COUNCIL FOR INTERNATIONAL ORGANIZATIONS
OF MEDICAL SCIENCES

CONSEIL DES ORGANISATIONS INTERNATIONALES DES SCIENCES MÉDICALES

C.I.O.M.S.

HEALTH NEEDS OF SOCIETY: A CHALLENGE FOR MEDICAL EDUCATION

10th CIOMS Round Table Conference and Scientific Session of the 10th General Assembly of CIOMS

SOCIÉTÉ ET SANTÉ: L'ENSEIGNEMENT MÉDICAL FACE A UN DÉFI

10° table ronde du CIOMS et Session scientifique de la 10° Assemblée générale du CIOMS

Editors:

A. Gellhorn, T. Fülöp & Z. Bankowski

Zechnical Editor for CIOMS: Olga Gellhorn

Published on behalf of the Council for International Organizations of Medical Sciences by the



WORLD HEALTH ORGANIZATION GENEVA 1977 HEALTH NEEDS OF SOCIETY:
A CHALLENGE FOR MEDICAL EDUCATION

10th CIOMS Round Table Conference
Ulm, Federal Republic of Germany, 6-10 July 1976

and

Scientific Session of the 10th General Assembly of CIOMS Geneva, 10 November 1976

Editors: A. Gellhorn, T. Fülöp & Z. Bankowski

Technical editor for CIOMS: Olga Gellhorn

Published by the World Health Organization on behalf of the Council for International Organizations of Medical Sciences, Geneva, 1977

PREFACE

The Council of International Organizations of Medical Sciences (CIOMS) is a non-governmental organization established by the World Health Organization and the United Nations Educational Scientific and Cultural Organization in 1948. Its membership includes sixty-six international organizations, representative of the basic medical sciences and clinical disciplines, and twenty-three national members representing academies of science or medicine and national research councils of their countries.

CIOMS was initially created by the United Nations agencies to reestablish communication among medical scientists and practitioners of medicine throughout the world. While still maintaining the initial purpose in the form of an annual calendar of international and regional biomedical meetings, CIOMS has expanded its activities in diverse areas. The activity of facilitating international communication has been augmented by the development of an international nomenclature of diseases. This, when completed, will reduce confusion and errors in the analysis of data on diseases reported from various parts of the world by providing the preferred name for a disease as well as a number of synonyms in common usage.

In the past decade CIOMS has brought the attention of the international biomedical community to ethical issues raised by advances in biology and medicine. This has been achieved through a number of round table conferences at which representatives of medical and non-medical disciplines from many parts of the world joined to consider timely and often sensitive and controversial issues. The proceedings of these round table conferences have been published and the subjects include the following:

Biomedical Science and the Dilemma of Human Experimentation (Paris, October 1967)

Heart Transplantation (Geneva, June 1968)

Evaluation of Drugs: Whose Responsibility? (Geneva, October 1969)

Medical Research - Priorities and Responsibilities (Geneva, October 1969)

Training of Research Workers in the Medical Sciences (Geneva, September 1970)

Drug Abuse: The Non-Medical Use of Dependence-Producing Drugs (Geneva, October 1971)

Recent Progress in Biology and Medicine: Its Ethical and Social Implications (Paris, September 1972)

Protection of Human Rights in the Light of Scientific and Technological Progress in Biology and Medicine (Geneva, November 1973) Medical Care and Society (Rio de Janeiro, August 1974)

The round table conferences, which have become a hallmark of CIOMS, have also identified the Council as one of the major organizations considering the social and ethical aspects of medicine and scientific research. CIOMS is presently developing a longterm, multi-facet programme to examine the ethical implications of scientific progress. The international and national membership of CIOMS includes representatives of many medical schools in the world. Those representing the international unions and federations of medical sciences as members of CIOMS are also usually distinguished teachers of future generations of physicians. In addition, the scope of research interest of CIOMS embraces aspects of research in all areas of health manpower development. Small wonder, therefore, that medical education has been a matter of concern to CIOMS. In the first quarter century after the Second World War, the emphasis in medical education was on the incorporation of the explosive growth of biomedical knowledge into the medical curriculum. the last ten years there has been a rising concern about medical education becoming too far removed from social needs for health in many countries. In recognition that this is an important issue which must be considered by the international health community and by national medical and science policy bodies, CIOMS organized the international round table conference, whose proceedings follow, to examine the potential contributions and limitations of medical education in meeting the needs of community health services.

