the final revision of all texts and published the research results in the above-mentioned studies.

7. Contents and methodology. The research contents and methodology were defined in accordance with the main objectives of this research (see paragraph 4). The studies were divided into the following chapters: (1) population, health status and

environmental changes; (2) main public health problems; (3) health status and health care of particular population groups; (4) health system and types of health services; (5) health care resources; (6) economic and social relationships within health system; (7) producing, transportation and consumption of drugs; (8) information support.

In formulating the methodology and defining a procedure for elaboration of the studies, MPNHD methodology as well as certain general and more specific methodological principles were applied.

8. General methodological principles. Each research team and each analysis had the following structure:

- a) development analysis from 1945 to 1980,
- b) prevailing problems of the 1980,
- c) development objectives:
 - until the year 2000,
 - until the year 1985,
 - short-term objectives;
- d) general development strategy;
- e) specific health and social policy measures.

In each analysis a comparison was made with the following countries: U.S.A., Sweden, Federal Republic of Germany, Switzerland, United Kingdom, Poland, Czechoslovakia, Hungary, Italy, Spain, France, Greece.

9. Besides general methodological principles, more specific ones were defined for each stage of the research as well. To illustrate, more specific guidelines for Chapter 2 ("Main public health problems") were as follows (see also Figure 3):

- a) epidemiological changes from 1945 to 1980,

- b) analysis of health system and health care policy between 1970 and 1980,
- c) proposal of health policy measures until the years 1985 and 2000:
 - for hospital care,
 - for primary care,
 - for self-care;
- d) other proposals of how to solve health problems.

FIGURE 1

TIMETABLE FOR COMPLETION OF RESULTS

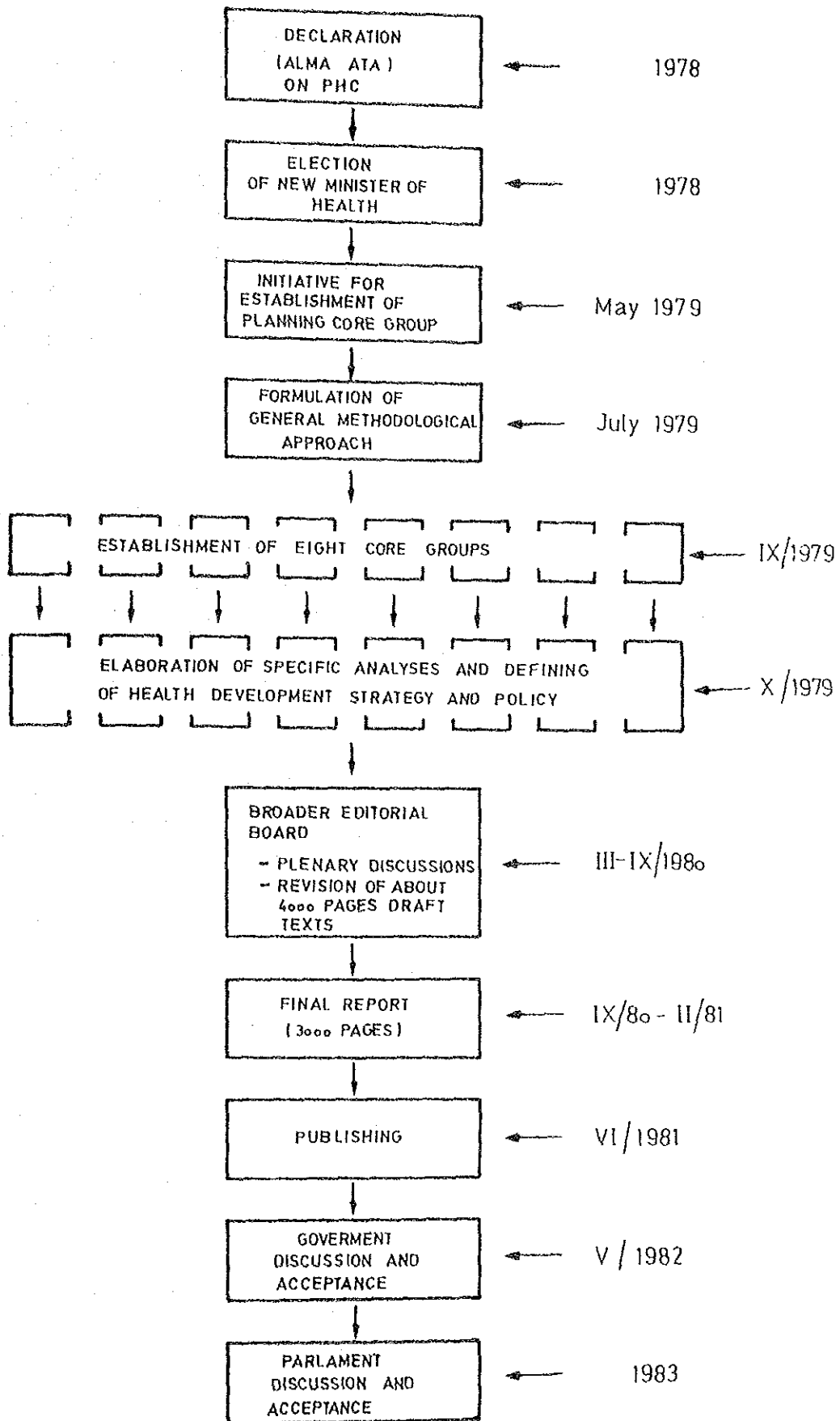


Figure 2: STRUCTURE OF PLANNING CORE GROUP BY
PROFESSION AND INSTITUTIONAL AFFILIATION

Institution Profession	School of public health	Hospital	Primary health care	Health author.	Self- manag. commun.	Other	Total
Soc.Med.-Physician	17	2	5	4	-	2	30
Other spec.physic.	-	128	5	-	1	1	135
G.P.	-	-	4	-	-	-	4
Nurses	2	-	-	-	-	-	2
Epidemiologists	3	-	4	-	-	1	8
Econom. and Sociolog.	5	2	-	-	3	2	12
Statisti., lawyers ...	2	-	4	5	4	4	19
Biologists, Pha., chemist.	5	3	5	-	-	5	18
Students	2	-	-	-	-	-	2
T o t a l	36	135	27	9	8	15	230

Figure 3: CORE GROUPS AND SUB-GROUPS ENGAGED IN REALIZATION OF RESEARCH "HEALTH CARE IN THE SOCIALIST REPUBLIC OF CROATIA - DEVELOPMENT, PRESENT SITUATION, PROSPECTS"

CORE GROUPS	SUB-GROUPS	Number of sub-group members
1.		
Demograph. development population health status and environmental changes	Population and health requirements	4
	Environmental changes	14
	Changes in the population health status	5
2.		
Main public health problems in Croatia from 1980 to 2000	Diseases of the circulatory system	10
	Diseases of the respiratory system	4
	Accidents, poisonings and violence	5
	Neoplasms	7
	Diseases of the digestive system	3
	Perinatal morbidity and mortality	2
	Mental diseases and mental disorders	6
	Diseases of the genitourinary system	5
	Endocrine, nutritional, and metabolic dis.	6
Diseases of the musculoskeletal system	4	
3.		
Health status and health care of particular population groups	Mothers and children	6
	Schoolchildren and the youth	3
	Women	8
	Workers	4
	The Elderly	1
4.		
Health system and types of health service	Health care system	3
	Self-care	1
	Social and preventive activities	12
	Primary health care	5
	Polyclinic care	3
	Clinic care	3
	Contemporary diagnostic activities	14
	Dentists' services	7
	Chemists' services	5
Health care in social institutions	2	

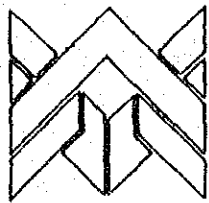
Fig. 3 (cont.)

5. Health care resources	Network of health institutions	1
	Labour force	3
	Education of health care workers	17
	Scientific-research potentials	4
	Financial resources	3
6. Economic and social relationship within health system	Managerial system for health development	8
	Health care financing system	3
	Health insurance system	5
	Medical ethics	3
	Control and supervision over professional work	2
	International co-operation	3
7. Manufacturing, transportation and consumption of drugs		4
8. Information support		4
Development of medical specialities		176

Centre for Health Cooperation

解題： 本プロジェクトのユーゴ側主要構成機関は Institute for Organization and Economics of Health 及び A. Stampar School of Public Health であるが、これらはいずれも “Centre for Health Cooperation with Non-aligned and Developing Countries” のメンバー機関である。また、同 Centre の他のメンバー機関も本プロジェクトの支援機関として位置づけられている (Association of Health Institutions, Institute for Diabetes, Endocrinology, and Metabolic Diseases 等)。その意味で本 Centre が、本プロジェクトにおいて占める役割は小さくない。

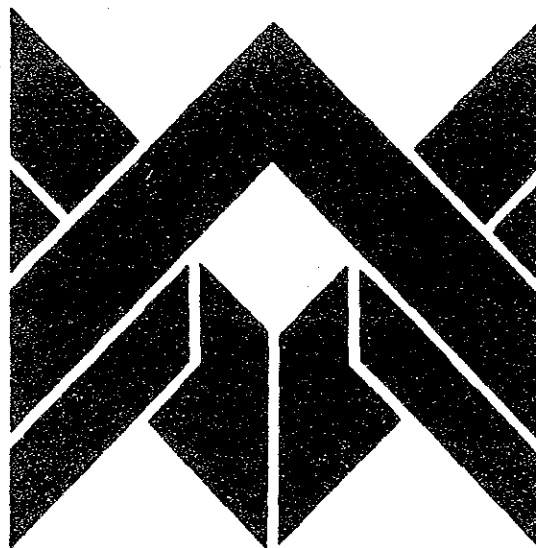
本冊子は同 Centre の概要を要約するとともに、そのメンバー機関のそれぞれを紹介したものである。



TCDC FOR HEALTH FOR ALL SERIES

**CENTRE FOR HEALTH COOPERATION
WITH NON-ALIGNED AND DEVELOPING
COUNTRIES**

**CENTRE FOR HEALTH
COOPERATION**



ZAGREB, 1985



centar za suradnju s nesvrstanimi i zemljama u razvoju na području zdravstva
center for health cooperation with non-aligned and developing countries

41000 Zagreb, Savska 41, Yugoslavia, pp (P. o. box) 913, tel. (041) 510-336

Series: TCDC for HEALTH for ALL

Editors: prof. Slaven Letica, Ph.D,
Berislav Skupnjak, MD, MPH

CENTRE FOR HEALTH COOPERATION WITH NON-ALIGNED
AND OTHER DEVELOPING COUNTRIES

Prepared by:

Karmela Krleza-Jeric, MD

Maja Jurin, MD

Berislav Skupnjak, MD

Zagreb, 1985.

D I R E C T O R Y

PART ONE: Centre for Health Cooperation with Non Aligned and Developing Countries as a WHO Collaborating Centre for Health Development and TCDC		
1. What is it?		1
2. How and why?		2
3. Goals!		3
4. Outstanding activities		8
5. Organizational structure		11
		14
PART TWO: Member Institutions and Their Activities*		17
1. Institute for Organization and Economics of Health, Zagreb		19
2. Research Drug Center, Zagreb (now part of the Institute for Organization and Economics of Health)		22
3. Association of Health Institutions of SR Croatia, Zagreb		25
4. Medical Faculty, University of Zagreb, Zagreb		28
5. Andrija Štampar School of Public Health, Medical Faculty, University of Zagreb, Zagreb		31
6. Institute for Medical Research and Occupational Health, Zagreb		33
7. Institute of Public Health of SR Croatia, Zagreb		37
8. Institute of Public Health of the City of Zagreb, Zagreb		39
9. Institute for Immunology, Zagreb		41
10. Institute for Mother and Child Care, Zagreb		43
11. SUVAG Center for Speech and Hearing Rehabilitation, Zagreb		48
12. Vuk Vrhovac Institute for Diabetes, Endocrinology and Metabolic Diseases, Medical Faculty, University of Zagreb, Zagreb		51
13. Architectonic Design and Consulting (APZ), Zagreb		59
14. Stomatology Faculty, University of Zagreb, Zagreb		61

* June 1985

15. Faculty of Pharmacy and Biochemistry,
University of Zagreb, Zagreb 64
16. Center for the Study and Treatment of
Alcoholism and other Drug Dependencies,
Dr. M. Stojanović Hospital, Zagreb 67
17. Dr. F. Mihaljević, Infectious Diseases
Teaching Hospital, Zagreb 71
18. Self-managing Community of Interest for
Education and Professional Training in
the Field of Health, Zagreb 74
19. Advanced School for Nurses and Health
Technicians, Zagreb 75
20. Health Equipment Buisness Community,
Belgrade-Zagreb 77
21. University Rehabilitation Institute with
Service for Technical Cooperation Support
for Rehabilitation of Disabled Persons,
Ljubljana 79
22. Service for technical cooperation support
for rehabilitation of disabled persons 82

P A R T O N E

CENTRE FOR HEALTH COOPERATION WITH
NON ALIGNED AND DEVELOPING COUNTRIES AS A WHO COLLABORATING
CENTRE FOR HEALTH DEVELOPMENT AND TCDC

1.

