OFFICIAL RECORDS
OF THE
WORLD HEALTH ORGANIZATION
No. 128

SIXTEENTH WORLD HEALTH ASSEMBLY

GENEVA, 7 - 23 MAY 1963

PART II

PLENARY MEETINGS

Verbatim Records

COMMITTEES

Minutes and Reports

WORLD HEALTH ORGANIZATION

GENEVA

December 1963

NOTE: Highlighted text was underlined in Dr. Henderson's personal copy of the document.

MEMBERSHIP OF THE HEALTH ASSEMBLY

LIST OF DELEGATES AND OTHER PARTICIPANTS

DELEGATIONS OF MEMBER STATES

AFGHANISTAN

Delegates:

Dr A. R. HAKIMI, Director-General of Health Services, Ministry of Public Health (*Chief Delegate*)

Dr A. GHANI AFZAL, Director, Kabul Tuberculosis Centre

ALBANIA

Delegates:

Dr S. KLOSI, Director, Hospital Clinic No. 1, Tirana (*Chief Delegate*)

Dr B. PREZA, Head, Clinic for Nervous Disorders

ALGERIA

Delegates:

Dr M. S. NEKKACHE, Minister of Health and Population (*Chief Delegate*)

Mr C. TALEB, Director, International Organizations Division, Ministry of Foreign Affairs

Dr M. DJEGHRI, Director of the Minister's Office, Ministry of Health

Alternates:

Dr M. E. EL-KAMAL, Inspector General of Public Health, Ministry of Health

Dr A. ZIROUT, President, Public Health Commission of the National Assembly

Mr K. AKOUCH TAYEB, Rapporteur, Public Health Commission of the National Assembly

Mr M. KERMIA, President, Algerian Red Crescent

Mr A. BOUDERBA, Chief, International Relations Department, Ministry of Health

ARGENTINA

Delegates:

Dr V. V. OLGUÍN, Director, International Health and Welfare Relations, Ministry of Social Welfare and Public Health (*Chief Delegate*)

Mr O. GARCÍA PIÑEIRO, Counsellor, Permanent Mission of Argentina to International Organizations in Geneva

AUSTRALIA

Delegates:

Dr W. D. REFSHAUGE, Director-General of Health, Commonwealth Department of Health (*Chief Delegate*)

Mr R. W. FURLONGER, Permanent Representative of Australia to the European Office of the United Nations

Dr R. C. WEBB, Chief Medical Officer, Australia House, London

Alternates:

Dr C. W. PHILLIPS, Medical Director, Migration Office of the Australian Embassy in the Netherlands

Dr C. W. RAMSAY, Medical Officer, Department of Health

AUSTRIA

Delegates:

Dr K. SCHINDL, Director-General of Public Health, Federal Ministry for Social Affairs (*Chief Delegate*)

Dr R. HAVLASEK, Ministerial Secretary, Federal Ministry for Social Affairs

Adviser:

Mr H. GLEISSNER, Deputy Permanent Representative of Austria to the European Office of the United Nations

BELGIUM

Delegates:

Dr J. F. GOOSSENS, Secretary-General, Ministry of Public Health and Family Welfare (*Chief Delegate*)

Dr M. KIVITS, Medical Adviser, Ministry of Foreign Affairs, Trade and Technical Assistance

Mr J. DE CONINCK, Assistant Counsellor; Chief, International Relations Department, Ministry of Public Health and Family Welfare

Advisers:

Mr E. LOTZ, Permanent Delegate of Belgium to the European Office of the United Nations

Mr M. J. P. HOULLEZ, Deputy Permanent Delegate of Belgium to the European Office of the United Nations

BOLIVIA

Delegate:

Dr F. TORRES-BRACAMONTE, Director-General, National Public Health Service

BRAZIL

Delegates:

Dr P. PINHEIRO CHAGAS, Minister of Health (*Chief Delegate* [1])

Dr A. DE MENDONÇA E SILVA, Director-General, National Health Department [2]

Dr M. MAGALHÃES DA SILVEIRA, Director, Health Planning Division

Alternate:

Dr M. BELCHIOR, Ministry of Health

BULGARIA

Delegates:

Dr K. IGNATOV, Minister of Public Health and Welfare (*Chief Delegate*)

Dr D. ARNAUDOV, Chief, Department of International Relations, Ministry of Public Health and Welfare (*Deputy Chief Delegate*)

Mr G. GAVRILOV, Acting Permanent Representative of Bulgaria to the European Office of the United Nations and the International Organizations

Alternate:

Mrs I. SPASOVA, Ministry of Public Health and Welfare

BURMA

Delegates:

Dr PE KYIN, Director of Health Services (*Chief Delegate*)

Dr HAN TUN, Officer on Special Duty, Ministry of Health

Dr HLA MYINT, Medical Officer, Sao San Htun Hospital, Taunggyi

BURUNDI

Delegates:

Mr A. M. BAREDETSE, Minister of Public Health (*Chief Delegate*)

Mr I. MAGEREGERE, Director in the Ministry of Public Health

Advisers:

Dr F. LANDRAIN, Medical Adviser, Ministry of Public Health

Mr J. YANSENNE, Attaché, Ministry of Public Health

CAMBODIA

Delegates:

Dr THIOUNN-THOEUN, Physician, Hôpital de l'AKS (*Chief Delegate*)

Dr KADEVA HAN, Chief, Technical Bureau, Ministry of Public Health

CAMEROON

Delegates:

Dr S. P. TCHOUNGUI, Minister of Public Health and Population (*Chief Delegate*)

Dr J. C. HAPPI, Director of Public Health, East Cameroon

Dr G. G. DIBUE, Director of Medical Services, West Cameroon

CANADA

Delegates:

Dr B. D. B. LAYTON, Principal Medical Officer, International Health Section, Department of National Health and Welfare (*Chief Delegate*)

Mr S. F. RAE, Ambassador; Permanent Representative of Canada to the European Office of the United Nations (*Deputy Chief Delegate*)

Dr A. D. KELLY, General Secretary, Canadian Medical Association

Alternate:

Dr G. MAILLOUX, Immigration Medical Officer, Berne

Advisers:

Mr W. E. BAUER, First Secretary, Permanent Mission of Canada to the European Office of the United Nations

[1] Until 10 May.

[2] Chief Delegate from 10 May.

Miss L. GAUTHIER, Second Secretary, Permanent Mission of Canada to the European Office of the United Nations

CENTRAL AFRICAN REPUBLIC

Delegates:

Mr P. MARADAS-NADO, Minister of Public Health (*Chief Delegate*)

Dr J. A. L. SAUGRAIN, Director, Department of Endemic Diseases Control

CEYLON

Delegates:

Mr B. F. PERERA, Ambassador of Ceylon to the Federal Republic of Germany (*Chief Delegate*)

Dr V. T. HERAT GUNARATNE, Deputy Director of Medical Services

CHAD

Delegate:

Dr J. GOURTAY, Director, Department of Endemic Diseases Control

CHILE

Delegates:

Dr A. L. BRAVO, Chief, Technical Department, National Health Service (*Chief Delegate*)

Dr J. A. GONZÁLEZ GONZÁLEZ, Medical Adviser, Ministry of Public Health

CHINA

Delegates:

Mr P. N. CHENG, Ambassador; Permanent Representative of China to the European Office of the United Nations (*Chief Delegate*)

Dr C. K. CHANG, Director, Department of Health Administration, Ministry of Interior

Dr H. WEI, Dean, College of Medicine, National Taiwan University

Adviser:

Mr H. C. KIANG, Second Secretary, Permanent Mission of China to the European Office of the United Nations

COLOMBIA

Delegates:

Dr S. RENJIFO, Minister of Public Health (*Chief Delegate*)