This conference, held at Ulm, Federal Republic of Germany, from 6 to 10 July 1976, was co-sponsored by the World Health Organization and made possible by grants from the German Research Society, the German Federal Ministry for Youth, Family Affairs, and Health, and the International Institute for Scientific Cooperation, Schloss Reisenburg.

The individual papers and a summary of the conference form the first part of this publication. They are followed by the individual papers and a discussion of the Scientific Session of the 10th General Assembly of CIOMS in November 1976. GREETINGS FROM DR H. MAHLER, DIRECTOR-GENERAL, WORLD HEALTH ORGANIZATION

As Director-General of the World Health Organization, I send greetings to this Ulm Conference of the Council of International Organizations of Medical Sciences in which I am especially interested for several reasons. First, it is under the auspices of WHO and UNESCO that the CIOMS, convener of this gathering, was established. Also, since 1949 the Council has been a non-governmental organization in official relationship with the World Health Organization and, furthermore, the present meeting was organized in close collaboration with and under the co-sponsorship of WHO.

Our Organization has always observed with pleasure how the CIOMS has flourished and how its activities have evolved. Besides its original aim of facilitating communication within the international scientific community, it has developed a number of new and important functions which are very appropriate for a nongovernmental organization such as CIOMS and which are also all complementary to WHO's actions in the relevant areas. These new programmes - to mention only two of them - include: the preparation of an international nomenclature of diseases, and the organization of a series of round table conferences - such as the present one - including the publication of their proceedings. Through this series of meetings, CIOMS has recently become a sort of "world conscience" for medical sciences. The extension of its activities to the field of training of health personnel is a most welcome development and yet another reason for gratification.

I feel strongly that an iconoclastic outlook and revolutionary changes are needed in the development of both health services and health manpower. Here radical changes should take place to bring about improvement. Ever since Hippocrates, so-called "health care" has been oriented towards the diseases of only a few privileged persons; this is also true of medical education, which has produced not health professionals but disease professionals. Now, through social revolution in public health, the orientation has to be directed towards the community's health in order to achieve our target, namely: health for all by the year 2000.

I strongly hope that from your deliberations will ensue dramatically imaginative, technically sound, and psychologically relevant new solutions to lead us on the road to progress. I am, therefore, wishing you a most rewarding and fruitful meeting, as well as all success in the future work of the Council.

CONTENTS

PART 1

HEALTH NEEDS OF SOCIETY: A CHALLENGE FOR MEDICAL EDUCATION (10th CIOMS ROUND TABLE CONFERENCE)

Preface	(iii) (v)
SESSION I	
Health and disease around the world - Lambo Health and disease in an industrialized country: implications for medical education - Fliedner & Biefang	9 19
Some characteristics of the health of the population of the USSR - Cerkovnyj	29
SESSION II	
The impact of health and disease on society - Etzioni & Salasi The impact of ill health and disease on the social structure	<u>n</u> 39
and economy of a community or a nation - Kamunvi The impact of ill health and disease on society with special reference to Brazil - Belchior	49 55
SESSION III	55
Implications of health and disease for the responsibilities of	
the medical profession - Rexed	61
Society - Bryant	69 81
health conditions - Fliedner, Heeg, & Biefang	89
SESSION IV	
The responsibilities of medical education in preparing the future physician - Fülöp	93 113 121 125 127

SESSION V

Medical education as a social phenomenon - Prywes & Antonovsky	133
The health care team - Reerink	143
Continuing medical education - Miller	149
The importance of the social and political environment -	155
Margulies	155
Summary of the proceedings - Gellhorn	161
Annex I - Some obstacles to changes in medical education and	
the health services	169
PART 2	
COLUMN OF THE 10+P CENEDAL ACCEMBLY OF CLONE	170
SCIENTIFIC SESSION OF THE 10th GENERAL ASSEMBLY OF CIOMS	1/3
Participants and representatives	174
Opening address by Dr T. A. Lambo, Deputy Director-General, WHO	179
Development, health and medical education - Tejada-de-Rivero .	185
Quelques problèmes d'éducation médicale à l'Ecole de	
Médecine de Genève - <u>Baumann</u>	191
Discussion	195
Resolution on Medical Education	221