WHAT IS IT?

The Centre for Health Cooperation with Non-aligned and Developing Countries was established in 1976 through the association of organizations concerned with delivery of health services and health education, as well as other professional and scientific organizations and associations whose responsibilities are either directly included in the system of health care or linked to it in various ways.

Foundation
1976

The Centre is a non-govermental association of numerous professional and scientific health and health related institutions with a purpose to enlarge their mutual cooperation and thus a) promote national health care delivery system (as intracountry network) and b) to promote cooperation among developing countries, especially between Yugoslavia and other developing countries in the field of health.

Role

Its head office is at the Institute for Organization and Economics of Health (41000 Zagreb, Savska 41, pp 913), a member institution which provides secretarial support to the Centre. (A list of its member institutions and their short description see in Part two.

Seat

2.

HOW AND WHY?

The Centre was founded in 1976 as a direct operational contribution to the fulfilment of tasks foreseen by the Fifth Summit of Non-aligned Countries in Colombo in 1976 and elaborated at the special meeting of Non-aligned and other developing Countries in Geneva 12 of May 1977. At that summit for the first time health and other cooperation among non-aligned and developing countries was tackled and included into the Action Program. The health areas addressed were: to enlarge cooperation among corresponding institutions; health and medical resources; organization; planning; manpower development; environmental health; pharmaceuticals; adequate facilities; technology; common research; joint investments; data reference bank; information exchange and others.

V Summit of
Non-aligned
Countries,
Colombo, 1976

At the beginning, these areas were "distributed" among republics. Yugoslavia as one of the initiators of the Non-aligned movement and these extension to non-political and non-economical sectors of cooperation, started activities to promote health and other cooperation. At the beginning the areas were "distributed" around the federation units (Socialist Republics and Autonomous Provinces), each of them being in charge to coordinate Yugoslav Cooperation in respective areas.

Yugoslav
approach

In SR Croatia which was responsible for health planing and manpower development, the health ministry - Secretariat for Health and Social Welfare delegated its coordinating responsibility to the newly founded Institute for Organization and Economics of Health in Zagreb.

In the mid-seventies non-aligned countries and the "Group 77" through WHO Secretarial and its governing bodies introduced a reorientation of WHO policy to serve more the interest of developing countries.

International activity
Group 77 and WHO

There were already several health and health related institutions in the Republic with long term experience in international collaboration and some with a great interest for it. They expressed the interest to form an intra-and intercountry network which would strenghten the health care delivery system within Yugoslavia as well as enable much more Comprehensive collaboration with developing countries.

Yugoslav convenience
Circumstances

In such convenient atmosphere the act of associating 20 health and health related institutions was signed in Zagreb, November 1977 in the premises of the Socialist Alliance.

Formation of Centre
November 1977

Immediately an information letter was send by dr Ivo Margan, the initiator of the Centre to dr H. Mahler, Director General of the WHO. This letter received a warm welcome answer and the close collaboration of the Centre with the WHO started from its very begining. This collaboration was expressed in getting all the printed editions of WHO HQ, and getting in touch with various programmes (TDR, EPI) and in the work of various departments.

Link with the
WHO

February 1982 the Centre was designated as the WHO Collaborative Centre for TCDC and Health Development.

WHO Collaborative
Centre, February
1982

The interest of developing countries for TCDC is growing rapidly. Health seems to be an area with great possibilities for TCDC.

Facilitating
circumstances

The Yugoslav-WHO Joint Coordinating Group (JCG) was formed in 1983 with the aim of implementing the Memorandum of Understanding between Yuqoslavia and WHO.

JCG

Memorandum of Understanding was signed between Yugoslavia and WHO in 1982.

Memorandum of
Understanding
SFRY - WHO

More and more health institutions are interested into becoming members of the Centre.

The eight meeting of coordinators of Non-aligned and other developing countries was held on Brioni in March 1984.

Brioni,
March 1984

May 1984, Geneva the health ministers met at the 8th Meeting of Non-aligned and other Developing Countries in the field of health. Medium term program and the Initial plan of action in health was adopted at these meetings and later on presented and endorsed by the World Health Assembly.

Geneva,
May 1984

As of June 1985, the Centre includes 21 members. These member organizations, institutions or broader groups have gained recognition through various types of cooperation in the field of health with many countries all over the world, and have participated in programmes of the WHO and other specialized UN organizations. The professional and scientific potential and standards of the associate members are very high. All branches of medicine are covered including health education, managerial processes for health development, and health technology. The potential of the Centre is constantly expanding because, as

Members

stipulated by its founding document, it is an association open to all Yugoslav institutions.

There are currently several institutions from various parts of Yugoslavia which are in the process of joining the Centre. These are: the Institute for Social Medicine of the Belgrade Medical Faculty; the Primary Health Centre, Novi Sad; the Regional Institute for Primary Health Care, Novi Sad; the Experimental Biology and Medicine Institute, Dobrota; the Institute for Medical Research, Titograd; and the Medical Centre, Titograd.

New members

Each of the member institutions or experts on their staffs have individually cooperated with various developing countries or are capable of doing so. Their efforts in the area of health cooperation led them to the idea to create an intracountry network of health institutions with two basic purposes.

3.

GOALS

First, the primary goal of the association is to facilitate a higher, more comprehensive level of cooperation in the field of health with non-aligned and other developing countries. It is anticipated that this cooperation will promote common goals and tasks of developing countries in the field of health and assist participating Yugoslav health institutions as well.

Secondly, such an association is intended to promote the joint efforts of member institutions on specific programmes in Yugoslavia, while simultaneously maintaining their individuality. Some of these institutions already have a long tradition of joint ventures, such as the A. Štampar School of Public Health and the Institute of Public Health of SR Croatia which perform tasks as a WHO Collaborating Centre for Primary Health Care and Viruses.

Several of the associated members were individually designated as WHO Collaborating Centres due to their respective fields of activities (see appendix 1). As of 1984, there are eight WHO Collaborating Centres among the member institutions which deal with various aspects of health care, such as diabetes, primary health care, psychotropic drugs, research and reference of immunological products, bacterial vaccines and immunization programmes, viruses, pesticide toxicology.

The Initial program of the Centre was drafted in 1977 and was based upon the Action Program set at Colombo Summit 1976 and elaborated at the special meeting of non-aligned and other developing countries in Geneva 1977. This two meetings identified the following tasks for non-aligned and other developing countries in their concluding documents:

- define health and medical resources needed by non-aligned and other developing countries,
- encourage more extensive forms of cooperation such as exchange of technology, common research projects and joint investments,
- set up a data reference bank in the field of health and medical science with a list of all potential consumers and suppliers,
- make long-range plans for activity programs and define priorities,
- establish contracts with corresponding health institutions and organizations in non-aligned and other developing countries,
- organize planned and coordinated education of health professionals from non-aligned and other developing countries according to their needs,
- encourage the exchange of experts and consultants who are selected on the basis of the given needs of their country,
- develop an organized system of information exchange in the field of medicine, health, medical technology, through technical exhibitions,
- identify common needs which may be presented at meetings of Roundtable discussions etc., various international, regional and other non-governmental organizations, such as WHO, UNCTAD, UNIDO, UNDP and others. This approach will be more effective in obtaining funds, professional services and manpower and in exchanging technology and experiences, and
- allocate funds for common projects from existing resources set aside for non-aligned and other developing countries economic development.

The program of the Centre was set to meet the possibilities of its members with conclusions cited above and it included the following fields:

- planning and programming of health services,
- prevention of the spread of infectious diseases and sanitation of the health environment from the damages of war and natural disasters,
- training of manpower for work in health care services,
- specific health care, rehabilitation and environmental protection,
- utilization and use of drugs, and
- construction and supply of health institutions.

This programme went through several adaptations due to the development of the idea. One key event was when the Centre got designated as a WHO Collaborating Centre for Health Development and TCDC in 1982. According to the designation act, its functions are:

1. To study problems related to integration of health into the overall development process in the context of TCDC and to implementation of the Plan of Action adopted by the UN Conference on TCDC held in Buenos Aires in 1978.
2. To identify and analyze existing constraints in implementation of TCDC and their possible solutions, mainly in the fields of health development, human resource development, health research, environmental health, food and nutrition, and indigenous technology.
3. To study appropriate methods and processes for the promotion of practical TCDC arrangements.
4. To carry out training programmes principally for participants from developing countries in order to enhance the implementation of TCDC in health and health related fields.

5. To participate in the production of documentation and technical material necessary for the above mentioned functions.
6. To collaborate with similar institutions or networks in other countries in carrying out analogous functions in the context of TCDC.

Based upon the Medium-term programme and Initial Plan of Action developed at 8th Meeting of the Coordinators of Non-aligned Countries in the Field of Health (Brioni, Yugoslavia, March 1984) and adopted by the 8th Meeting of the Ministers of Health of the Non-aligned and other Developing Countries (Geneva, May 1984) and endorsed by the 37th World Health Assembly (Geneva, May 1984) the Center incorporated into its programme the following activities:

Colloquia on TCDC for Health for All, data bank establishment and exchange of information; appropriate training and research for TCDC and health development one of NGO-s in promotion of TCDC for Health for All.

4.

OUTSTANDING ACTIVITIES

In executing the given tasks, this Centre has already been included in various analytical and action-type programmes. Its member institutions, especially the already existing WHO Collaborating Centres, have continued to carry out their specific programme assignments in compliance with the commitments of their designations, implementing them through the Centre and thus enriching its programme. Broader programmes including several members are currently under development.

- 4.1. This is particularly intensively going on in the area of primary health care, biological antropology, diabetology, mother and child care, rehabilitation of physically disabled persons and medical rehabilitation of hearing and speach problems by the SUVAG method (for details see under respective members, Part II).
- 4.2. Two Round Table Discussions of Developing Countries were organized and conducted by the Centre. The first one (1978, Zagreb) on Appropriate Pharmaceuticals, equipment and facilities. Round Table Disscusions 1978 and 1980
- 4.3. Technical organization on the WHO conference on Country Health Programing (CHP), Dubrovnik 1979. 1979, Dubrovnik CHP
- 4.4. Precongress seminar for developing countries on information flow was organized in Belgrade, September 1980, linked to the International Congress on Medical Librarians. 1980, Belgrade Medical Librarians
- 4.5. Analysis of TCDC activities in the field of health was prepared as a part of Director General's Report to a High Level Meeting in TCDC. 1983, Report-Study on TCDC in Health
- 4.6. Technical organization and support of the preparatory meeting of Non-aligned and other developing countries in the field of health, Brioni, March 1984. 1984, Brioni Non-aligned Countries

- 4.7. The first international Leadership Development Colloquium (ILDC I) on Brioni, October 1984 organized by the Government of Yugoslavia, Organizational, technical and secretarial support the Colloquium (see appendix 2). ILDC-I
Brioni, 1984
- 4.8. UNDP - TCDC missions in the field of health. Brasil - Yugoslavia were exchanged to start cooperation, May and July 1985. UNDP
TCDC
MISSION EXCHANGE
1985
- 4.9. The second International Leadership Colloquium, Brioni, October 1985 (technical organization and support of the Yugoslav WHO activity). ILDC - II
Brioni, 1985