Dr A. ESCOBAR-BALLESTAS, Secretary-General, Ministry of Public Health

CONGO (Brazzaville)

Delegates:

Mr R. D. KINZOUNZA, Minister of Public Health and Population (*Chief Delegate*)

Dr B. TCHIKOUNZI, Director, Department of Endemic Diseases Control

CONGO (Leopoldville)

Delegates:

Mr P. BOLYA, Minister of Public Health (*Chief Delegate*)

Mr E. NGANDU, Secretary-General, Ministry of Public Health

CUBA

Delegates:

Dr C. M. MARTÍNEZ REYES, Regional Director of Public Health, Province of Las Villas (*Chief Delegate*)

Dr M. BALY BALY, Director, Department of Health Education

Dr P. NOGUEIRA RIVERO, Director, Department of International Relations

Alternate:

Dr Coralia PANEQUE, First Secretary, Permanent Mission of Cuba to the European Office of the United Nations and other International Organizations in Geneva

Adviser:

Mr E. CAMEJO-ARGUDÍN, Ambassador; Permanent Delegate of Cuba to the European Office of the United Nations and other International Organizations in Geneva

CYPRUS

Delegate:

Dr V. P. VASSILOPOULOS, Director-General, Ministry of Health

CZECHOSLOVAKIA

Delegates:

Dr J. PLOJHAR, Minister of Health (*Chief Delegate*)

Dr J. VYŠOHLÍD, Deputy Minister of Health

Dr B. DOUBEK, Head, Secretariat of the Minister of Health

Alternate:

Dr L. HANDL, Ministry of Foreign Affairs

DAHOMEY

Delegate:

Dr Z. S. GANGBO, Technical Adviser, Ministry of Health, Population and Welfare

Adviser:

Dr A. QUENUM, Professeur agrégé in Histology and Embryology

DENMARK

Delegates:

Dr Esther AMMUNDSEN, Director-General, National Health Service (*Chief Delegate*)

Dr O. ANDERSEN, Professor at the University of Copenhagen (*Deputy Chief Delegate*)

Mr J. H. ZEUTHEN, Permanent Under-Secretary of State, Ministry of the Interior

Advisers:

Dr C. JACOBSEN

Mr F. NIELSEN, Assistant Chief of Section, Ministry of the Interior

ECUADOR

Delegate:

Dr J. A. MONTALVÁN C., Director, National Institute of Hygiene

ETHIOPIA

Delegates:

Mr A. RETTA, Minister of Public Health (*Chief Delegate*)

Mr H. SEBSIBE, Director-General, Ministry of Public Health

Dr A. WOLDESEMAIT, Medical Practitioner, Princess Tsehai Haile Selassie Hospital

FEDERAL REPUBLIC OF GERMANY

Delegates:

Dr Elisabeth SCHWARZHAUPT, Federal Minister of Health (*Chief Delegate* [1])

Dr J. STRALAU, Ministerial Director, Federal Ministry of Health (*Deputy Chief Delegate* [2])

Dr Maria DAELEN, Director, International Relations Section, Federal Ministry of Health

Alternates:

Professor E. G. NAUCK, Director, Institute of Tropical Medicine, Hamburg

Dr H. DANNER, Ministerial Counsellor, Federal Ministry of Health

Advisers:

Dr W. RÖKEN, Federal Medical Association, Stuttgart

Dr H. LÖFFLER, Director of Public Health, Hamburg

Professor W. KOLL, Director, Medical Research Institute of the Max-Planck Gesellschaft, Göttingen

Mr H. VOSSHENRICH, Counsellor, Federal Ministry of Health

Mr H. C. VON HARDENBERG, Ambassador; Permanent Observer of the Federal Republic of Germany to the European Office of the United Nations; Permanent Delegate to the International Organizations in Geneva

Mr T. SCHMITZ, Consul of the Federal Republic of Germany in Geneva

FEDERATION OF MALAYA

Delegates:

Mr ABDUL RAHMAN BIN HAJI TALIB, Minister of Health (*Chief Delegate*)

Dr M. DIN BIN AHMAD, Director of Medical Services

Mr Y. M. C. HON, Deputy Permanent Secretary, Ministry of Health

Alternate:

Dr L. W. JAYESURIA, Deputy Director of Medical Services

FINLAND

Delegates:

Professor N. PESONEN, Director-General, National Medical Board (*Chief Delegate*)

Dr A. P. OJALA, Chief, Public Health Division, National Medical Board

Secretary:

Mr E. HEINRICHS, Attaché, Permanent Delegation of Finland to the International Organizations in Geneva

FRANCE

Delegates:

Professor E. J. AUJALEU, Director-General of Public Health, Ministry of Public Health and Population (*Chief Delegate*)

[1] Until 9 May.

[2] Chief Delegate from 9 May.

Dr J. S. E. CAYLA, Inspector-General, Ministry of Public Health and Population

Dr L. P. AUJOULAT, Former Minister; Chief, Technical Co-operation Service, Ministry of Public Health and Population; Director, National Centre for Health and Social Education

Advisers:

Dr R. SOHIER, Professor of Hygiene, Faculty of Medicine, University of Lyons

Dr P. M. BERNARD, Technical Adviser, Ministry of Co-operation

Miss E. BAUDRY, Chief, International Relations Office, Ministry of Public Health and Population

Miss N. TRANNOY, Secrétaire d'ambassade, Permanent Mission of France to the European Office of the United Nations and Specialized Agencies in Geneva

Miss J. BALENCIE, Assistant Secretary at the Ministry of Foreign Affairs

Miss C. CARIGUEL, Senior Officer, International Relations Division, Ministry of Public Health and Population

GABON

Delegates:

Dr J. B. BIYOGHE, Director of Public Health (*Chief Delegate*)

Dr J.-P. MARTINAZZO, Inspector, Department of Endemic Diseases Control; Chief, Technical Office, Ministry of Public Health

GHANA

Delegates:

Dr C. O. EASMON, Surgeon in Chief, Ministry of Health (*Chief Delegate*)

Dr J. N. ROBERTSON, Principal Medical Officer, Ministry of Health

Dr J. Adjei SCHANDORF, Member of the Medical and Dental Board of Ghana, and of the Council of the Ghana Medical Association

Alternate:

Mr H. A. H. S. GRANT, Ambassador; Permanent Representative of Ghana to the European Office of the United Nations and the Specialized Agencies in Geneva

Adviser:

Miss A. V. A. WOOD, First Secretary, Permanent Mission of Ghana to the European Office of the United Nations and the Specialized Agencies in Geneva

GREECE

Delegates:

Dr T. KATSACOS, Director, Health Service, Department of Athens (*Chief Delegate*)

Dr J. ANASTASSIADES, Consultant Psychiatrist, Ministry of Social Welfare

GUATEMALA

Delegate:

Mr A. DUPONT-WILLEMIN, Consul-General of Guatemala in Geneva; Permanent Representative of Guatemala to the European Office of the United Nations and the International Labour Organisation

GUINEA

Delegate:

Dr O. KEITA, Director of the Minister's Office, Ministry of Public Health and Social Welfare

HUNGARY

Delegates:

Dr I. SIMONOVITS, First Vice-Minister of Health (*Chief Delegate*)

Dr D. FELKAI, Envoy Extraordinary and Minister Plenipotentiary

Dr Z. SZABO

Secretary:

Mr J. REGÖS, Third Legation Secretary, Permanent Mission of Hungary to the European Office of the United Nations

ICELAND

Delegates:

Dr S. SIGURDSSON, Director-General of Public Health (*Chief Delegate*)

Dr J. SIGURJÓNSSON, Professor of Hygiene, University of Iceland

INDIA

Delegates:

Dr Sushila NAYAR, Union Health Minister (*Chief Delegate*)