PART 1

HEALTH NEEDS OF SOCIETY: A CHALLENGE FOR MEDICAL EDUCATION

10th CIOMS Round Table Conference

Ulm, Federal Republic of Germany, 6-10 July 1976

Participants

- Dr M. BELCHIOR, President, Federal Council of Medicine, Av. Rio Branco, 18-18^o, Rio de Janeiro, Brazil
- Professor J.H. BRYANT, Director, School of Public Health, Columbia University, 600 West 168th Street, New York City, NY 10032, USA
- Dr G. CERKOVNYJ, Chief, Department of Health Statistics, Ministry of Health of the USSR, Rachmanovsky per. 3, Moscow, USSR
- Dr E.P. CRONKITE, Chairman, Brookhaven National Laboratory, Upton, L.I., NY 11973, USA
- Professor T.M. FLIEDNER, Head, Department of Clinical Physiology, University of Ulm, Oberer Eselsberg, 79 Ulm (Donau), Federal Republic of Germany
- Dr T. FÜLÖP, Director, Division of Health Manpower Development, World Health Organization, Avenue Appia, 1211 Geneva 27, Switzerland
- Professor A. GELLHORN, President of CIOMS, Director, Center for Medical Education, City College of New York, New Science Building, 138th Street and Convent Avenue, New York, NY 10031, USA
- Professor H. HEIMPEL, Head, Department of Internal Medicine and Haematology, University of Ulm, Steinhövelstrasse 9, 79 Ulm (Donau), Federal Republic of Germany
- Dr F. KAMUNVI, East African Medical Research Council of the East African Community, P.O. Box 1002, Arusha, Tanzania
- Dr H.J. KRAEMER, Director, Institute for Medical and Pharmaceutical Examinations, Grosse Langgasse 8, 65 Mainz, Federal Republic of Germany

- Dr T.A. LAMBO, Deputy Director-General, World Health Organization, Avenue Appia, 1211 Geneva 27, Switzerland
- Dr H. MARGULIES, Deputy Administrator, Health Resources Administration, Department of Health, Education and Welfare, Room 1005, Parklawn Building, 5600 Fishers Lane, Rockville, MD 20852, USA
- Professor G.E. MILLER, University of Illinois at the Medical Center, College of Medicine, Center for Educational Development, 835 South Wolcott Avenue, Chicago, IL 60612, USA
- Professor G.L. MONEKOSSO, Director, University Centre for Health Sciences, Yaoundé, Cameroon
- Professor H.G. PAULI, Director, Institute for Research on Education and Examination, Medical Faculty of the University of Bern, Inselspital, 3010 Bern, Switzerland
- Professor E.G. PFEIFFER, Rector of the University of Ulm, Head of the Department of Internal Medicine, Endocrinology, and Metabolism of the University of Ulm, Steinhövelstrasse 9, 79 Ulm (Donau), Federal Republic of Germany
- Professor M. PRYWES, Dean, Ben Gurion University of the Negev, University Centre for Health Sciences, P.O. Box 2053, Beersheva 84 120, Israel
- Professor A. QUERIDO, University of Leiden, Rijnsburgerweg 10, Leiden, The Netherlands
- Dr E. REERINK, Chairman, Department of Health Care Research, Medical Faculty, University of Maastricht, Bernhardlaan 13, Maastricht, The Netherlands
- Professor B. REXED, Director General, National Board of Health and Welfare, Linnnégatan 87, 10630 Stockholm, Sweden
- Professor V. RUDKO, Moscow Medical Stomatological Institute, 18 Kalayevskaya, Moscow, USSR

- Dr S. SALASIN, Chief, Research and Utilization Section of the Division of Mental Health Services Program, National Institute of Mental Health, 5600 Fishers Lane, Rockville, MD 20760, USA
- Dr R. WIEDERSHEIM, Chief, Health Manpower Development,
 Regional Office for Europe, World Health Organization,
 8. Scherfigsvej, 2100 Copenhagen, Denmark

Secretary

Dr Z. BANKOWSKI, Executive Secretary, CIOMS Secretariat, c/o World Health Organization, Avenue Appia, 1211 Geneva 27, Switzerland