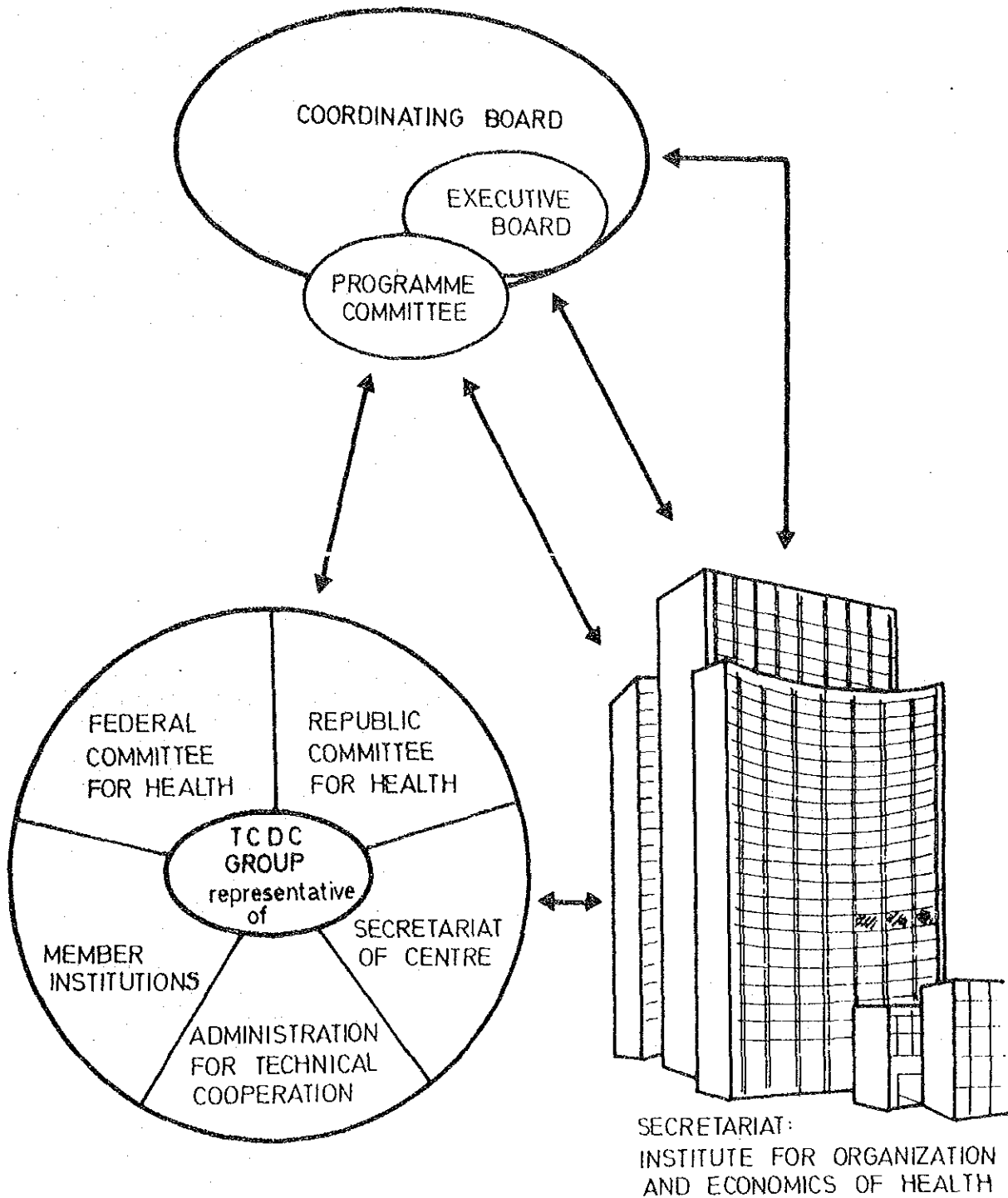
5.

ORGANIZATIONAL STRUCTURE

The organizational structure of the Centre is shown in Figure 1. Two representatives are from each member institution form the Coordinating Board which is the decision-making body of the Centre. The Coordinating Board members elect their chairpersons and vice-chairpersons, while the secretary is permanently from the secretariat institution (the Institute for Organization and Economics of Health). For operational reasons, eight members of the Coordinating Board are elected to the Executive Board, which again has its own chairperson.

Experts from several member institutions form the Programme Committee which proposes programme development for the Centre and reviews the documents prepared by the TCDC working group. The TCDC working group is the central operational unit of the Centre. It is composed of professionals with various background and from various institutions. Its task is to draft documents (programme proposals and reports) and to work on their implementation. For larger programmes the TCDC working group may incorporate more experts and coordinate their work (see Figure 1).

FIGURE 1: ORGANIZATIONAL STRUCTURE OF THE CENTRE



WHO Collaborating Centres Among Member Institutions in the
Centre for Health Cooperation with Non-aligned and other
Developing Countries

There are eight WHO Collaborating Centres within member institutions which deal with various aspects of health care:

1. WHO COLLABORATING CENTRE FOR DEVELOPMENT OF APPROPRIATE TECHNOLOGY IN THE CONTROL OF DIABETES MELLITUS
Prof. Z. Škrabalo
Institute for Diabetes, Endocrinology and Metabolic Diseases "Vuk Vrhovac", Medical Faculty, University of Zagreb, Zagreb
2. WHO COLLABORATING CENTRE FOR PRIMARY HEALTH CARE
Prof. Ž. Jakšić
Andrija Štampar School of Public Health, University of Zagreb, Zagreb
3. WHO COLLABORATING CENTRE FOR THE STUDY OF PSYHOTROPIC DRUGS
Dr. N. Bohaček
Department of Neurology and Psychiatry, School of Medicine, University of Zagreb, Zagreb
4. WHO COLLABORATING CENTRE FOR RESEARCH AND REFERENCE SERVICE FOR IMMUNOLOGICAL BIOLOGICAL PRODUCTS
Prof. Dr. Ikić
Institute of Immunology, Zagreb
5. WHO COLLABORATING CENTRE FOR REFERENCE AND RESEARCH ON BACTERIAL VACCINES AND IMMUNIZATION PROGRAMMES
Prof. B. Popović
Institute of Immunology, Zagreb
6. WHO VIRUS COLLABORATING CENTRE
Prof. M. Galinović-Weisglass and Dr. Borčić
Department of Virology Andrija Štampar School of Public Health University of Zagreb and Institute of Public Health, Zagreb

7. WHO COLLABORATING CENTRE FOR
PESTICIDE TOXICOLOGY--TOXICITY
AND SAFETY OF ANTICHOLINESTERASE
COMPOUNDS

Dr. R. Plestina
Department of Toxicology
Institute for Medical
Research and Occupational
Health
Yugoslav Academy of Sciences
and Arts, Zagreb

8. WHO COLLABORATING CENTRE FOR
HEALTH DEVELOPMENT AND TCDC

Dr. B. Skupnjak
Institute for Organization
and Economics of Health,
Zagreb

P A R T T W O

MEMBER INSTITUTIONS AND THEIR ACTIVITIES

The List of Member Institutions*

1. Institute for Organization and Economics of Health, Zagreb
2. Research Drug Center, Zagreb (now part of the Institute for Organization and Economics of Health)
3. Association of Health Institutions of SR Croatia, Zagreb
4. Medical Faculty, University of Zagreb, Zagreb
5. Andrija Štampar School of Public Health, Medical Faculty, University of Zagreb, Zagreb
6. Institute for Medical Research and Occupational Health, Zagreb
7. Institute of Public Health of SR Croatia, Zagreb
8. Institute of Public Health of the City of Zagreb, Zagreb
9. Institute for Immunology, Zagreb
10. Institute for Mother and Child Care, Zagreb
11. SUVAG Center for Speech and Hearing Rehabilitation, Zagreb
12. Vuk Vrhovac Institute for Diabetes, Endocrinology nad Metabolic Diseases, Medical Faculty, University of Zagreb, Zagreb
13. Architectonic Design and Consulting (APZ), Zagreb
14. Stomatology Faculty, University of Yagreb, Zagreb
15. Faculty of Pharmacy and Biochemistry, University of Zagreb, Zagreb
16. Center for the Study and Treatment of Alcoholism and other Drug Dependencies, Dr M. Stojanović Hospital, Zagreb
17. Dr. F. Mihaljević Infectious Diseases Teaching Hospital, Zagreb
18. Self-managing Community of Interest for Education and Professional Training in the Field of Health, Zagreb
19. Advanced School for Nurses and Health Technicians, Zagreb
20. Health Equipment Business Community, Belgrade-Zagreb
21. University Rehabilitation Institute with Service for Technical Cooperation Support for Rehabilitation of Disabled Persons, Ljubljana

*June 1985

1. INSTITUTE FOR ORGANIZATION AND ECONOMICS OF HEALTH

Savska 41/VII
P.O. Box 913
41000 Zagreb
YUGOSLAVIA

1/ Activities

1.1. The institute studies, analyses, evaluates and does consulting in the following fields:

- a/ macro - and micro - economics; planning, programming and development of health services;
- b/ optimal forms of organization of health facilities;
- c/ medical technology and the supply and functional construction of health facilities;
- d/ production, distribution and consumption of pharmaceuticals;
- e/ contemporary pharmacotherapy.

1.2. It initiates, organizes and coordinates the activities of various organizations and institutions in the area of health cooperation and assistance among non-aligned and other developing countries.

1.3. It is engaged in publication activity on questions related to the above areas.

2/ Departments

2.1. Department for the Economics of Health Activity

2.2. Department for the Organization of Health Services and Health Planning

2.3. Department for Medical Technology, Supply and Functional Construction of Health Institutions

2.4. Department for Study of Health Services and Health Systems in other Countries

2.5. Research Drug Center

3) Personnel

The Institute conducts its work on the principle of ad hoc working groups and teams which are formed to deal with specific tasks and to carry out particular studies and projects. These groups are coordinated by several full timers. There is a full time staff of 15 members, 10 of whom have university level training or higher (3 physician-specialists, 4 with master's of science degrees). Most members of the staff know English and some also use French, German or Russian.

The institute staff members are also involved in teaching at the various levels and serve as temporary advisers to the WHO.

4. Contributions to Cooperation among Developing Countries

The Institute for Organization and Economics of Health can be included both directly and indirectly in cooperation with developing countries in all areas of activities noted above.

It is particularly involved in coordinating activities in planning the development of national health services and manpower training. As the secretariat and service institution for the Centre for Health Cooperation with Non-aligned and Developing Countries, the Institute performs the administrative functions of the Centre and facilitates contacts, meetings and other activities among developing countries in the area of health.

The Institute is one of three republic institutions involved in the intracountry planning process (Long term plan in the field of health until year 2000). It is also engaged in the analytical and technical aspects of planning process on regional basis for several regions within Yugoslavia.

The institute has a long cooperation with the WHO-EURO in the areas of health planning and economics of health, and is the leading institution in that area in Yugoslavia. As such it is one of initiators of the Southern-European countries cooperation in the field of health economics. It organized several meetings and workshops with the WHO-EURO such as on Selfcare (Dubrovnik, 1974), Health Economics (Dubrovnik, 1974) etc.

2. RESEARCH DRUG CENTER

Savska 41/VII
P. O. Box 913
41000 Zagreb
YUGOSLAVIA

1/ Activities

The Research Drug Center functions as an association of health and research institutions which cooperate to carry out the following activities in the field of pharmaceuticals:

- 1.1. Promotion of pharmacotherapy and clinical pharmacology /through participation in postgraduate education and programs of specialization in clinical pharmacology: organization of seminars and other professional meetings; monitoring the side effects of pharmaceuticals; elaboration of methods of clinical trials etc/;
- 1.2. Providing up-to date information on pharmaceuticals to physicians and pharmacists /as editorial headquarters for the quarterly journal, PHARMACA; through publication of other materials; organization of seminars etc./;
- 1.3. Research and control of pharmaceuticals-pharmacies /participation in preparation of the Yugoslav Pharmacopeia; elaboration of legal regulations on pharmaceuticals/;
- 1.4. Research on economic problems in the field of pharmaceuticals /e.g., monitoring of prices and consumption of pharmaceuticals; research on prescription habits of general practitioners/.

Since 1977 the Secretariat of the Research Drug Center has been a part of the Institute for Organization and Economics of Health.

2/ Departments

The Research Drug Center consists of a single organizational unit which coordinates the activities of various collaborating institutes, such as: the Department of Clinical Pharmacology of the Clinic of Internal Medicine, Rebro Teaching Hospital, Zagreb; the Institute of Pharmacology of the Zagreb Medical Faculty; the Institute of Research and Control of Drugs; the Clinic for Infectious Diseases; the Clinic for Psychiatric Diseases; and the Department for Pharmacies of the Association of Health Institutions of SR Croatia.

3/ Personnel

The Research Drug Center has 5 full time staff members, 4 of whom have at least university-level training /pharmacists, physicians/. There are more than 700 professionals of different specialties from collaborating institutions who are engaged as consultants for various Center projects. Knowledge of foreign languages include: English, German, Italian and Russian.