Dr K. NAGAPPA ALVA, Minister of Health, Government of Mysore

Dr A. L. MUDALIAR, Vice-Chancellor, University of Madras

Alternate:

Dr M. S. CHADHA, Director-General of Health Services

Secretary:

Dr N. JUNGALWALLA, Deputy Director-General of Health Services

INDONESIA

Delegates:

Dr Hurustiati SUBANDRIO, Deputy Health Minister; Director, Bureau of Foreign Affairs, Department of Health (*Chief Delegate*)

Dr H. WIKNJOSASTRO, Professor of Obstetrics and Gynecology, Faculty of Medicine, University of Indonesia

Adviser:

Dr R. SUNARIO, First Secretary, Indonesian Embassy in Switzerland

IRAN

Delegates:

Dr E. RIAHY, Minister of Health (*Chief Delegate*)

Dr A. T. DIBA, Under-Secretary of State for Public Health and Parliamentary Affairs (*Deputy Chief Delegate*)

Dr H. MORSHED, Director-General of Public Health

Advisers:

Dr M. ROWHANI, Director-General of Medical and Health Services, National Iranian Oil Company, Teheran

Dr H. BASSEGHI, Director, Health Department of the Plan Organization

Mr S. GOLESTANEH, First Secretary, Permanent Delegation of Iran to the European Office of the United Nations and the Specialized Agencies

IRAQ

Delegates:

Dr S. AL-WAHBI, Director of International Health, Ministry of Health (*Chief Delegate*)

Dr F. H. GHALI, Assistant Dean, Baghdad Medical College

Mr I. T. KITTANI, Minister Plenipotentiary; Permanent Representative of Iraq to the European Office of the United Nations

IRELAND

Delegates:

Mr T. J. BRADY, Assistant Secretary, Department of Health (*Chief Delegate*)

Dr J. D. HOURIHANE, Deputy Chief Medical Adviser, Department of Health

ISRAEL

Delegates:

Mr I. RAFAEL, Deputy Minister of Health (*Chief Delegate*)

Dr S. SYMAN, Director-General, Ministry of Health [1]

Dr D. BRAKHOTT, District Health Officer, Ministry of Health, Central District

Advisers:

Dr Tova YESHURUN-BERMAN, Member of the Executive Council of the Sick Fund, Tel Aviv

Mr E. TAVOR, First Secretary, Permanent Delegation of Israel to the European Office of the United Nations

ITALY

Delegates:

Professor N. SANTERO, Under-Secretary of State, Ministry of Health (*Chief Delegate*)

Mr F. P. VANNI D'ARCHIRAFI, Ambassador; Permanent Representative of Italy to the European Office of the United Nations (*Deputy Chief Delegate*)

Mr U. DE LEONI, Director-General and Chief, International Relations Service, Ministry of Health

Alternates:

Professor S. CRAMAROSSA, Director-General, Public Health and Hospitals Section, Ministry of Health

Professor G. A. CANAPERIA, Chief Inspector-General, Ministry of Health

Mr B. FENZI, Embassy Counsellor; Deputy Permanent Representative of Italy to the European Office of the United Nations

Mr L. PINTUS, Head of the Secretariat of the Under-Secretary of State, Ministry of Health

Professor F. PETRILLI, Director, Institute of Hygiene, University of Genoa

Dr R. VANNUGLI, Office of International and Cultural Affairs, Ministry of Health

Advisers:

Professor B. BABUDIERI, Istituto Superiore di Sanità, Rome

Professor A. CORRADETTI, Istituto Superiore di Sanità, Rome

[1] Dr Syman died during the session — on 22 May.

Professor P. SCROCCA, Member of the Superior Health Council

Professor F. TOFFOLI, Istituto Superiore di Sanità, Rome

IVORY COAST

Delegates:

Dr B. N'DIA KOFFI, Minister of Public Health and Population (*Chief Delegate*)

Dr H. VARLET, Director-General of Public Health

Dr P. DELORMAS, Technical Adviser in the Minister's Office, Ministry of Public Health and Population

JAMAICA

Delegates:

Dr H. ELDEMIRE, Minister of Health (*Chief Delegate*)

Dr A. A. PEAT, Chief Medical Officer, Ministry of Health

JAPAN

Delegates:

Dr T. OMURA, Director, Public Health Bureau, Ministry of Health and Welfare (*Chief Delegate*)

Mr K. CHIKARAISHI, Counsellor, Permanent Delegation of Japan to the International Organizations in Geneva

Mr Y. SAITO, Counsellor and Chief Liaison Officer, International Affairs, Ministry of Health and Welfare

Alternate:

Mr N. TAKIZAWA, First Secretary, Permanent Delegation of Japan to the International Organizations in Geneva

JORDAN

Delegate:

Dr K. A. SHAMI, Director of Public Health, Ministry of Health

KUWAIT

Delegates:

Mr A. M. THUNAIN, Minister of Public Health (*Chief Delegate*)

Mr Y. J. HIJJI, Under-Secretary of State, Ministry of Public Health (*Deputy Chief Delegate*)

Dr A. AL-RASCHIED, Paediatrician

Adviser:

Dr A. K. EL-BORAI, Chief Medical Officer, Ministry of Public Health

LAOS

Delegates:

Dr O. SOUVANNAVONG, Adviser to the Ministry of Public Health (*Chief Delegate*)

Dr C. S. SAIGNAVONGS, Director, National Maternal and Child Health Service

LEBANON

Delegates:

Dr H. H. JALLOUL, Director of Preventive Health Services, Ministry of Public Health

Dr E. WAKIL, Director of Medical Care, Ministry of Public Health

LIBERIA

Delegates:

Dr E. M. BARCLAY, Director-General, National Public Health Service (*Chief Delegate*)

Dr J.-B. TITUS, Adviser, National Public Health Service; Director, Preventive Medicine Bureau

LIBYA

Delegates:

Dr A. BISCHTI, Minister of Health (*Chief Delegate*)

Dr A. ABDULHADI, Ministry of Health

Dr M. MAGHUR, Ministry of Health

Advisers:

Dr A. H. TURGUMAN, Ministry of Health

Mr A. BADI, Ministry of Health

LUXEMBOURG

Delegates:

Dr L. MOLITOR, Director of Public Health (*Chief Delegate*)

Mr I. BESSLING, Permanent Delegate of Luxembourg to the European Office of the United Nations

Dr E. DUHR, Inspector of Public Health

MADAGASCAR

Delegates:

Dr J. RAVOAHANGY-ANDRIANAVALONA, Minister of Public Health and Population (*Chief Delegate*)

Dr A. C. ANDRIAMASY, Minister Plenipotentiary, Ministry of Foreign Affairs

Mr J. ANDRIAMALALA, Ministry of Public Health and Population

MALI

Delegates:

Dr S. DOLO, Minister of Public Health and Social Affairs (*Chief Delegate*)

Mr A. SANGARÉ, Counsellor, Embassy of Mali in France

MAURITANIA

Delegates:

Dr B. BOCAR ALPHA, Minister of Health, Labour and Social Affairs (*Chief Delegate*)

Mr M. TOURÉ, Ambassador of Mauritania to the Federal Republic of Germany

MEXICO

Delegates:

Dr A. LÓPEZ SÁNCHEZ, Envoy Extraordinary and Minister Plenipotentiary; Director-General of Administration, Ministry of Health and Welfare (*Chief Delegate*)

Professor M. VELASCO-SUÁREZ, Director-General of Neurology, Mental Health and Rehabilitation, Ministry of Health and Welfare

Dr A. RÍOS-VARGAS, Director, Angel Gaviño Research Hospital

MONACO

Delegates:

Mr H. SOUM, Minister of Monaco in Switzerland (*Chief Delegate*)