REPRESENTATIVES OF INTERNATIONAL MEMBERS OF CIOMS

World Federation of Societies of Anaesthesiologists

Professor R. FREY, Director of the Institute for
Anaesthesiology, Johannes-Gutenberg-University,
Mainz, Federal Republic of Germany
Professor W. DICK, Department of Anaesthesiology

Professor W. DICK, Department of Anaesthesiology, University of Ulm, Federal Republic of Germany

International Federation of Clinical Chemistry

Professor K. ROMMEL, Department of Clinical Chemistry, University of Ulm, Federal Republic of Germany

International Dental Federation

Professor W. HAHN, Weimarer Strasse 8, 2300 Kiel-Wik, Federal Republic of Germany

International Diabetes Federation

Professor E.F. PFEIFFER, Rector of the University of Ulm, Federal Republic of Germany

International Society of Internal Medicine

Professor A. VANNOTTI, Chemin du Languedoc 30, Lausanne, Switzerland

International Leprosy Association

Professor M.F. LECHAT, Deputy Director, School of Public Health, Louvain University, Brussels, Belgium

International Society of Neuropathology

Professor F. SEITELBERGER, Rector of the University of Vienna, 1090 Vienna, Austria

International Union of Nutritional Sciences

Professor W. KÜBLER, Institute for Nutritional Sciences I of the Justus-Liebig-University, Giessen, Federal Republic of Germany

World Association of Societies of Pathology

Professor D. FRITSCHE, Director of the Institute for Medical Microbiology, Ludwigshafen, Federal Republic of Germany

International Pediatric Association

Professor K. BETKE, Director of the University Children's Hospital, Munich, Federal Republic of Germany

World Psychiatric Association

Professor H. THOMÄ, Psychotherapy Department of the University of Ulm, Ulm, Federal Republic of Germany

International Rehabilitation Medicine Association

Dr W.M. ZINN, F.M.H. Medical Director, 7310 Bad Ragaz, Switzerland

International Society of Blood Transfusion

Professor S. SEIDL, Blood Bank Hessen, Frankfurt, Federal Republic of Germany

Medical Women's International Association

Dr Helga THIEME, Untere Schildwache 3, D-38 Goslar, Federal Republic of Germany

REPRESENTATIVES OF NATIONAL MEMBERS OF CIOMS

Royal Belgian Academy for Medicine

Professor A. LACQUET, Secretary of the Royal Academy of Medicine of Belgium, Brussels, Belgium

Federal Council of Medicine of Brazil

Professor M. BELCHIOR, President, Federal Council of Medicine of Brazil, Rio de Janeiro, Brazil

Dr A. VALENTE, Federal Council of Medicine of Brazil, Rio de Janeiro, Brazil

Royal Danish Academy of Sciences and Letters

Professor B. SØRENSEN, Professor of Surgery, Hvidovre Hospital, 2650 Hvidovre, Denmark

German Research Society

Professor T.M. FLIEDNER, Department of Clinical Physiology of the University of Ulm, 79 Ulm (Donau), Federal Republic of Germany

Royal Netherlands Academy of Arts and Sciences

Professor J.H.P. JONXIS, University Hospital, Department of Pediatrics, Groningen, The Netherlands

National Research Council of the Philippines

Professor P. CAMPOS, University of the Philippines, Medical Center Manila, Manila, Philippines

Swedish Medical Research Council

Professor B. REXED, Director General, National Board of Health and Welfare, 10630 Stockholm, Sweden

REPRESENTATIVES OF UNESCO

<u>United Nations Educational, Scientific and Cultural</u> <u>Organization (UNESCO)</u>

Dr W. SCHWENDLER, Division of Philosophy, UNESCO, 75700 Paris, France

Professor A.N. KHOLODILIN, Science in the Contemporary World Unit, UNESCO, 75700 Paris, France

Mr J.G. RICHARDSON, Impact of Science and Society, UNESCO, 75700 Paris, France REPRESENTATIVES OF OTHER INTERNATIONAL OR NATIONAL ORGANIZATIONS AND INSTITUTES

Association for Medical Education in Europe

Professor H.J. WALTON, President, Association for Medical Education in Europe, University of Edinburgh, Edinburgh 10, United Kingdom