4/ Contributions to Cooperation among Developing Countries

The Research Drug Center is the technical part of the Yugoslav Committee for Drugs. It is also a national centre for Monitoring Adverse Drug Reactions and, as such, it has participated in the WHO global programme, "Spontaneous Monitoring for Adverse Drug Reactions" since 1974. All doctors (primary health care, polyclinic, hospital)

are invited to report their observations concerning adverse drug reactions on special forms. Data collected in such way can be compared with other countries via WHO and also are provided to the Yugoslav legislative body which is responsible for determining the lists of approved drugs. It is precisely this Research Drug Center that has been fighting for years to ensure the quality and control of drugs on the Yugoslav market.

3. ASSOCIATION OF HEALTH INSTITUTIONS OF SR CROATIA

Savska 41/VII
P.O. Box 913
41001 Zagreb
YUGOSLAVIA

1/ Activities

The Association is an organization formed by around 280 health institutions in the Republic of Croatia for the purposes of coordinating the work of member institutions, health planning and programming, manpower training, etc.; monitoring and suggesting changes and additions to health legislation; providing expert advice to health institutions, governmental agencies and other bodies; and, in general, advancing the status of health and the work of health institutions in the Republic. These functions are carried out by a professional staff which is organized by member institutions.

2/ Departments

2.1. Department for Economics and Organization

- a. instruction and consultation on economic-financial problems of the health service
- b. compilation of analytical, statistical and other materials on economic-financial matters of the health service
- c. work on a contract basis with individual health institutions (e.g., with regard to agreements on allocation of total revenues and personal income,

negotiations on health care between health institutions and health insurance self-managing interest communities)

- d. cooperation with republic, intercommunal and communal organs of authority; with professional organizations; with the Yugoslav Federation of Associations of Health Institutions, Republic and Regional Associations in resolving economic-financial problems of the health service

2.2. Legal Department

- a. proposes drafts of new and changes and additions to existing laws and regulations in the area of health, and monitors and analyzes the implementation of health legislation
- b. provides legal interpretations and opinions
- c. organizes conferences, seminars, etc.
- d. compiles and publishes materials on health law

2.3. Economic-Commercial Department

- a. organizes the supply of medical and other equipment and materials to health institutions
- b. organizes international exhibitions and fairs

2.4. Department for Pharmacy Activity

- a. cooperates with the Research Drug Center of the Institute for Organization and Economics of Health, with the Faculty of Pharmacy and Biochemistry of Zagreb, University, with the Croatian Pharmaceutical Society and other institutions to promote pharmacy activity.
- b. publishes a card file of factory-prepared drugs and other professional editions

2.5. Accounting Department

2.6. General Affairs Department.

3/ Personnel

The professional staff of the Association of Health Institutions of SR Croatia includes 29 persons, 10 of whom have university-level training or higher (e.g. economists, lawyers). Knowledge of foreign languages include: English, German, Italian, and Russian.

4/ Contributions to Cooperation among Developing Countries

- 4.1. The Association can contribute in the following ways:
through studies and plans for the organization of health services in developing countries with regard to professional-
- medical, economic and legal aspects, together with other members of the Centre for Health Cooperation with Non-
-aligned and Developing Countries
- 4.2. through organization and convening of the international exhibition Medicine and Medical Aids - INTERLABOR at the Zagreb Fair
- 4.3. through organization and convening of international meetings in Yugoslavia (conferences, symposia, panel discussions, etc.) either independently or together with other institutions and organizations.
- 4.4. through facilitating contacts with specific member institutions in Croatia for the purpose of exchanges of experience, experts, etc.

4. MEDICAL FACULTY, ZAGREB UNIVERSITY

Šalata 3
41000 ZAGREB
YUGOSLAVIA

1/ Activities

Undergraduate and postgraduate education in the health sciences, scientific research and professional health care activities are organized and carried out within the scope of the Zagreb Medical Faculty. In addition, the Faculty also engages in various publication activities for the needs of educational, scientific and professional work.

Postgraduate education lasting 2-6 semesters and leading to a diploma is offered in the following areas:

1. Diabetology
2. Endocrinology
3. Gastroenterology
4. Cardiology
5. Nephrology
6. Orthopedics
7. Ophthalmology
8. Neurology
9. Child psychiatry
10. Social psychiatry
11. Psychotherapy
12. Medical genetics
13. Medical cytology
14. Emergency medicine
15. Clinical pharmacology
16. Otorhinolaryngology
17. Pre-clinical experimental pharmacology
18. Public health and epidemiology

19. Occupational health
20. School health
21. School hygiene
22. Sports medicine
23. Medical microbiology
24. Clinical-laboratory diagnostics
25. Industrial sanitation and work safety
26. Health ecology
27. Mother and child care
28. General practice
29. Rheumatology
30. Radiology
31. Pediatrics
32. Neo-perinatology

With completion of a thesis and dissertation, master's and doctoral degrees are awarded, respectively, by the Zagreb Medical Faculty.

2/ Departments

The Faculty consists of 30 work units (departments) which are organized into 3 main divisions: Basic Medical Sciences, Clinical Medical Sciences and the Andrija Štampar School of Public Health.

3/ Personnel

There are 577 persons employed at the Faculty: 211 with doctorates, 29 with master's degrees, and 337 other teaching, administrative and technical workers.

4/ Contributions to Cooperation among Developing Countries

The Zagreb Medical Faculty can contribute to cooperation

among developing countries by sending expert educators and consultants to medical and health faculties and institutions for the purpose of assisting in the advancement of the organization of health services and teaching and scientific work, as well as for collaboration in joint scientific-research projects of mutual scientific and practical interest. In addition, it accepts students from developing countries (around 30 candidates per year).

Medical faculty has started its international collaboration group and even one of vice-deans' duties are specifically international collaboration.

5. ANDRIJA STAMPAR SCHOOL OF PUBLIC HEALTH, MEDICAL SCHOOL,
UNIVERSITY OF ZAGREB
WORLD HEALTH ORGANIZATION COLLABORATING CENTRE FOR
PRIMARY HEALTH CARE

Rockefellerova 4
41000 ZAGREB
YUGOSLAVIA

1/ Activities

As a division of the Zagreb Medical Faculty, the Andrija Štampar School of Public Health carries out part of the undergraduate and postgraduate education in the medical sciences. In addition, the School also organizes and engages in scientific and professional work in public health (preventive medicine); in primary health care and social welfare; environmental protection and promotion; preventive, socio-medical and health educational activities; study and monitoring the health status of the population groups; planning the organization and evaluation of work of the health service; health information, statistics and documentation; microbiology and parasitology; and international public health work.

2/ Departments

- 2.1. Institute of Public Health
- 2.2. Institute for Health Ecology
- 2.3. Institute for Statistics, Epidemiology and Informatics
- 2.4. Institute for Microbiology
- 2.5. Andrija Štampar Library.

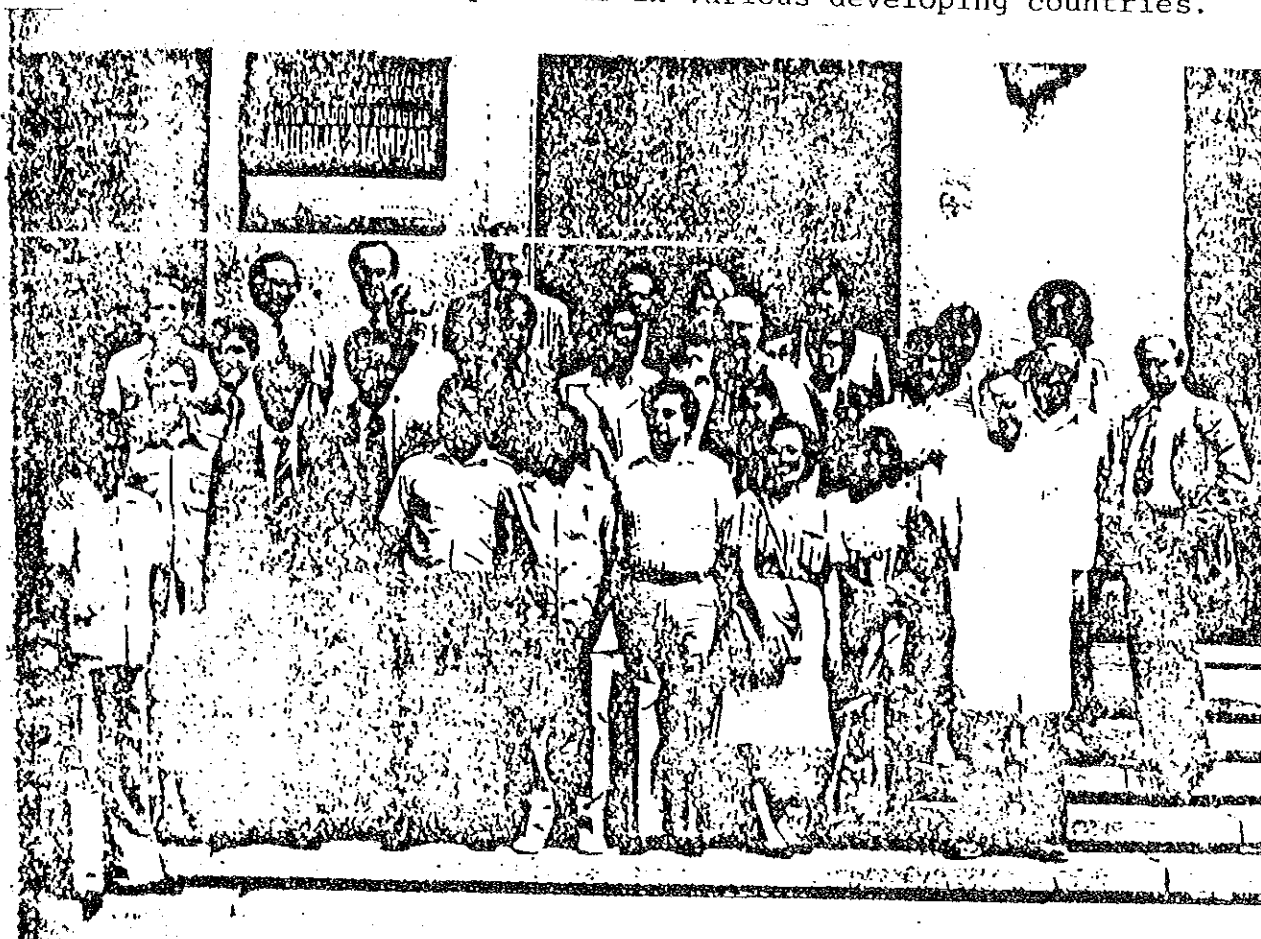
3/ Personnel

There are 65 members on the teaching staff, 24 with doctorates and 10 with master's degrees. In addition, a larger number

of practitioners also participate in the School's educational activities on a part time basis.

4/ Contribution to Cooperation among Developing Countries

In cooperation with the World Health Organization and other international organizations, the Andrija Štampar School of Public Health organizes postgraduate training courses in various public health fields. Members of the School's full and part time educators have or are working as WHO consultants in resolving health problems in various developing countries.



PARTICIPANTS AND STAFF OF THE FIFTH INTERNATIONAL NINE-WEEK POSTGRADUATE COURSE IN PLANNING AND MANAGEMENT OF PRIMARY HEALTH CARE IN DEVELOPING COUNTRIES, ANDRIJA ŠTAMPAR SCHOOL OF PUBLIC HEALTH, MEDICAL SCHOOL, UNIVERSITY OF ZAGREB,

1 June - 31 July, 1984

6. INSTITUTE FOR MEDICAL RESEARCH AND OCCUPATIONAL HEALTH

Moše Pijade 158
P.O. Box 291
41000 Zagreb
YUGOSLAVIA
tel. 434-188
273-132

This institute is the major research institution in the republic, oriented purely toward medical research and having the leading role in the development research in the republic. It is located in several premises according to with the joint adress indicated above.

1) Activities

i. i. Research activity

- a. research on the effects of the environment on human life and work, especially those related to industrialization and urbanization;
- b. basic medical research on human physiological, pathological and psychological processes;
- c. research on protection of human health from the harmful effects of chemical and physical agents.

1.2. Health protection activity

- a. Control of noxious substances in the living and working environment, as well as control of X-radiation and radiations from high sources and radioactive contamination of the environment;
- b. Assessment of residual work capacity and disability.