Dr E. BOÉRI, Commissioner-General for Public Health (*Deputy Chief Delegate*)

Mr J.-C. MARQUET, Conseiller juridique du Cabinet de S.A.S. le Prince de Monaco

MONGOLIA

Delegates:

Dr G. TUVAN, Minister of Public Health (*Chief Delegate*)

Dr Peljegin DOLGOR, Chief Surgeon, Ministry of Public Health

Mr N. ISOGT, Expert at the Ministry of Foreign Affairs

MOROCCO

Delegates:

Dr A. KHATIB, Minister of Public Health (*Chief Delegate*)

Mr M. AMOR, Ambassador of Morocco to Switzerland

Mr A. EL KOUHEN, Director of the Minister's Office, Ministry of Public Health

Alternates:

Dr M. SENTICI, Director of Technical Services, Ministry of Public Health

Mr M. FERAA, Director, Research Bureau, Ministry of Public Health

NEPAL

Delegate:

Dr D. BAIDYA, Director of Health Services

NETHERLANDS

Delegates:

Professor P. MUNTENDAM, Director-General of Public Health (*Chief Delegate*)

Dr R. H. J. KRUISINGA, Director of Scientific Research and Planning, Ministry of Social Affairs and Public Health (*Deputy Chief Delegate*)

Advisers:

Professor J. H. DE HAAS, Head, Department of Social Hygiene, Netherlands Institute of Preventive Medicine, Leyden

Professor A. T. L. M. MERTENS, Professor of Social Medicine, University of Nijmegen

Miss A. F. W. LUNSINGH MEIJER, Deputy Permanent Representative of the Netherlands to the European Office of the United Nations

Miss J. SCHALIJ, Department of International Health Affairs, Ministry of Social Affairs and Public Health

NEW ZEALAND

Delegates:

Dr H. B. TURBOTT, Director-General, Department of Health (*Chief Delegate*)

Mr B. D. ZOHRAB, Permanent Representative of New Zealand to the European Office of the United Nations

NICARAGUA

Delegate:

Dr O. AVILÉS, Director of Administrative Services, Ministry of Public Health

NIGER

Delegates:

Dr H. KOUKA, Minister of Labour and Public Health (*Chief Delegate*)

Dr J. KABA, Chief Medical Officer, Public Health Service

NIGERIA

Delegates:

Dr M. A. MAJEKODUNMI, Federal Minister of Health (*Chief Delegate*)

Mr B. C. OKWU, Minister of Health, Eastern Nigeria (*Deputy Chief Delegate*)

Dr O. B. ALAKIJA, Acting Chief Medical Adviser to the Federal Government

Alternates:

Mr C. O. LAWSON, Permanent Secretary, Federal Ministry of Health

Dr S. E. ONWU, Director of Medical Services and Permanent Secretary, Ministry of Health, Eastern Nigeria

Dr O. ADENIYI-JONES, Medical Officer of Health, Lagos Town Council

Secretary:

Mr J. E. T. PECKU, Assistant Secretary, Federal Ministry of Health

NORWAY

Delegates:

Dr K. EVANG, Director-General of Health Services (*Chief Delegate*)

Dr J. BJÖRNSSON, Deputy Director-General of Health Services

Dr A. STRÖM, Dean of the Faculty of Medicine, and Professor of Social Medicine, University of Oslo

Alternate:

Dr Ö. JONASSEN, County Commissioner of Health, Sör-Tröndelag

PAKISTAN

Delegates:

Dr M. S. HAQUE, Director-General of Health, and Joint Secretary, Ministry of Health, Labour and Social Welfare (*Chief Delegate*)

Dr T. M. NIAZ, Deputy Director-General of Health, and Deputy Secretary, Ministry of Health, Labour and Social Welfare

PANAMA

Delegates:

Dr B. GONZÁLEZ RUIZ, Minister of Labour, Social Welfare and Public Health (*Chief Delegate*)

Mr R. E. CUCALÓN ICAZA, Assistant Director, Official Protocol Service

PARAGUAY

Delegate:

Dr D. F. LOFRUSCIO, Director, First Health Region, Acting Director-General of Health, Ministry of Public Health and Social Welfare

PERU

Delegate:

Dr C. QUIRÓS SALINAS, Director-General of Health, Ministry of Public Health and Welfare

PHILIPPINES

Delegates:

Dr C. S. GATMAITAN, Under-Secretary for Health and Medical Services (*Chief Delegate*)

Dr R. T. CAÑOS, Under-Secretary for Special Health Services

POLAND

Delegates:

Professor F. WIDY-WIRSKI, Deputy Minister, Ministry of Health and Social Welfare (*Chief Delegate*)

Professor B. GORNICKI, Rector, Academy of Medicine, Warsaw

Dr M. KACPRZAK, Professor at the Faculty of Medicine, Warsaw

Alternates:

Professor K. ROWINSKI, Head of the Department of Paediatric Radiology, Warsaw Academy of Medicine; Deputy Secretary, Department of Medical Sciences, Polish Academy of Science

Mr K. SZABLEWSKI, Second Secretary, Permanent Representation of Poland to the European Office of the United Nations

PORTUGAL

Delegates:

Dr P. M. SOARES MARTINEZ, Minister of Health and Welfare (*Chief Delegate*)

Dr A. DA SILVA TRAVASSOS, Director-General of Health, Ministry of Health and Welfare (*Deputy Chief Delegate*)

Dr M. A. DE ANDRADE SILVA, Senior Inspector of Health Overseas

Alternates:

Dr A. A. DE CARVALHO SAMPAIO, Senior Inspector of Health and Hygiene

Dr F. J. P. PINTO DE BALSEMÃO, Secretary to the Minister of Health and Welfare

Advisers:

Dr F. DE ALCAMBAR PEREIRA, Permanent Representative of Portugal to the World Health Organization

Dr A. H. DE ALMEIDA COELHO-LOPES, Consul-General of Portugal in Paris

REPUBLIC OF KOREA

Delegates:

Dr Chung Kun PARK, Director, Bureau of Medical Affairs, Ministry of Health and Social Affairs (*Chief Delegate*)

Dr Sang Tae HAN, Senior Medical Officer in charge of International Health, Ministry of Health and Social Affairs

Mr Soon Kun CHUNG, First Secretary, Permanent Delegation of the Republic of Korea to International Organizations in Geneva and Office of the Permanent Observer to the European Office of the United Nations

REPUBLIC OF VIET-NAM

Delegates:

Professor TRAN DINH DE, Secretary of State for Health (*Chief Delegate*)

Dr LE CUU TRUONG, Director-General of Health and Hospitals

Mr NGUYEN VAN THINH, First Secretary, Embassy of the Republic of Viet-Nam in the Federal Republic of Germany

ROMANIA

Delegates:

Dr S. IOAN, Deputy Minister of Health and Social Welfare (*Chief Delegate*)

Dr P. SGINDAR, Director of the Secretariat and of International Relations, Ministry of Health and Social Welfare

Dr M. ALDEA, Deputy Inspector-General, Ministry of Health and Social Welfare

Alternate:

Mr R. NEAGU, Third Legation Secretary, Ministry of Foreign Affairs

RWANDA

Delegate:

Mr M. GASHAKAMBA, Director, Kigali Hospital

Advisers:

Dr F. X. VANDERICK, Adviser to the Ministry of Health

Mr J. MBONYIMANA, Legation Secretary, Brussels

SAUDI ARABIA

Delegates:

Dr R. ALSAYED ALY, Adviser to the Ministry of Health (*Chief Delegate*)

Dr H. KRIMLY, Director of Quarantine, Jeddah Airport

SENEGAL

Delegates:

Mr D. COLY, Minister of Health and Social Affairs (*Chief Delegate*)