Centre for Educational Research and Innovation of the OECD

Mr P. DUGUET, Centre for Educational Research and Innovation, OECD, 75775 Paris, France

Ministry of Education, The Netherlands

Mr K. KOOIJ, Ansbalduslaan 11, Waalre, The Netherlands

Hebrew University-Hadassah Medical School, Jerusalem, Israel

Professor M. RACHMILEWITZ, Hebrew University-Hadassah Medical School, Jerusalem, Israel

University of The Philippines

Professor P. CAMPOS, University of The Philippines, Medical Center Manila, Manila, Philippines

Institute for Medical Research, Mwanza, Tanzania

Dr D.B. MATOVU, East African Institute for Medical Research, Mwanza, Tanzania

Trypanosomiasis Research Organizations, Tororo, Uganda

Dr O.K. ITAZI, East African Trypanosomiasis Research Organization, Tororo, Uganda

REPRESENTATIVES OF SOCIETIES, INSTITUTIONS, AND ORGANIZATIONS OF THE FEDERAL REPUBLIC OF GERMANY

Bundesministerium für Jugend, Familie und Gesundheit

Ministerialrat Dr B. ZOLLER, Bundesministerium für Jugend, Familie und Gesundheit, 53 Bonn-Bad Godesberg

Deutsche Gesellschaft für Anaesthesie und Wiederbelebung

Prof. Dr R. FREY, Direktor des Instituts für Anaesthesiologie der Johannes-Gutenberg-Universität Mainz, 6500 Mainz

Prof. Dr W. DICK, Abteilung Anaesthesiologie II der Universität Ulm, 79 Ulm (Donau)

Deutsche Gesellschaft für Hämatologie

Prof. Dr T.M. FLIEDNER, Abteilung Klinische Physiologie der Universität Ulm, 79 Ulm (Donau)

Deutsche Gesellschaft für Kinderheilkunde

Prof. Dr W. TELLER, Abteilung für Kinderheilkunde der Universität Ulm, 79 Ulm (Donau)

Deutsche Gesellschaft für Klinische Chemie

Prof. Dr K. ROMMEL, Abteilung für Klinische Chemie der Universität Ulm, 79 Ulm (Donau)

Deutsche Gesellschaft für Laboratoriumsmedizin

Dr O. FENNER, Bergstrasse 14, 2 Hamburg 1

<u>Deutsche Gesellschaft für Physikalische Medizin und Rehabilitation</u>

Dr P. ZIMBER, Institut für Balneologie und Klimaphysiologie, 7800 Freiburg

Deutsche Röntgengesellschaft

Prof. Dr W. FRIK, Abteilung Radiologie der Med. Fakultät, 5100 Aachen

Deutsche Gesellschaft für Rheumatologie

Prof. Dr G. BACH, Chefarzt der II. Medizinischen Klinik, Rheumazentrum Bad Abbach, 8403 Bad Abbach

Deutsche Gesellschaft für Unfallheilkunde e.V.

Doz. Dr W. SPIER, Department Chururgie der Universität Ulm, 79 Ulm (Donau)

Deutsche Gesellschaft für Zahn-, Mund-und Kieferheilkunde

Prof. Dr W. HAHN, Dekan der Medizinischen Fakultät Kiel, 2300 Kiel-Wik

<u>Institut für medizinische und pharmazeutische Prüfungsfragen</u>

Priv.-Doz. Dr G. BOELCKE, Institut für medizinische und pharmazeutische Prüfungsfragen, 6500 Mainz

Landesversicherungsanstalt Württemberg

Prof. Dr W. GERCKE, Direktor der Landesversicherungsanstalt
Württemberg, 7000 Stuttgart 40 (Freiberg)
Dr F. FILWANGER, Landesversicherungsanstalt Württemberg.

Dr E. ELLWANGER, Landesversicherungsanstalt Württemberg, 7000 Stuttgart 40 (Freiburg)

Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.