1.3. Educational activity

- a. graduate and postgraduate teaching;
- b. organization of seminars, courses and individual training of experts in the areas covered by the Institute.

2) Sections

2.1. Experimental Biomedicine

- a. Laboratory of Analytical and Physical Chemistry
- b. Laboratory of Biochemistry
- c. Laboratory of Cell Biology
- d. Laboratory of the Physiology of Mineral Metabolism
- e. Laboratory of the Psychophysiology of Work
- f. Laboratory of Toxicology
- g. Laboratory of Mutagenesis

2.2. Epidemiology nad Clinical Medicine

- a. Laboratory of the Epidemiology of Chronic Diseases
- b. Laboratory of Applied Physiology
- c. Department of General and Clinical Medicine
- d. Departement of Occupational Diseases
- e. Laboratory of Anthropology
- f. Laboratory of Human Metabolism

2.3. Environmental Hygiene

- a. Laboratory of Environmental Hygiene
- b. Laboratory of Radiation Dosimetry
- c. Laboratory of Environmental Radioactivity

2.4. General Affairs

3) Personnel

The Institute has a total staff of 247 persons, 106 of whom have university degrees, English is used by 140 staff members; German by 50; and French by 15. Other languages include: Czech, Hungarian, Italian, Russian and Spanish.

4) Contributions to Cooperation among Developing Countries

4.1. The Institute can participate in various programs of research and manpower training. Based on experience here in Yugoslavia, it is particularly equipped to contribute to the development of occupational health services with a specific profile of health manpower to deal with some of the consequences of rapid industrialization on health status in developing countries, either through training of manpower in our country or in countries where such needs exist.

4.2. The Institute can also join with other institutions to conduct specific research programs on the harmful effects of the environment on human health (except for live agents). Researchers from countries with which cooperation is established could also be included in the research teams and, by so doing, would also receive training in specific disciplines. This applies in particular to research programs on the actions of pesticides.

4.3. As a collaborating centre of WHO, the Institute takes part in adopted programmes for testing and evaluating the efficacy and safety of new-developed pesticides conducted on a tripartite basis among WHO, industry and national governments.

- 4.4. Postgraduate students of various profiles have been educated in the field of pesticides toxicity (Costa Rica, Tanzania, Indonesia, Brasil, etc.), especially toxicology of anticholinesterases and pyrethroids in mammals.

- 4.5. The Institute organizes an annual International School of Biological Anthropology. In 1984 the topic of the training programme was the "Anthropology in Developing Countries". In 1985 the topic was "Rapid Modernization and Human Biology" while in 1986 it is planed to be on the topic "Epidemilological significance of increase of average life expectancies in human population".

7. INSTITUTE OF PUBLIC HEALTH OF SR CROATIA

Rockefellerova 7
41000 ZAGREB
YUGOSLAVIA

1/ Activities

The Institute of Public Health of SR Croatia carries out hygiene - epidemiological and socio-medical tasks throughout the Republic of Croatia. This includes monitoring the health status of the population, the network of health institutions and profiles of health workers through collection of health, demographic and vital statistics; investigating the causes of infectious diseases and implementing measures for their control; participating in programming health care; etc. It also provides advanced training for health workers both independently and in cooperation with the Zagreb Medical Faculty and other institutions of higher education. Members of its staff are also engaged in scientific research work.

2/ Departments

- 2.1. Department for Bacteriology and Parasitology
- 2.2. Department for Epidemiology and Virology
- 2.3. Department for Food Hygiene
- 2.4. Department for Health Statistics and Socio-Medical Research
- 2.5. Unit for Health Research Work
- 2.6. Department for General Affairs

3/ Personnel

There are 286 persons employed at the Institute of Public

Health of SR Croatia, 55 of whom have at least university-level education. Almost all of these latter speak one foreign language (English, French, German, Italian, Russian and others).

4/ Contributions to Cooperation among Developing Countries

The Institute of Public Health can be included in programs of international cooperation in several ways:

- 4.1. acceptance of experts for laboratory training in the areas of parasitological, microbiological and virological diagnostics and for monitoring the health quality of foodstuffs especially with regard to pesticides and metals;
- 4.2. acceptance of experts on study tours for the fields of epidemiology, organization of health services and nutrition, also including the organization and making of legal regulations for improving the quality of foodstuffs;
- 4.3. organization of short seminars from the areas cited above;
- 4.4. participation of individual experts in teaching (undergraduate and graduate) which could be organized at appropriate institutions in Yugoslavia, particularly in the areas of epidemiology, microbiology, virology, public health and communal hygiene;
- 4.5. sending of experts or teams to non-aligned and other developing countries for specific tasks from the above - mentioned areas and activities.

8. INSTITUTE OF PUBLIC HEALTH OF THE CITY OF ZAGREB

Mirogojska 16
41000 ZAGREB
YUGOSLAVIA

1/ Activities

The Institute of Public Health of the City of Zagreb is engaged in hygiene-epidemiological and socio-medical activities within the territorial limits of Zagreb, and for broader socio-political communities. It performs research and educational functions as well as tasks aimed at direct protection and promotion of human health.

2/ Departments

2.1. Epidemiology

- a. Department for Operational Epidemiology
- b. Department for Analytical Epidemiology
- c. Department for Microbiological Activity
- d. Department for Health Education

2.2. Health Care and Protection of the Work and Life Environment

- a. Department for Occupational Health and Traffic
- b. Department for the Study and Promotion of Community Food Supply
- c. Department for the Protection and Promotion of the Human Environment
- d. Department for Sports Medicine

2.3. Health Research and Promotion of Health Care

- a. Department for Health Research

- b. Department for the Development of the Health Service
 - c. Department for Chronic Diseases and Geriatrics
 - d. Center for Cardiovascular Diseases
- 2.4. Disinfection, Disinsectization, Deratization, Decontamination and Deodorization Department
- 2.5. Department for Health Economics

3/ Personnel

The Institute of Public Health of the City of Zagreb has 333 employees, 92 of whom have university-level training or higher (85 in the medical professions). Practically all health workers in managerial positions and those with university-level training use at least one foreign language (most often English).

4/ Contributions to Cooperation among Developing Countries

The Institute can participate either independently or with other members of the Centre for Health Cooperation with Non-aligned and Developing Countries in sending experts to developing countries as needed, in accepting persons from developing countries for advanced training and other common programs within the sphere of its activities.

9. INSTITUTE FOR IMMUNOLOGY

Rockefellerova 2
41000 ZAGREB
YUGOSLAVIA

1/ Activities

- 1.1. Scientific research work in the area of human immunobiology; provision of undergraduate and graduate education in immunology; preparation of serums and vaccines, blood derivatives and other biological preparations; testing of materials of biological origin for the purpose of disease prevention; organization of actions for disease prevention and assistance with other institutions in organizing such actions.
- 1.2. The Institute is a World Health Organization Collaborating Centre for Reference and Research on Bacterial Vaccine and World Health Organization Collaborating Centre for Research and Reference Services.

2/ Departments

The Institute is divided into ten Departments. In addition, it makes use of a common library with the Andrija Štampar School of Public Health and Institute of Public Health of SR Croatia.

3/ Personnel

There are a total of 303 workers at the Institute for Immunology. Of these, 78 have university-level training or

higher (e.g., biologists, pharmacists, chemists, veterinarians, physician-specialists and others). All of these workers are required to know English and the majority also know either French, German and/or Russian.

4/ Contributions to Cooperation among Developing Countries

- 4.1. The Institute for Immunology can be included in programs of international cooperation in manpower education within its sphere of work, can provide assistance to developing countries for the establishment of their own production and control of immunobiological preparations, and can cooperate with developing countries in selecting equipment and constructing facilities for such production and control.
- 4.2. It can supply developing countries with appropriate immunobiological preparations for immunization activities under especially favorable terms.
- 4.3. It can assist in sending experts to developing countries.

10. INSTITUTE FOR MOTHER AND CHILD CARE

Klaićeva 16
41000 Zagreb
YUGOSLAVIA

1/ Activities

The Institute for Mother and Child Care is a specialised educational and professional-methodological health institution which seeks to identify, propose and carry out measures for the protection and promotion of mother and child health throughout the Republic of Croatia. In its work, the Institute applies the achievements of the modern science.

The duties of the Institute include the following activities:

- a/ scientific and research work in areas important for child care and maternity health care;
- b/ cooperation with other institutions in scientific and research work and initiation of scientific research in various parts of the Republic of Croatia;
- c/ organising, programming and conducting of postgraduate education for all health worker profiles whose sphere of action is child care and maternity health care; participation in educational programmes planned for medical students and nurses;
- d/ the Institute serves as an educational base for Zagreb Medical Faculty;
- e/ participating in compulsory continuing education of physicians and other health workers;
- f/ monitoring and studying the events influencing Mother and Child Health, proposing measures for eliminating unfavourable factors and improving Mother and Child Health Care;

- g/ cooperation with all health and other institutions as well as with working organizations which directly or indirectly take part in child and maternity health care;
- h/ its activity in Family Planning includes:
- studying the social, psychological and juridical problems of the family,
 - conducting epidemiological observations of artificial abortion frequency and proposing measures for reducing the number of abortions;
 - developing research work on theoretical aspects of Family Planning;
- i/ studying the methodology of health education, coordinating the forms and extent of the health education programmes in different areas;
- j/ research and application of new methods, improving existing health care methods, diagnosing, treatment and rehabilitation methods in the appropriate hospital wards or in outside-units;
- k/ clinical research on new drug-substances for children and new preparations for nutrition;
- l/ medical publishing work and editing of the "Archiv for Mother and Child Health Care";
- m/ cooperation with related institutes and institutions of Federal significance, and with institutions in other republics and abroad;
- n/ cooperation in programs contracted with international organizations /UNICEF, FAO, etc./;
- o/ performing tasks entrusted to the Institute by competent authorities.

2/ Departments

In addition to departments which carry out research and educational activities, the Institute has units which

provide all forms of health care from first contact to sub-specialized activities in the area mother and child care.

- a/ Pediatrics provides dispensary, polyclinical and inpatient care to children aged 0-14;
- b/ Child Surgery provides constant emergency, polyclinical and inpatient services for the city of Zagreb and other parts of SR Croatia for children aged 0-14;
- c/ Child Orthopedics provides polyclinical and inpatient services for congenital and acquired orthopedic conditions in children aged 0-14;
- d/ Maternity Care includes a department for family planning and contraception counseling clinic, dispensary for women and counseling clinic for pregnant women, and department for gynecology for children;
- e/ Diagnostics includes an X-ray unit; laboratories for biochemistry, hematology and microbiology; a department for clinical study of drugs and department for photo documentation;
- f/ Theoretical Departments include a department for statistical records and analyses; a health education department, editorial offices for the journal, ARHIV ZA ZAŠTITU MAJKI I DJECE; a library and administrative department;
- g/ Scientific Research Units.

3/ Personnel

There are a total of 425 workers employed at the Institute for Mother and Child Care, 75 of whom have at least university level training.

Knowledge of foreign languages includes English /42/people , Franch /26/, German /25/, Russian /10/ and Italien /5/.

4/ Contributions to Cooperation among Developing Countries

According to its work and its potential so far, the Institute for Mother and Child Care is able to take part in cooperation

with developing Countries /within the Centre/, in the following areas:

4.1. Educational activities

- a/ planning and organization of the development of manpower for teaching activity in the area of mother and child health;
- b/ training courses for experts from developing countries in child health care which could be held at the Institute;
- c/ cooperation in mother and child health education in developing countries.

Thus far, many experts from developing countries have received specialist training at the Institute.

4.2. Participation in conceiving and working out programs of Mother and Child Health Care.

This cooperation has been carried out during visits of experts from developing countries, through consulting and informative function of the Institute.

4.3. Manpower cooperation and assistance

This is realised through participation in actions organised by the WHO, UNICEF or organizations for technical cooperation. In the very close future (in September, 1985), Zagreb and the Mother and Child Care Institute will be hosts for an International Seminar on the Immunization of Children, organised by: the Yugoslav Commission for UNICEF and the UNICEF Secretariat in New York, in cooperation with the World Health Organization. Based on the accepted report of Mr. James Grant, Executive Director of UNICEF, "State of the World's Children Report - 1984" (April 24 - May 5, 1984, at the Rome session of the Executive

Board), it was proposed that an International Seminar on the Immunization of Children in the World be held in Zagreb, Yugoslavia, taking into consideration the fact that Yugoslavia has registered significant results in this field over a comparatively short period. This, in turn, can set a good example for other developing countries. The following topics will be discussed at the Seminar: Community Care for Children in Yugoslavia; Hygienic Standards in the Prevention of Contagious Disease; Influence of Proper Diet on Children, Especially Natural Foods; Immunization; the Influence of Contagious Diseases on Children's Health; the Epidemiology of Children's Contagious Diseases in the World; the Development and Results of the Immunization of Children in the SFRJ; Current Possibilities of Immunization (vaccines against contagious diseases). Special attention shall be devoted to planning aspects, immunization programmes at the local level and community participation.