Dr L. DIALLO, Deputy Director of Public Health, Ministry of Health and Social Affairs

Dr H. BA, Chief Medical Officer, Cape Vert Region

Alternates:

Mr B. N'DIAYE, Ambassador; Permanent Representative of Senegal to the European Office of the United Nations and the Specialized Agencies in Switzerland

Mr A. N'DIAYE, Secrétaire d'ambassade

SIERRA LEONE

Delegates:

Mr D. L. SUMNER, Minister of Health (*Chief Delegate*)

Dr D. E. BOYE-JOHNSON, Deputy Chief Medical Officer, Ministry of Health

Mr M. A. O. FINDLAY, Acting Permanent Secretary, Ministry of Health

SOMALIA

Delegates:

Mr ABDIRAHMAN HAJI MOOMIN, Under-Secretary of State, Ministry of Health, Veterinary Medicine and Labour (*Chief Delegate*)

Mr A. F. ABRAR, Chief, Health Department, Ministry of Health, Veterinary Medicine and Labour

Dr A. S. IBRAHIM, Medical Officer, Demartino Hospital

SOUTH AFRICA

Delegates:

Dr C. A. M. MURRAY, Regional Director, State Health Services, South Transvaal Region (*Chief Delegate*)

Mr C. H. TALJAARD, Ambassador Extraordinary and Plenipotentiary of South Africa in Switzerland

Mr I. J. MARAIS, Principal Administrative Officer, State Health Department

SPAIN

Delegates:

Professor J. GARCÍA ORCOYEN, Director-General of Health (*Chief Delegate*)

Mr J. M. ANIEL-QUIROGA, Minister Plenipotentiary; Permanent Delegate of Spain to the International Organizations in Geneva

Professor G. CLAVERO DEL CAMPO, Director, National School of Health

Alternates:

Mr L. ARROYO AZNAR, Deputy Permanent Delegate of Spain to the International Organizations in Geneva

Mr M. DE VILLEGAS Y URZÁIZ, Embassy Counsellor, Permanent Delegation of Spain to the International Organizations in Geneva

Mr J. J. ARBOLI DES VALLS, Embassy Secretary, Permanent Delegation of Spain to the International Organizations in Geneva

SUDAN

Delegates:

Dr A. KHALIL, Acting Under-Secretary, Ministry of Health (*Chief Delegate*)

Dr MAHGOUB HAMZA, Province Medical Officer of Health, Port Sudan

SWEDEN

Delegates:

Dr A. ENGEL, Director-General of Public Health (*Chief Delegate*)

Dr M. TOTTIE, Medical Officer, National Board of Health

Alternates:

Professor G. BIÖRCK

Mr C. LIDBOM, Head of Division, Ministry for Social Affairs

Mr C. H. VON PLATEN, Ambassador Extraordinary and Plenipotentiary; Permanent Representative of Sweden to the European Office of the United Nations and other International Organizations in Geneva

SWITZERLAND

Delegates:

Dr A. SAUTER, Director, Federal Public Health Service (*Chief Delegate*)

Dr P. KÜRSTEINER, Assistant Medical Officer, Federal Public Health Service

Mr F. PIANCA, Legal Officer, International Organizations Division, Federal Political Department

Alternates:

Dr C. FLEURY, Chief, Infectious Diseases Section, Federal Public Health Service

Dr J.-P. PERRET, Assistant Medical Officer, Federal Public Health Service

Advisers:

Professor M. SCHÄR, Director, Institute of Preventive and Social Medicine, University of Zurich

Dr O. JEANNERET, Assistant Medical Officer, Youth Health Service, Department of Education of the Canton of Geneva

Secretary:

Miss A.-M. DÜRING, Federal Public Health Service

SYRIA

Delegates:

Dr A. ARAFEH, Secretary-General, Ministry of Health and Public Assistance (*Chief Delegate*)

Dr Dia E. CHATTY, Director of International Health Affairs (*Deputy Chief Delegate*)

Dr Y. SAYEGH

TANGANYIKA

Delegates:

Mr S. A. MASWANYA, Minister for Health (*Chief Delegate*)

Dr C. V. MTAWALI, Permanent Secretary, Ministry of Health

THAILAND

Delegates:

Professor P. SANGSINGKEO, Director-General, Department of Medical Services, Ministry of Public Health (*Chief Delegate*)

Dr P. CHANDAVIMOL, Deputy Director-General, Department of Health, Ministry of Public Health

Mr S. VEJJAJIVA, Chief, International Health Division, Office of the Under-Secretary of State for Public Health

TOGO

Delegates:

Dr VOVOR, Minister of Public Health (*Chief Delegate*)

Dr J. AMORIN, Deputy Director of Public Health

TRINIDAD AND TOBAGO

Delegate:

Dr L. M. COMISSIONG, Chief Medical Officer, Ministry of Health and Housing

TUNISIA

Delegates:

Mr Z. CHELLI, Ambassador of Tunisia to Switzerland; Permanent representative of Tunisia to the European Office of the United Nations and the Specialized Agencies (*Chief Delegate*)

Dr A. R. FARAH, Director, National Tuberculosis Institute

Dr M. BAHRI, Medical Inspector; Chief, Hospitals Section, Secretariat of State for Public Health and Social Affairs

Adviser:

Mr R. AZOUZ, Chief, External and International Relations Section, Secretariat of State for Public Health and Social Affairs

TURKEY

Delegates:

Dr N. H. FISEK, Under-Secretary of State, Ministry of Health and Social Welfare (*Chief Delegate*)

Dr T. ALAN, Director-General of International Relations, Ministry of Health and Social Welfare

UGANDA

Delegate:

Dr I. S. KADAMA, Chief Medical Officer and Permanent Secretary, Ministry of Health

UNION OF SOVIET SOCIALIST REPUBLICS

Delegates:

Dr S. V. KURAŠOV, Minister of Health of the USSR (*Chief Delegate*)

Professor V. M. ŽDANOV, Director, Institute of Virology of the USSR Academy of Medical Sciences

Dr G. A. NOVGORODCEV, Chief, Department of External Relations, USSR Ministry of Health

Alternates:

Mr P. S. KOSENKO, Assistant Chief, Department of International Economic Organizations, USSR Ministry of Foreign Affairs

Dr Ju. P. LISICYN, Deputy Director, Semaško Institute of Public Health Organization and History of Medicine, Moscow

Advisers:

Professor Z. I. JANUŠKEVIČUS, Rector, Kaunas Medical Institute

Mr V. S. POZARSKIJ, Counsellor, Permanent Representation of the USSR to the European Office of the United Nations

Dr R. M. STARKOV, Member of the Editorial Board of *Medicinskaja Gazeta*

Mr A. D. ALEŠIN, Senior Inspector, Department of External Relations, USSR Ministry of Health

Dr D. D. VENEDIKTOV, Adviser, Representation of the USSR to the United Nations, New York

UNITED ARAB REPUBLIC

Delegates:

Dr M. H. EL BITASH, Under-Secretary of State, Ministry of Public Health (*Chief Delegate*)

Professor M. A. ABBASY, Dean, High Institute of Public Health, University of Alexandria

Dr H. M. EL-KADI, Director of International Health, and Technical Director of the Minister's Office, Ministry of Public Health

Adviser:

Mr M. F. ABDEL BARR, Legal Adviser, Ministry of Public Health

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Delegates:

Sir George GODBER, Chief Medical Officer, Ministry of Health (*Chief Delegate*)

Mr J. M. LISTON, Medical Adviser, Department of Technical Co-operation

Mr H. N. ROFFEY, Assistant Secretary, Ministry of Health

Alternates:

Sir Kenneth COWAN, Chief Medical Officer, Scottish Home and Health Department

Dr L. H. MURRAY, Principal Medical Officer, Ministry of Health

Advisers:

Mr C. P. SCOTT, Permanent Representative of the United Kingdom to the European Office of the United Nations

Mr J. D. MILLER, Deputy Permanent Representative of the United Kingdom to the European Office of the United Nations

Secretary:

Miss M. I. BRABANT, Ministry of Health

UNITED STATES OF AMERICA

Delegates:

Dr L. L. TERRY, Surgeon General, United States Public Health Service, Department of Health, Education and Welfare (*Chief Delegate*)

Mr N. M. MCKITTERICK, Director, Office of International Economic and Social Affairs, Department of State

Dr J. WATT, Assistant Surgeon General; Chief, Division of International Health, United States Public Health Service, Department of Health, Education and Welfare

Alternates:

Mr H. B. CALDERWOOD, Office of International Economic and Social Affairs, Department of State

Dr C. L. WILLIAMS, Chief, International Relations Division, United States Public Health Service, Department of Health, Education and Welfare

Advisers:

Mr J. E. FOGARTY, House of Representatives

Mr M. R. LAIRD, House of Representatives

Dr J. Z. APPEL, Vice-Chairman, Board of Trustees of the American Medical Association

Dr A. E. RIKLI, Medical Consultant, Division of International Health, United States Public Health Service, Department of Health, Education and Welfare

Mr J. WACHOB, United States Mission to the European Office of the United Nations and other Organizations in Geneva

Mr S. H. WHALEY, Vice-President for Health Sciences, University of Arkansas Medical Center

Dr C. L. WILBAR, Secretary of Health, Pennsylvania Department of Health

Mr G. A. TESORO, United States Mission to the European Office of the United Nations and other Organizations in Geneva

Secretary:

Mr W. G. MURPHY, Office of International Conferences, Department of State

UPPER VOLTA

Delegate:

Dr P. LAMBIN, Minister of Public Health and Population

VENEZUELA

Delegates:

Dr D. CASTILLO, Assistant to the Director of Public Health, Ministry of Health and Social Welfare (*Chief Delegate*)

Dr G. FIGUEROA, Assistant Medical Officer, International Health Section, Ministry of Health and Social Welfare

Adviser:

Mr H. APONTE, First Secretary, Permanent Delegation of Venezuela to United Nations Organizations in Geneva

WESTERN SAMOA

Delegate:

Dr J. C. THIEME, Director of Health

YEMEN

Delegate:

Mr A. A. MOHANNY, Director-General, Ministry of Health

YUGOSLAVIA

Delegates:

Mr M. MARKOVIĆ, Secretary for Public Health and Social Welfare, Federal Executive Council (*Chief Delegate*)

Professor R. GERIĆ, Deputy Secretary for Public Health and Social Welfare (*Deputy Chief Delegate*)

Dr H. KRAUS, Director, Federal Institute of Public Health

Advisers:

Mr S. ŠOĆ, Counsellor, Permanent Delegation of Yugoslavia to the European Office of the United Nations and Specialized Agencies in Europe

Mrs V. VLAHOVIĆ, Second Secretary, Secretariat of State for Foreign Affairs

REPRESENTATIVES OF ASSOCIATE MEMBERS

KENYA [1]

Dr N. R. E. FENDALL, Director of Medical Services

MAURITIUS [2]

Mr J. G. FORGET, Minister of Health and Reform Institutions

Dr B. TEELOCK, Principal Medical Officer, Ministry of Health

2. Smallpox Eradication Programme

Agenda, 2.4

At the invitation of the CHAIRMAN, Dr KAUL, Assistant Director-General, Secretary, introduced the report of the Director-General on the smallpox

eradication pro gramme,[1] in which an attempt had been made to analyse the world incidence of smallpox in relation to the endemic areas. The report also referred to the epidemiological and research studies that were being supported by WHO.

It was hoped that the report would encourage a critical approach to the persistence of infection in endemic areas, reveal gaps in scientific knowledge, and make it possible to deal with technical problems more effectively. Slow progress in the eradication programme, however, was due not so much to technical problems, which were relatively few, as to administrative, organizational and financial difficulties.

Table I indicated that the number of reported cases in 1962 had shown no appreciable decrease: the total of 73 913 was lower than in 1959 and 1961, but higher than in 1960. The reduction as compared with the 1961 incidence was 0.7 per cent. in Africa, and 11 per cent. in Asia. In the Americas, the general decline in incidence since 1959 had been halted in 1962 by the occurrence of a large number of cases in Brazil, which, as the delegate of Venezuela had mentioned in the previous meeting of the Committee, had had certain repercussions on the frontier area between the two countries. Table II showed the countries and territories in which cases had been reported during the past three years. In 1962, fifty-seven countries and territories had reported cases—thirty-five in Africa, seven in the Americas, eleven in Asia, and four in Europe.

Section 3 of the report referred to world incidence in relation to endemicity. Table III showed that eighteen countries and territories had reported more than 500 cases in 1962, and the rates per 100 000 of the population for those countries indicated that parts of Africa were as highly endemic as parts of Asia.

Table IV, indicating the number of weeks in which cases of smallpox had been reported in 1960, 1961 and 1962 showed that the infection was prevalent almost throughout the year in most countries in Africa and Asia. Areas of high endemicity as indicated by the frequency of such reports were shown in the maps [2] following Table IV, the map for 1962 showing also the countries and territories in which eradication programmes were either planned or in progress.

Section 4 dealt mainly with technical aspects. Epidemiological studies were necessary in order to learn more about the behaviour of the disease in densely populated areas as compared with sparsely populated areas, in different age-groups, and in persons in whom immunity had declined. It was also necessary to discover whether partially immune persons constituted a reservoir of infection in overcrowded parts of the larger cities. Studies were also being made on methods of measuring the level of protection of populations against smallpox. Vaccination and revaccination with a standard vaccine of high potency were being carried out on random samples of population, to determine the percentage of susceptibles according to age and interval since last vaccination. Information would thus be obtained on the optimum intervals for revaccination for persons of different ages.

Laboratory studies were being developed on the levels of antibodies in the blood of vaccinated persons affording protection against challenge with highly potent vaccine. The importance of production of stable and highly potent vaccines could not be overemphasized. Recent studies had shown that only vaccines of the highest potency would give satisfactory revaccination "take" rates. A vaccine producing a high percentage of "takes" in primary vaccinations, but failing partially or completely in revaccination, not only doomed a campaign to failure but also gave a false sense of security.

Comparative trials on results obtained by using jet injectors and multi-pressure technique in vaccination were now in progress, and in Liberia such trials were being developed by a WHO medical officer. The Organization was also supporting studies on the production and testing of animal hyperimmune gamma-globulin with a view to its possible use in prevention and treatment.

The Organization had supported studies in Madras on the infectiousness of smallpox in the early stages of the disease, and on the dissemination of the virus by air. An expert committee on smallpox was to be convened in 1964, to advise on the epidemiology and prevention of smallpox, to review the research that had been carried out, and to evaluate the organization and progress of the eradication programme.

Section 5 of the report described the procedure adopted by the Organization for testing donated vaccines before they were accepted for distribution. The amounts of vaccine received and distributed were shown in Table V: it would be noted that there would be a shortfall to meet 1963 requirements unless further substantial donations were received in the near future.

Part II described the progress in the eradication programme. Table VI summarized the present state of programmes in the endemic countries: of forty-four countries and territories where smallpox was endemic, fourteen were now developing eradication programmes or eliminating residual foci, twenty-two had prepared programmes but had not yet begun to implement them, and eight had not as yet produced plans for eradication.

[1] *Off. Rec. Wld Hlth Org.* **127**, Annex 16.

[2] Not reproduced in the printed version of the report.

Section B of Part II gave a summary of progress country by country.