Prof. Dr FEUERLEIN, Leiter der Poliklinik am Max-Planck-Institut für Psychiatrie, 8000 München 40

Robert Bosch Stiftung

Dr Ch. WALTER, Robert Bosch Stiftung GmbH, 7000 Stuttgart

Abteilung Medizinische Psychologie, Universität Göttingen

Prof. Dr H. POHLMEIER, Abteilung Medizinische Psychologie der Universität Göttingen, 34 Göttingen P. SCHABACKER, Dipl.-Soz., Abteilung Medizinische

P. SCHABACKER, Dipl.-Soz., Abteilung Medizinische Psychologie der Universität Göttingen, 34 Göttingen

Ärzteschaft des Kreises Ulm

Dr med. K. RÖDERER, Vorsitzender der Ärzteschaft des Kreises Ulm, 79 Ulm (Donau)

Unterrichtskommission Medizin der Universität Ulm

Doz. Dr W. SCHÜFFEL, Department Innere Medizin der Universität Ulm, 79 Ulm (Donau)

Universität Ulm

Prof. Dr J.R. POLEY, Universitäts-Kinder-Klinik, 79 Ulm (Donau)

Doz. Dr H.D. FLAD, Laborbereich Immunologie, Universität Ulm, 79 Ulm (Donau)

SESSION I

HEALTH AND DISEASE AROUND THE WORLD T.A. Lambo

Health, health services, and medical education

Medical science in recent decades equated disease-curative service with health care. Medical education was focused on the diagnosis and management of diseases which often were not major health hazards. This preoccupation is reflected in the services provided, consisting at best of a costly curative service for the very few in urban areas, making even those who can afford medical service dependent on such a service, dependent on drugs, dependent on hospital care. This is in sharp contradiction to the original WHO definition of health which stressed health for all and the interdependence of the promotion of health and the prevention and cure of disease. Health must be viewed in terms of overall social wellbeing. This recognition of health not being equatable with the cure of disease is now a source of change.

An attempt will be made to describe by reference to the present world situation (needs for health and health services) the problems that require resolution and hence to which the meeting should address itself.

World health situation

Despite every effort and a heavy expenditure of material and human resources, the health situation today is grave. The present trends are developing into a major crisis which must be faced at once if costly reactions are to be averted and present opportunities grasped.

(a) General

In spite of tremendous strides in medicine and technology, the health status of the majority of people in the disadvantaged areas of most countries of the world remains low. The seriousness of the problem is shown by the high morbidity and mortality rates that exist in the rural and peri-urban populations that still constitute 80-85% of the population of the world, where some 550 million people are still suffering from absolute poverty. Although morbidity and mortality show a downward trend, problems such as malnutrition, communicable diseases, parasitic infestations, and others continue to take a heavy toll of people's lives, especially those of infants, children, and other vulnerable groups in the disadvantaged areas. The low health status of

these people has not only manifested itself in terms of morbidity and mortality but has also affected human development and the capacity of individuals to develop their potentialities and lead a productive life.

The following section reviews some of the achievements improving the health situation, but also points to the major needs that still exist.

(b) Communicable diseases

Malaria. As at 31 December 1975, out of a world population of 3141 million, 2015 million live in areas which were originally malarious, while 1126 million are in areas where malaria was never indigenous or disappeared without specific antimalaria resources; 41% of the originally malarious areas. comprising a population of 824 million, are actually claiming malaria eradication. Another 1191 million people are in areas where the risk of being infected with malaria still exists. Of this under-risk population, 344 million are living in areas where no specific antimalaria measures are carried out, while 847 million are being protected by various methods of malaria control or eradication. It is estimated that, in the past year, there were 120 million cases of malaria. 100 million occurred in Africa and the remaining 20 million were mainly concentrated in South-East Asia, particularly in India and Pakistan.

Geographically, malaria has been eradicated in most of the temperate countries of the world, notably in Europe and North America. In the Mediterranean basin as an entity, the eradication of the disease is foreseen in the not very distant future, while prospects in the equatorial and tropical belt of the world vary very much from one continent to another. In America and the Western Pacific, the level of control is quite satisfactory but the situation is worsening in the southeastern part of the Asian continent and has never been under control in Africa south of the Sahara.

Smallpox. By now, smallpox has been circumscribed to a few remote villages in mountainous and desert areas of Ethiopia, and in the rest of the world continuous surveillance activities are failing to detect any smallpox outbreaks. The disease was once endemic throughout the world, but during the first half of this century many countries became smallpox-free by means of extensive vaccination programmes and aggressive containment measures. By 1967, when WHO launched the global smallpox eradication programme in collaboration with Member States, the