4.4. Family planning

- a/ consultation with regard to introduction, planning and evaluation of family planning activities;
- b/ education of medical and other manpower in family planning; one or two weeks long seminars on various subjects (family planning; the methods for family planning; psycho-social, ethical and demographic aspects of family planning).

4.5. Participation in developing programs for child nutrition and registries of medical substances for child health care (examine proper foods for children, develop national programmes for child nutrition, drug research unit).

11. SUVAG CENTRE FOR SPEECH AND HEARING REHABILITATION

Anke Butorac 10
41000 Zagreb
YUGOSLAVIA

Suvag Centre is a medical, educational and social institution, established in 1961 by the Executive Council of the Socialist Republic of Croatia with a definite purpose: to apply the new Verbotonal method in the process of speech and hearing rehabilitation. The main idea of the Verbotonal System has been developed and worked out in detail by Professor Dr Academician Petar Guberina.

1/ Activities

- 1.1. Diagnosis, treatment and rehabilitation of speech and hearing difficulties;
- 1.2. Scientific research and manpower development.

2/ Departments

- 2.1. Department for Diagnostics (audiometry, ENT outpatient clinic, psychology, neurology, etc.)
- 2.2. Department for Speech Difficulties (for rehabilization of stuttering, aphasia, etc.)
- 2.3. Nursery School for Children with Normal and Damaged Hearing
- 2.4. Department for Individual Hearing Rehabilitation and Fitting of Hearing Prostheses
- 2.5. Department for Scientific Research and Development of Manpower (for Yugoslavia and other countries)

3/ Personnel

There are 192 persons employed at the Suvag Centre. Of these 126 have at least university-level training. Over half of the employers speak various foreign languages including French, Italian, English, Russian, German, Spanish and Portugese.

4/ Contributions to Cooperation among Developing Countries

4.1. The Suvag Centre for Speech and Hearing Rehabilitation serves as a Yugoslav and international centre for the Verbotonal Method and trains manpower in many countries. It is particularly active among non-aligned and other developing countries. Experts from these countries come to Zagreb, and personnel from the Suvag Centre go to these countries at the request of authorities, institutions and organizations. They stay there for few months, a year or longer, working on developing local manpower for speech and hearing rehabilitation, alphabetization and training in foreign languages. Among the countries in which programs have already been established by our expert teams are: Tunis, Egypt and Algeria. Prof. Guberina and other representatives of the Suvag Centre established Suvag Centres for Verbotonal Methods in Several African countries (e.g. , Angola, Senegal) for:

- a/ alphabetization,
- b/ speech and hearing rehabilitation of handicapped children, and
- c/ speech development in children from different subcultures. Twenty members from Suvag have already been included in various activities which have mainly been financed by authorities in developing countries. In four cases, the Yugoslav Federal Administration for International Scientific and

Technical Cooperation has financed these efforts and, in one instance, the Croatian Republic Administration for Technical Cooperation.

4. 2. The Centre organizes international courses each year in Yugoslavia to teach Verbotonal methods. Each year, up to 50 participants from developing countries have attended these courses for periods up to 3 months. Courses are a Hended every year each time up to 50 participants.



12. VUK VRHOVAC INSTITUTE FOR DIABETES, ENDOCRINOLOGY AND METABOLIC DISEASES, MEDICAL SCHOOL, ZAGREB UNIVERSITY

Krijesnice bb
41000 Zagreb
Yugoslavia

Clinical Hospital "Ozren Novose

WHO COLLABORATING CENTRE FOR
DEVELOPMENT OF APPROPRIATE
TECHNOLOGY IN THE CONTROL
OF DIABETES MELLITUS

INFORMATION CLEARING HOUSE FOR
DIABETES FOR DEVELOPING
COUNTRIES



1) Activities

As a professional, scientific and educational institution, the "Vuk Vrhovac" Institute for Diabetes, Endocrinology and Metabolic Diseases participates in health care of diabetics. Within the scope of its professional activity, the Institute provides health care for diabetics on the secondary health care level (both inpatient and outpatient care).

The Institute participates in undergraduate and post-graduate training of the Medical School, University of Zagreb, as well as in continuous postgraduate training of physicians, engineers, nurses, dieticians and health technicians.

Within the scope of its scientific activity the Institute takes part in various research projects in the field of etiology, diagnostics, diabetic therapy, thyroid gland diseases, male infertility, diseases of fat disturbances

in organisms and metabolically-induced bone diseases.

Cooperation with developing countries is a special type of activity performed in the Institute. In this respect, the Institute for Diabetes, Endocrinology and Metabolic Diseases has been designated as an Information Clearing House for Diabetes for Developing Countries in 1979, and as a WHO Collaborating Centre for Development of Appropriate Technology in the Control of Diabetes Mellitus in 1981.

2, Departments

The Vuk Vrhovac Institute has the following organizational units:

- 2.1. General Affairs
- 2.2. Accounting
- 2.3. Department for the Organization of Health Care
- 2.4. Scientific Research Department
- 2.5. Morphology Department
- 2.6. Endocrinology Department
- 2.7. Hormone Laboratory
- 2.8. Department for Diabetology, with Consultation-
-Outpatient Clinic
- 2.9. Metabolic Department
- 2.10. Outpatient Clinic for Control of Fat-Metabolism
Disturbances
- 2.11. Clinical Chemistry Laboratory.

3) Personnel:

There are 48 professionals with university level-training

or higher at the Vuk Vrhovac Institute (28 physicians, 40 chemical and biochemical engineers; 3 professors at the Medical Faculty and at the Faculty of Pharmacy and Biochemistry, and 3 English and German language teachers. The majority of physicians and chemists can use English, while some also know French, German, Hungarian or Russian.

4) Contributions to Cooperation among Developing Countries

International cooperation between the Institute and developing countries as well as international organizations (WHO, IDF, FAO) has been carried for more than 10 years in the following areas:

4.1. Data Bank

The Data Bank is primarily directed towards diabetes problems in developing countries. It was founded by the Vuk Vrhovac Institute with the goal of distributing data on diabetes mellitus. By establishing the Data Bank, the Institute started a close cooperation with numerous developing countries, especially Malta, Bangladesh, India, Egypt, Cuba, Libya, Tanzania, Pakistan, Venezuela, China, Ethiopia, Kenya, Peru and Cyprus. All relevant pieces of information including references, literature and correspondence have been stored in special files (separately for each country). Computer processing of the Data Bank has been initiated.

Programmes relevant to developing countries have been extensively elaborated. For instance, the following information is available in the Data Bank:

- bibliographical data regarding diabetology;

- research findings in diabetology relevant to developing countries;
- data on incidence and prevalence of diabetes mellitus and its complications;
- addresses of experts and institutions in developing countries dealing with diabetes problems.

Computer processing of all data is planned (so far only a directory has been worked out). The Data Bank is open to all foreign experts interested in diabetes.

4.2. Publishing Activity

The Bulletin: Delivery of Health Care for Diabetics in Developing Countries is published every year. It contains articles by experts from Yugoslavia as well as other countries. The Bulletin is published in 1500 - 3000 copies, four issues a year (every three months). The Bulletin is distributed and has been well received throughout the world. A certain number of the Bulletin issues are distributed by the International Diabetes Federation's secretary office in London (more than 500 issues). It is planned to transform the Bulletin into a specialized publication (with a larger circulation) which would inform experts in developing countries about news in technology and in the literature, with thematic reviews.

Visits to the Institute

Numerous eminent experts have paid visits during the last few years to the Vuk Vrhovac Institute. Basically, the visits to the Institute may be divided into three kinds:

1. stay of experts for diabetic health care from developing and developed countries. The aim of their stay has been to get acquainted with development and performance of diabetic health care, especially with respect to the development of primary, secondary and tertiary health care levels;
2. visits paid by eminent WHO experts aimed at coordinating further activities of diabetic health care in developing countries;
3. visits by representations of many institutions from different countries with which the Institute has established professional, educational and scientific cooperation (contracts).

There is a plan to accept more of these experts when a dormitory is opened within the Centre for Health Cooperation with Non-aligned and Developing Countries (or by the City of Zagreb).

Development of an Integral System of Educational Tools

Being a life-long chronic disease, diabetes has great implications for patients' everyday life. In order to control the disease, patients have to change their habits and their behaviour. Due to this, proper education becomes a necessary part of the treatment. From the beginning of its existence, the Institute recognized and approved this statement. Therefore, continuous patient education has become an integral part of its routine activity. Continuous patient education is performed in the form of lectures, either individually or in large groups. Recently, a system of education of patients in small groups following behaviour therapy principles has been elaborated. For

this purpose, educators (physicians and nurses) had to attend courses headed by a psychiatrist, a psychologist and an expert for public health education.

Due to recent technological advancements and the increasing number of diabetics, a need has arisen to approach the problem of diabetic patient education more intensively. This does not only require a direct involvement of patients and their families in the education process, but also, to a lesser extent, the involvement of the general population taking advantage of up-to-date technology.

In cooperation with "Zagreb-Film", a cartoon-producing company (especially with Mr D. Vukotić, who was awarded the Oscar Prize for his cartoon SUROGAT some years ago), the Vuk Vrhovac Institute plans to develop an integral system of education tools - films, element films, slides, tapes and printed material with commonly recognizable symbols. These materials will be designed in such a way that, with minor changes, they would be applicable in different parts of the world, especially in developing countries. This system of educational tools is meant to be a simple and attractive one. However, at the same time, it should aim at carrying clearly the educational message of the necessity to understand the nature of diabetes mellitus in a proper way, its impact on daily life and the importance of proper treatment with special reference to diabetic diets.

Congresses and Meetings

Until now, several different meetings for experts from developing countries regarding the performance of diabetic health care have taken place in Yugoslavia. The first such meeting, as the Satellite Symposium of the IDF Congress for Developing

Countries, took place in Dubrovnik in 1979. A similar, but somewhat wider-in-scope meeting was held in Opatija in 1982 entitled: "Diabetic Health Care Performance in Developing Countries Regarding Diabetes Mellitus Problems". Representatives from forty-seven developing and non-aligned countries participated in this meeting

Ongoing Projects

1. Malta Project

Comprehensive epidemiological study and the so-called First National Diabetes WHO Programme have been in progress for several years in the Republic of Malta. The leading role was given to the Vuk Vrhovac Institute for Diabetes in Zagreb. Publication of the final report of the first and the second phase of this project is in progress; the third part of the project is still in process, whereas the fourth and the fifth project phase are in the preparation.

In keeping with the agreement to support diabetic health care organization in Malta, two physicians from the Vuk Vrhovac Institute visit Malta continuously on a rotating basis every 3-6 months for the above-mentioned purpose. Two physicians from the Institute are in Malta at the present moment.

2. Cyprus Project

During Dr. Theophanides' stay in Opatija in March 1982, preliminary discussions were started about the epidemiological study of diabetes incidence in Cyprus. After Prof. Dr. Škrabalo's

visit to Cyprus in October 1983 and his discussions with Vice-President of the Republic of Cyprus, Dr Ladas, and Minister of Health, Dr Markiades, the plan for joint epidemiological study has been continuously in progress.

3. Egypt Project

A joint project in Egypt similar to the project carried out in Malta and to the one planned in Cyprus was started in 1983.

4. Problems of Nutrition

Regarding nutrition investigation, data on qualitative and quantitative nutrition indicators of developing and non-aligned countries are permanently collected and processed. Data sent to the Institute are analyzed, and results returned to the sender. The problem of malnutrition diabetes is of special interest and is thus eagerly explored. The Vuk Vrhovac Institute functions as a coordinator of a number of developing and non-aligned countries (twelve research centres in these countries) regarding the Malnutrition Diabetes Project.