The Organization, aware of the danger of infection being reintroduced from endemic countries conducting eradication programmes, was urging neighbouring countries, particularly contiguous ones, to co-ordinate and whenever possible synchronize their control and eradication programmes. An example was the co-ordination of eradication activities in a large area of West Africa comprising Ghana, Guinea, Ivory Coast, Liberia, Mali, and Upper Volta. At the Fifteenth World Health Assembly it had been reported that progress in the smallpox eradication programme had been slow, owing mainly to difficulties encountered by the endemic countries in finding sufficient funds for vehicles and refrigeration and other equipment. Eradication programmes were still being hampered by lack of resources. The Fifteenth World Health Assembly, in its resolution WHA15.53, had invited voluntary contributions in cash or kind for the smallpox eradication programme, and in July 1962 the Director-General had accordingly issued a circular letter inviting contributions from Member States. The following Member States had offered supplies of vaccine: Switzerland, 2 million doses; Chile, 500 000 doses; Italy, 100 000 doses; and the Netherlands, 1 million doses.

The Organization continued to assist national eradication programmes as far as its budgetary resources permitted, but its limited assistance was insufficient to accelerate the eradication programme. The assistance provided by the Organization consisted of short-term consultants to advise and help national administrations in the production of freeze-dried vaccine, and to advise on the organization and planning of eradication campaigns and on pilot eradication schemes, medical officers to advise and assist in the implementation of eradication programmes, equipment and supplies for vaccine production, and a limited amount of transport.

The situation, as described in the report, could be summarized as follows: while a few countries in the endemic areas had completed their programmes and had not reported cases for three years, the majority were still encountering difficulties, mainly of a financial nature—transport and other equipment, and supplies, were the main requirements; substantial amounts of vaccine were needed in the near future in order to complete eradication campaigns in progress; WHO continued to provide within its budgetary limitations advice and support for studies and investigations on smallpox (in epidemiology and immunology), and, to a limited extent, supplies and equipment for the production of freeze-dried vaccine, and transport and refrigeration requirements.

In order to accelerate the global programme, concerted and sustained efforts were needed at both national and international levels.

Professor MUNTENDAM (Netherlands) had been very impressed by the report on the smallpox eradication programme, and recommended that it be printed and distributed as widely as possible. It reviewed a problem that should be known to all doctors, both public health doctors and clinicians, in developed as well as in developing countries. Moreover, it should help to make doctors more "world-health-minded"—an important task to which WHO should pay more attention.

In the introduction to the report, it was deduced, on the basis of the epidemics of 1951 and 1957-1958, that 1963 and 1964 might be dangerous years. Had the epidemics of 1951 and 1957 taken place in Asia and Africa simultaneously?

The report made recommendations concerning developing countries, but the implementation of those recommendations was dependent on assistance provided by the developed countries. The Organization should use the anxiety felt by the developed countries at the possible importation of smallpox in order to urge those governments to support the smallpox eradication campaign.

In order to reduce the risk of secondary cases when smallpox was imported to non-endemic areas, various measures were obviously required—for example, the vaccination or revaccination of all doctors and nurses in hospitals, and of non-medical hospital personnel. WHO should, however, take advantage of recent happenings and analyse the experience of such countries as the United Kingdom, the Federal Republic of Germany, and Sweden, in which outbreaks due to imported cases of smallpox had recently occurred. It could then make practical, up-to-date recommendations for the control of imported smallpox.

The use of gamma-globulin for direct contacts, the construction of modern quarantine stations, and isolation and surveillance procedures should be considered, and the individual practitioner should be made to realize his great responsibility when he saw a case where smallpox might be the diagnosis, however remote the possibility.

A mass vaccination programme covering at least 80 per cent. of a country's population (both children and adults), as mentioned in the introduction to the report, seemed an unattainable goal for countries where the disease was not endemic. The report contained no mention of the very important paediatric aspect of mass vaccination in developing countries. In practice, it was impossible to apply in endemic areas the contra-indications normally followed in non-endemic areas,

but the general health condition of the individual should be considered, and under-nourished infants and pre-school children should of course not be included in mass vaccination programmes. It was hoped that WHO would advise countries in endemic areas to include, whenever possible, a paediatrician with vaccination experience in national and local vaccination committees.

Regarding the potency of the vaccine, it was stated in section 4 of the report that a vaccine might produce a high percentage of "takes" in primary vaccination, but might fail in revaccination. It was hoped that WHO would bring that important observation to the attention of all countries.

He would like to know what kind of local and general reactions in primary vaccination were produced in children and adults by highly potent vaccines giving a high percentage of "takes" in revaccination. Did those vaccines cause more severe reactions, or was there a divergence between immunogenicity on the one hand and degree of reaction on the other?

Professor ŽDANOV (Union of Soviet Socialist Republics) recalled that smallpox was a disease that the public health authorities were certainly in a position to eradicate. During the first half of the last decade certain progress had been made, but later the disease appeared to remain stationary or, what was worse, showed a tendency to spread in countries where it had previously been eradicated. The report showed that during 1962, 136 imported cases had been notified in Europe (in the Federal Republic of Germany, Poland, the United Kingdom and Switzerland, and others more recently in the Scandinavian countries). As long as endemic areas still existed, the possibility remained that outbreaks would occur in countries where the disease had been eradicated: in 1960, for instance, smallpox cases had been imported into the Soviet Union from India.

The problem of imported cases varied according to the country. There was obviously a problem where the population was dense around ports and airports. Smallpox was highly endemic in certain countries during 1960 and 1961, 60 per cent. of all cases of smallpox had been registred in fifty-nine endemic countries); in other countries, the outbreaks were sporadic; in others the only cases were imported. In spite of the difficulties, where endemicity was high the authorities should be urged to adopt national eradication programmes.

It must be said, however, that WHO was far from having done everything possible. Research was still needed into new eradication methods. The prophylaxis at present in use was many years old and could certainly be improved. Moreover only a fully effective vaccine could produce valid results, and closer consideration should therefore be given to the production and standardization of smallpox vaccines.

Those were secondary points, however, since means for eradicating smallpox existed. Attention must be given to the organizational side, and in that respect co-ordination between neighbouring countries could do much to reduce the danger of the disease spreading. The map included in the report [1] served as a further reminder that smallpox was indeed an international health problem, and that its eradication could be achieved only by a combined effort on the part of all countries in the world.

In conclusion, he would make an urgent request that priority be given to the global smallpox eradication programme. It was, perhaps, the only programme that could really be completed, and in the foreseeable future. Mass vaccination programmes—which did not require exorbitant financial resources—should be started; a clear and detailed eradication programme should be drawn up by WHO; and unceasing efforts should be made to achieve eradication. The Soviet Union would do all in its power to help towards a solution of such an important international health problem.

Dr DA SILVA TRAVASSOS (Portugal) wished to make a few comments on the excellent report before the meeting. The global programme of eradication had been started soon after the decision of the Eleventh World Health Assembly in 1958, but the results obtained so far could not be considered wholly satisfactory. There remained foci in Asia, Africa and South America that were real reservoirs of smallpox and constituted a danger not only to neighbouring countries but to the whole world. The present swift means of transport made the spread of smallpox from those areas very easy.

The report pointed out the essentials for a sound plan of eradication and the factors that influenced it, e.g. quality of vaccine, techniques used and assessment of results. There were of course epidemiological factors. But the summary appeared to omit a very important point: the need in some countries for legislation to introduce compulsory vaccination, so that suitable age-groups would be systematically vaccinated.

Another important point that the Committee might consider was the criterion for deciding when a country was free from smallpox. He referred to the summary, given in the second paragraph in Part II of the report, of the position in a number of countries since 1958, and asked whether a country in which outbreaks were

[1] Not reproduced in the printed version.

solely due to imported cases should be considered free from smallpox.