13. ARCHITECTONIC DESIGN AND CONSULTING

Petrinjska 7
41000 ZAGREB
YUGOSLAVIA

1. Activities

Architectonic Design and Consulting is an architectural planning and consulting firm which has as one of its main preoccupations the planning and constructing of health facilities. To date it has designed and constructed various medical centers, health centers, hospital facilities and other health institutions throughout SR Croatia. It is also engaged in planning and constructing health-recreational facilities (e.g., sauna, swimming pools, tennis courts, etc.) in both Yugoslavia and abroad.

2. Departments

Architectonic Design and Consulting consists of 10 architectural-planning studios, 5 bureaus for planning all types of building installations and one group for agro-engineering.

3. Personnel

A total of 102 persons are employed at Architectonic Design and Consulting, 41 of whom have at least university-level training (architects, machinists, construction and electrical engineers and others).

4. Contributions to Cooperation among Developing Countries

Members of the Architectonic Design and Consulting staff can participate in planning and constructing small local health facilities in developing countries as well as in making plans for the general development and construction of larger health facilities at the regional and national levels (hospitals, medical, centers, etc.). It has already joined with two other Yugoslav firms in constructing a pharmaceutical factory in Nairobi, Kenya. The possibility exists for expanding such activities in cooperation with other members of the Center for Health Cooperation with Non-aligned and Developing Countries.

14. STOMATOLOGY FACULTY, ZAGREB UNIVERSITY

Gundulićeva 5
41000 ZAGREB
YUGOSLAVIA

The Stomatology Faculty in Zagreb is the most important educational, scientific and health institution for dental medicine in the Socialist Republic of Croatia. Its activity dates from 1948, when stomatology studies were included in the structure of the Medical Faculty. The Stomatology Faculty became independent in 1962.

1. Activities

1.1. Educational activities:

- a) theoretical and practical undergraduate education lasting 10 semesters to train polyvalent physician-stomatologists;
- b) postgraduate education lasting 4 semesters in the areas of stomatology and social psychiatry, alcoholism and other dependencies (master's of science degrees are granted with completion of a thesis);
- c) continuing education through refresher courses for polyvalent stomatologists and specialists.

1.2. Scientific research:

- a) research is conducted both within the scope of the Stomatology Faculty and in cooperation with related institutions;
- b) doctoral degrees are granted following completion and defense of a dissertation based on research conducted at the Faculty;

c) the Faculty co-publishes the quoterly journal: ASCRO.

1.3. Dental health care activities

2. Departments

The Faculty consist of 9 Institutes which are engaged in expert, scientific and educational problem area; 4 Departments for general subjects; 27 Departments for stomatology subjects.

3. Personnel

There are 93 members of teaching staff (33 professors, 14 lecturers, 46 teaching fellows) 51 of whom have a doctor degree of science and 34 master's of science degrees. All members of the teaching staff can use one or more foreign languages, mainly English. The teachers in specific dental subjects hold classes for stomatology students at the Medical Faculty in Rijeka, and also participate in the daily work of the stomatology clinic at the "Clinical Hospital Center" - Zagreb.

4. Contributions to Cooperation among Developing Countries

a) The possibility exists to send instructors and consultants as lecturers to corresponding educational, scientific and health institutions in relevant countries, where they could contribute to the organization and development of stomatology services. Among the lecturers at the Stomatology Faculty, there are several who collaborate with WHO and the International Dental Federation.

b) Many students from developing countries have already

attended and finished studies of stomatology in Zagreb. So far this cooperation with developing countries has been fulfilled primarily through undergraduate training of foreign students, but the number of those who have also completed postgraduate education, specializations in various stomatology branches or who have been awarded master's of science degrees is constantly increasing.

c) Some significant activities in the area of specific dental subjects could be useful and important for cooperation with developing countries:

- dental health care in children,
- early detection of orthodontic anomalies and treatment planning,
- the role of prosthetic therapy in dental health care and relation between prosthesis and surrounding tissues,
- prophylaxis and treatment of "peridontal disease",
- early detection of tumors, especially malignant formations in the oral cavity.

The Stomatology Faculty has been particularly active in the area of children propedentics, where complex programmes of health education, early diagnosis, prophylactic interventions and treatment are organized through kindergarden services and schools. A series of booklets starting with dental problems in pregnancy, and going into infants, pre-school and school children have been published. These programmes assume high participation of children, teachers and parents - the positive results of these activities in the City of Zagreb area are already showing up and, as such, may be used as a model for dental health in other countries.

15. FACULTY OF PHARMACY AND BIOCHEMISTRY, ZAGREB, UNIVERSITY

A. Kovačića 1
41000 ZAGREB
YUGOSLAVIA

1. Activities

- 1.1. Educational activities (by content and length equivalent to European faculties)
- a) undergraduate training lasting 8 semesters on informational teaching (lectures, demonstrations, professional field trips), experimental teaching (laboratories) seminars and consultations and leading to degrees of graduate pharmacist (general) or graduate pharmacist (medical biochemistry);
 - b) postgraduate education in the area of medical biochemistry lasting 4 semesters based on required and elected courses; master's degrees are awarded with completion of a thesis (other programs of postgraduate education are currently in preparation).
- 1.2. Scientific research is organized within the Faculty and in cooperation with other institutions and the pharmaceutical industry (organized as individual, team, uni - or multidisciplinary research); there is also the possibility of supervised research leading to the doctoral degree.
- 1.3. Health and pharmaceutical production activities.

1.4. Some other activities are:

- possible education performed in other organizations
- scientific and expert publishing activity
- laboratory diagnosing
- elaboration of scientific and expert analysis
- giving expert testimonies in legal cases
- plant cultivation, etc.

2. Departments

The Faculty consist of 8 institutes and 7 departments.

3. Personnel

There are 164 persons employed at the Faculty of Pharmacy and Biochemistry. Eighty-two members of the teaching staff have at least university-level training and know English and German. A smaller number also speak French.

4. Contributions to Cooperation among Developing Countries

4.1. The Faculty has trained many students from developing countries.

4.2. It can be included in programs of international cooperation in several ways: for example, participation in the production of pharmaceuticals, in research laboratories, at faculties of pharmacy and medicine, clinical centers, etc. Its Institute for Drug Analysis, Pharmaceutical Chemistry, Pharmacognosy and Pharmaceutical Technology have shown particular interest in cooperation among developing countries. These Institutes would readily send personel to interested developing countries for agreed-upon

periods to facilitate training of local manpower. Yugoslav representatives from our Faculty are prepared to assist colleagues in faculties of pharmacy in developing countries in both scientific-educational work and in founding research institutes for the development and promotion of pharmacioindustry. Since education and training of manpower occupies an important place in the scope of priority needs in non-aligned and other developing countries, the Zagreb Faculty of Pharmacy and Biochemistry is prepared to offer assistance both by sending Yugoslav personnel to developing countries as needed and by accepting students from developing countries for study in Yugoslavia.

16. CENTRE FOR THE STUDY AND TREATMENT OF ALCOHOLISM
OTHER DRUG DEPENDENCIES

UNIVERSITY DEPARTMENT FOR NEUROLOGY, PSYCHIATRY,
ALCOHOLISM AND OTHER ADDICTIONS, DR. MLADEN STOJANOVIC
UNIVERSITY HOSPITAL, ZAGREB

Vinogradska 29
41000 ZAGREB
YUGOSLAVIA

1. Activities

- 1.1. Inpatient and outpatient treatment of alcoholism and other persons with drug dependencies. This treatment is organized through hospitalisation, treatment in dispensaries and polyclinics and clubs for alcoholism and those with other drug dependencies.
- 1.2. Teaching activities include undergraduate and postgraduate levels of teaching in several faculties of Zagreb University. The Centre also participates in specialisation programmes for physicians. There is a specific teaching activity for paramedical and lay people, initiated and conducted by the Department, to promote the self-care and mutual aid activities and certain aspects of prevention and therapy. There are various educational programmes of this type lasting from 3-5 days to 2 years. Special seminars have been organized for experts from other countries.
- 1.3. Scientific research on alcoholism and other drug dependencies.
- 1.4. Maintenance of the Republic Registry of Treated Alcoholics

of SR Croatia in cooperation with the Republic Institute of Public Health. It has been collecting, processing and periodically publishing the data since 1965. Recently these data have been computerized.

Data from the register illustrate the complexity and dimension of the problem of alcoholism in the SR of Croatia. It also enables the process of continuing evaluation of program control of alcoholism at all levels.

1.5. Publishing activities

1. Periodically, textbooks and monographs have been issued during the last five years (14 textbooks and 4 books (monographs have been published by 1984).
2. There are several professional and scientific journals prepared, edited and published by the Department. These are the following:
 - *Anali Kliničke bolnice "Dr Mladen Stojanović"* (Annals of the "Dr. Mladen Stojanović" Teaching Hospital), started in 1962. This is scientific journal initiated and edited by the people from the Department, containing papers from other fields of medicine.
 - "Al-klub" (Al-Club) journal has been issued ever since 1964 primarily for patients. Since 1978, several issues a year have been issued for professionals as well.
 - "Mediterranean Journal of Social Psychiatry" (twice a year) in English, Croatian, Italian and Arabic.
 - "Alcoholism" published twice a year jointly with the International Council on Alcoholism and Addictions from Lausanne.

2. Physical facilities

There is a 200-bed hospital used for all types of

hospitalizations; a day hospital which can take up to 100 patients a day; a dispensary for 150 patients (so-called partial hospitalization, i.e. patients come with their families for 2 hours every day for a period of 3 months). There is also a Center for detoxication of alcoholic disease patients which can receive up to 10 patients per day.

3. Personnel

The Department employs 209 people, out of whom 53 are physicians, 90 nurses, 6 social workers, 3 psychologists 3 defectologists. The remainder are allied and auxiliary personnel.

4. Contributions to Cooperation Among Developing countries

4.1. International Collaboration

The Department has developed various international activities. The majority of them go through the World Association of Social Psychiatry. As members of that Association, the professionals from the Department actively participate in various congresses and have even organized world psychiatric congresses in Yugoslavia.

Following the establishment of the Mediterranean Association of Social Psychiatry, better collaboration with other Mediterranean countries has been developed.

Being acknowledged for its practical experiences, particularly for its innovative approaches in alcoholism and high activity within the Association, cooperation has been developed between the Department and similar institutions from Italy, Hungary, Catalonia (Spain), Portugal and USA. Many professionals from other countries come to study the principles of work of the Zagreb school.

This is a good example of model in a developing country which can be used both by developed and developing countries.

4.2. Possible contributions to cooperation among developing countries. There are numerous possibilities in the areas of the Centre activities. In particular: exchanges of experts; acceptance of candidates for study-tours, specialization and special continuing education of a postgraduate nature for physicians and experts; and sending of individual professional-scientific workers from the Center for the Study and Treatment of Alcoholism and other Drug Dependencies to various courses and other meetings in developing countries as needed.

17. DR. FRAN MIHALJEVIĆ INFECTIOUS DISEASES TEACHING HOSPITAL

Mirogojska 8
41000 ZAGREB
YUGOSLAVIA

1. Activities

1.1. Health care activities

- a) the regular work in clinical and polyclinical treatment and intensive care and respiratory re-animation of patients with infectious diseases is carried out within the scope of the Teaching Hospital;
- b) the Center for Intensive Care and Respiratory Re-animation of patients with infectious diseases is the only one of its kind in SR Croatia;
- c) its clinics serve as a center for problems in the area of infectology for SR Croatia.

1.2. Educational activities

- a) instruction is provided at the Infectious Diseases Teaching Hospital for students of the medical, stomatology and pharmacy-biochemistry faculties; the advanced school for nurses; and middle medical school for health technicians;
- b) postgraduate training is offered within the scope of training courses of the Zagreb Medical Faculty and Andrija Štampar School of Public Health in the areas of school medicine, epidemiology, public health, general medicine, mother and child health and social pediatrics;

1.3. Scientific research in the area of clinical infectology.

2. Departments

2.1. Clinical Departments

Clinical work is carried out through departments for infectious disease problems of infants and young children, adults and intensive care (The Center for Intensive Care and Respiratory Re-animation).

2.2. Polyclinical departments.

3. Personnel

There are over 300 health workers on the staff of the Dr. F. Mihaljević Infectious Diseases Teaching Hospital. Of these, around 100 have university-level training or higher (e.g., physician-infectologists, microbiologists, pharmacists-biochemists and others). Knowledge of foreign languages include: English, German, Italian and Russian.

4. Contributions to Cooperation among Developing Countries

4.1. The possibility exists for exchanges of experts through either acceptance of physicians, nurses and other health workers for training or through sending members of our staff to developing countries as needed. Training in the area of specific pathological entities and study, organization, education and health interventions in developing countries are also possible.

4.2. Given its experience in provision of intensive care to patients with infectious diseases, it is also possible to organize such services in intensive care units in developing countries on a contract basis.

4.3. The Infectious Disease Teaching Hospital can also

contribute to cooperation in the area of clinical pharmacology (especially with regard to chemotherapy and antibiotics).

- 4.4. Because of its long-term experience in dealing with the problem of intrahospital infection, its experts can assist in the application of measures to control such infection and in training manpower to apply such measures.
- 4.5. It can assist in organizing outpatient-polyclinical services for patients with infections based on its experience in such work.
- 4.6. Members of its staff have undertaken special study of tropical diseases, and two of them spent several years in Asia or Africa doing research or working with patients with such diseases as variola, cholera, malaria, and others.

The possibility exists for expanding such activities in cooperation with other Yugoslav institutions and institutions in developing countries.

18. SELF-MANAGING COMMUNITY OF INTEREST FOR EDUCATION AND PROFESSIONAL TRAINING IN THE FIELD OF HEALTH

Vodnikova 2/III
41001 ZAGREB
YUGOSLAVIA

1/ Activities

The Self-managing Community of Interest for Education and Professional Training in the Field of Health is an association formed by delegates from health teaching institutions and delegates from all health care institutions in the Republic of Croatia. Its sphere of work is to ensure the financial, organizational, manpower and other conditions necessary for the work and development of professional training in the area of health. It also engages in planning and programming for intermediate, advanced and university-level manpower needs of health care institutions.

2/ Personnel

This Self-managing Community of Interest includes representative from the health teaching and health care institutions located in SR Croatia. Its Assembly is formed by delegates from these institutions who are engaged in the work of the Community as needed. There is a professional secretariat with a full time secretary-economist and clerical service.

3/ Contributions to Cooperation among Developing Countries

3.1. Within the sphere of its work, the Community assembles various programs for professional training, carries

19. ADVANCED SCHOOL FOR NURSES AND HEALTH TECHNICIANS,
ZAGREB UNIVERSITY

Mlinarska 38
41000 ZAGREB
YUGOSLAVIA

1/ Activities

The School provides training to nurses and various profiles of health technicians.

2/ Departments

Training of nurses and health technicians is carried out through the following programs:

- 2.1. hospital
- 2.2. dispensary-public health
- 2.3. physiotherapy
- 2.4. laboratory
- 2.5. sanitary
- 2.6. radiology
- 2.7. midwifery.

3/ Personnel

There are 30 persons employed at the Advanced School for Nurses and Health Technicians, with 16 of these directly engaged in teaching. Six members of the teaching staff know English: 1 German and 1 French.

4/ Contributions to Cooperation among Developing Countries

Training of manpower for work in the cited areas within the scope of the School's activities is possible for candidates who can use the Croatian language.

out programming of all profiles of health manpower, does research on educational needs of the health service and does consultations on construction and supply of health educational facilities. It brings together a large number of medical and other health educational schools and can facilitate participation of these schools in cooperative efforts as needed.

3.2. Cooperation is possible either through the Community or directly with member institutions.

20. THE HEALTH EQUIPMENT BUSINESS COMMUNITY

29. NOVEMBAR 115/II

11000 BELGRADE

YUGOSLAVIA

1/ Activities

The Health Equipment Business Community is an association of 13 Yugoslav firms created for the purpose of realizing joint ventures in the area of health through development of activities of production, supply, servicing and maintenance of equipment, manpower training as well as trading of products for the health service on both domestic and foreign markets.

2/ Members

Eight members of the Health Equipment Business Community are engaged in production activities:

- EI OOUR FABRIKA ELEKTROMEDICINSKIH APARATA I UREDJAJA - Banjski put bb, Niš
- EI OOUR FABRIKA RENTGEN APARATA - Niš
- ELEKTROMEDICINA - Cigaletova 2, Ljubljana
- INSTRUMENTARIJA - Rapska bb, Zagreb
- JUGODENT - Futoški put 22, Novi Sad
- SUTJESKA - FABRIKA MEDICINSKIH UREDJAJA - 29 Novembar 113, Belgrade
- TIK - Kobarid
- SOCA - Ljubljana:

Five members are engaged in trading activities:

- EI OOUR EXPORT - IMPORT - Majke Jevrosime 15, Belgrade
- HOSPITALDENT-LABORATORIJA - Ilica 48, Zagreb
- JUGOLABORATORIJA - 7. Jula 44, Belgrade

- JUGOLEK - Kosovska 10, Belgrade
- SANOLABOR - Cigaletova 9, Ljubljana.

3/ Personnel

A total of around 7000 persons are employed by members of the Health Equipment Business Community.

4/ Contributions to Cooperation among Developing Countries

The Health Equipment Business Community can supply health services with the most complicated electromedical equipment and instruments as well as various consumer goods and equipment. The Community can provide the following services to completely equip hospitals and other health institutions in developing countries as needed:

- a. procurement and transport of apparatuses, devices and other equipment, installation and initiation of operations; training of manpower for handling equipment;
- b. organization of services for maintenance of equipment within and after the guarantee period; and
- c. preparation and organization of the preparation of the complete documentation and technology of work and equipping of health stations, dispensaries, and counseling clinics for various specialties, institutes for preventive and curative work, health centers, clinics with and without inpatient facilities, and hospitals.

21. UNIVERSITY REHABILITATION INSTITUTE LJUBLJANA

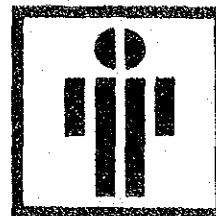
61001 LJUBLJANA, Linhartova 51

P.O. Box 381

Telephone: (061) 315-188, 315-194

Cable: ZRI Ljubljana

telex: 32260 YU ZRILJU



The University Rehabilitation Institute Ljubljana was founded in 1954 and is the central establishment for the rehabilitation of physically disabled persons in the Socialist Republic of Slovenia, as well as being the largest producer of orthopaedic and rehabilitation aids and medical equipment among the numerous such producers in Yugoslavia.

2) Departements

It is made up of 5 divisions, with the following spectrum of activities:

- medical rehabilitation of physically disabled persons, both hospital and specialist out-patient care;
- psycho-social rehabilitation with vocational guidance, pre-employment vocational training, vocational rehabilitation and employment for disabled persons;
- training and education of specialists in rehabilitation medicine and equipment;
- research and development in the field of rehabilitation, technology of orthopaedic aids, hospital and rehabilitation equipment;
- production and fitting of orthotic and prosthetic aids;
- production of rehabilitation and other health equipment.

3) Personnel

The following staff are available for consultancy in the field of rehabilitation services:

- 10 specialists in physical medicine and rehabilitation;
- 15 other rehabilitation staff (physiotherapists, occupational therapists, speech therapists, psychologists, prosthetists, orthopaedic technicians).

Languages spoken: English, French, German

Facility

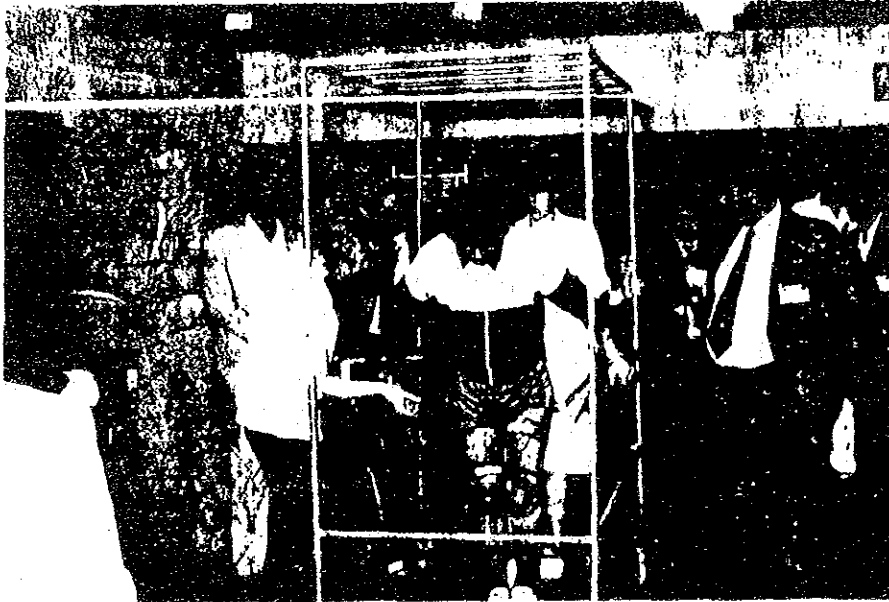
In the Institute are 200 hospital beds, with nearly half of the patients treated being severely physically disabled (paraplegics, amputees etc). Each day more than 260 persons are treated in the clinics and the fitting centre. An extensive programme of physical and occupational therapy is provided, and according to the patient's requirements, also speech therapy.

Activity

The Institute performs 85% of its rehabilitation programme for the Socialist Republic of Slovenia, while the remaining 15% helps to meet the demand from other Yugoslav republics, as well as other countries, especially developing countries. The production capacity of the Institute meets almost 85% of the demand for wheelchairs and 50% of that for hospital beds and other health service equipment inside Yugoslavia. In recent years the export of rehabilitation and other health service equipment has been increasing, to reach 30% of the production total by 1985, including 75% of wheelchair production, which amounts to 8,000 in all.

In addition, in line with current rehabilitation practice, there is a full programme of career guidance and preparation of the rehabilitant for the world of work. This includes vocational training and pre-employment training to ensure that the disabled person will be able to take his full place, to the extent his disability allows, in the workplace.

The Institute has a high reputation in the areas of education and research, being responsible for the training of medical and paramedical specialists in rehabilitation. In research the leading area is that of functional electrical stimulation, pioneered by the Institute and now being introduced into a number of other rehabilitation institutes.



PARTICIPANTS IN THE TRAINING COURSE ON REHABILITATION AIDS
OBSERVE THE USE OF FUNCTIONAL ELECTRICAL STIMULATION WITH
A PARAPLEGIC PATIENT

SERVICE FOR TECHNICAL COOPERATION SUPPORT FOR REHABILITATION
OF DISABLED PERSONS

61001 LJUBLJANA, Linhartova 51

P.O. Bpx 381

Telephone: (061) 329-366, 329-369

cable: ZRI Ljubljana

telex: 32260 YU ZRILJU

Since 1981 the Service for Technical Cooperation Support for Rehabilitation of Disabled Persons has been working as an independent body within the Institute, the establishment of which is a concrete contribution of Yugoslavia to the implementation of the recommendations of the International Year of Disabled Persons -1981, and other documents and activities, with which the international community has been trying to improve the situation of the disabled in developing countries.

The Service, whose purpose is the furthering of technical cooperation among developing countries (TCDC) in the field of prevention of disability, rehabilitation and equalisation of opportunities for the disabled via their full participation in social life and development, has the following programme objectives: exchange of information, transfer of technology and know-how, training of trainers and development of models of rehabilitation services suitable for developing countries.

This programme is put into effect by the Service via the organization of expert seminars and courses for participants from developing countries, publicising activity, fellowships for key personnel in the field of rehabilitation and prosthetics/orthotics and consultancy services.

Two international seminars have been organized by the Service so far. The first in 1982 was on "Community Services and Locally Produced Technical Aids for Disabled Persons", the second in 1984 was a "Training Course on Rehabilitation Aids for Instructors in Prosthetics/Orthotics from the Mediterranean and Near East Areas".

Over 50 participants from 25 developing countries of Africa, Asia and Latin America attended, along with international experts in the field, representatives of the United Nations and its specialised agencies, and non-governmental organizations.

The Training programme of the Service is also carried out by the granting of fellowships for rehabilitation to professionals from developing countries who come to Yugoslavia for a period of 1-3 months. In addition to the fellowships already granted to rehabilitation personnel from Ethiopia, Malta, Yemen Arab Republic and the Philippines, 20 new fellowships will be awarded in the academic year 1985-86.

Working in close cooperation with the Centre for Social Development and Humanitarian Affairs, of the United Nations Department of International Economic and Social Affairs, and with the financial support of the International Year of Disabled Persons Trust Fund the Arab Gulf Programme for United Nations Development Organisations (AGFUND), the OPEC Fund for International Development and the Yugoslav Government, the Service is thus contributing to the joint international effort to improve the situation of disabled persons in developing countries.