In Table VI of the report Angola, Mozambique and Portuguese Guinea were included among the countries that had not yet reported plans for eradication. Yet in section B it was said of Angola that "a systematic vaccination campaign is carried out annually", and of Mozambique that a yearly vaccination programme was carried on in which thousands of vaccinations were done with a locally produced vaccine. In fact since 1955 the number of vaccinations had been between 1 200 000 and 1 500 000 every year. In Portuguese Guinea also an eradication campaign was in progress.

He asked whether Table VI included only those countries that had asked WHO for help with their national eradication programmes. If so, he wished to declare that his Government considered its health services adequate and competent to deal with campaigns against smallpox, which they considered to be normal public health work.

To return to Angola, there had not been a single case of smallpox in that territory in the four years before 1962, in which year there had been two imported cases followed by a small outbreak in two northern districts. Up to the end of April 1963, eighteen cases had been diagnosed. On those facts, he thought that Angola should be in the same category as Bolivia, Paraguay and Ceylon, referred to in the introduction to Table VI.[1] In the four years mentioned, systematic vaccination had been continued. It should also be mentioned in Table VI that in Cape Verde, in the islands of Sao Tomé and Principe, and in Portuguese Timor and Macao, no cases of smallpox had been reported for many years. He would be glad to have that information recorded. Finally he thought that, on the map showing the weekly frequency of smallpox in 1962[2], Angola, Mozambique and Portuguese Guinea should be shown as having eradication campaigns in progress; the map as it stood was not accurate and might be confusing.

In conclusion, on behalf of the Portuguese delegation, he congratulated the Chairman on his election and for the able manner in which he was presiding over the Committee's discussions.

Dr FIGUEROA (Venezuela) recalled that, at the fourteenth meeting, in the discussion on the report of the Committee on International Quarantine, he had given some figures relating to smallpox which showed that in his country no cases of smallpox had been reported since 1956, except for eleven cases in 1962 in a forest district near the Brazilian frontier. In spite of the topographical difficulties of that area, a vigorous vaccination campaign had been started and had been extended to the whole country by the local health services; since then no further cases had been reported.

According to the report before the Committee, some 90 per cent. of the cases notified in the Americas had occurred in Brazil: 2759 out of a total of 3029. It was encouraging to note that Brazil was now about to begin a very intensive smallpox eradication campaign.

In conclusion, he congratulated the Director-General on the excellent report before the Committee.

The meeting rose at 5.55 p.m.

SIXTEENTH MEETING

Wednesday, 22 May 1963, at 10.30 a.m.

Chairman: Dr V. V. OLGUÍN (Argentina)

---

1. Smallpox Eradication Programme (continued)

Agenda, 2.4

Dr EL-BORAI (Kuwait) said that the eradication of smallpox was one of the biggest problems facing the world today, but with speedy and concerted action it could be solved. As was stated in the report before the Committee [3], most of the countries where the disease was endemic were hampered in implementing national campaigns by lack of funds, transport, equipment and personnel, but there was still a danger of epidemics even in some countries with well organized public health services. The cause of many local outbreaks was the entry into a country of a person incubating the disease who spread it to other persons before the health authorities became aware of the situation. Thus, not only was smallpox a terrifying problem in

[1] *Off. Rec. Wld Hlth Org.*, **127**, 202.

[2] Not reproduced in the printed version.

[3] *Off. Rec. Wld Hlth Org.*, **127**, Annex 16.

the countries where it was endemic, but the whole world was exposed to the threat of infection. He therefore appealed to the countries most directly concerned to intensify their eradication campaigns, and to neighbouring countries to co-ordinate operations with them. His delegation had welcomed the resolution adopted the previous year in which the Health Assembly had requested UNICEF to give assistance to such campaigns.

His delegation was aware that WHO was giving close attention to smallpox research, both epidemiological and virological. The recommendations of the expert committee that was to meet in 1964 were eagerly awaited, because an understanding of the epidemiology of smallpox was a prerequisite for sound planning of eradication programmes. Questions requiring clarification included the choice of a suitable vaccine for revaccination and the problem of partially immune persons in the community.

The introduction of dried vaccine had been enthusiastically welcomed, but experience had unfortunately shown that it did not always give satisfactory results under field conditions. His Government was therefore looking forward to the results of WHO's work on the production of heat-resistant dried vaccines. Another problem requiring attention was post-vaccinal encephalitis, of which for unknown reasons cases still occurred in some countries.

Vaccination with stable vaccine was not merely the most effective, but was the only weapon for the control of smallpox; his delegation was therefore in favour of legislation providing for compulsory vaccination throughout the world. In his country, legislation had been adopted in 1960 making primary vaccination compulsory during the first three months of life, with inspection of results after one week, vesiculation being considered the only proof of success. If unsuccessful, vaccination was repeated up to twice at monthly intervals, the third unsuccessful attempt entitling the patient to exemption. Exemption could also be granted on medical grounds.

Though immunity was generally supposed to last for seven to ten years, the International Sanitary Regulations, to increase the margin of safety, fixed the validity of the vaccination certificate at three years, and his Government accordingly planned to carry out general vaccination at three-year intervals. One such vaccination had been carried out at the end of 1956 and the beginning of 1957 on the occurrence of sporadic cases imported from Oman, and a second in 1959 to 1960. Unfortunately, the results had not been evaluated, but emphasis would be placed on that aspect next time.

After giving further details of the legislative provisions in his country regarding vaccination, he said that since 1959 only one case of smallpox, imported by ship, had occurred.

His delegation would support the draft resolution recommended by the Executive Board and inviting Member States to make voluntary contributions in cash or kind to enable WHO to help requesting countries meet their deficiencies of transport, equipment and vaccine.

Dr WILLIAMS (United States of America) observed that, as had been pointed out by Dr Kaul and by the Soviet Union delegate, the slow progress made in the smallpox eradication campaign the previous year had been due to financial and administrative, rather than technical, difficulties.

The smallpox eradication campaign had existed as a recognized WHO programme since 1951, but it had differed from the malaria eradication programme in that activities were undertaken mainly at the country level with minimal assistance from international organizations. Thus, the appropriation proposed by the Director-General and now approved by the Health Assembly for 1964 amounted to only $ 227 100. Among the communicable diseases known to man, smallpox was one of those whose eradication seemed most feasible, despite technical difficulties relating to effectiveness of vaccines, techniques of vaccination and criteria for reading results. It was endemic in only three parts of the world: South-East Asia, Africa and South America. Eradication campaigns were in operation in South-East Asia, South America and South Africa, leaving most of the African continent without any specific action aimed at eradication. The Pan American Sanitary Conference, meeting in Minneapolis in 1962, had set 1967 as the target date for the elimination of smallpox from the western hemisphere.

His delegation wished to urge the Director-General to give more attention to the problem in future budgets, setting aside funds for a stated number of years to finance eradication programmes, particularly in the three endemic areas of the world. An expenditure of $ 10 million over a few years seemed realistic for achieving eradication, but it would not be attained by waiting for voluntary contributions; provision must be made in the regular budget.

His delegation would support a draft resolution calling for synchronized co-operative action by governments to achieve the objectives laid down by previous Health Assemblies, with appropriate assistance from WHO.

Dr CHADHA (India) said the Committee was aware of the high incidence of smallpox in his country and would understand the anxiety of his Government to liquidate the problem as expeditiously as possible.

Of the 73 913 cases registered throughout the world in 1962, 42 231 had occurred in India. The figure had had been higher in 1961, but the difference was not substantial and the cyclical incidence of the disease, with peaks every five to seven years due to the building up of susceptibility in the population, was recognized.

In 1958 his Government had appointed an expert committee on smallpox and cholera which had produced its report in 1959. On the basis of its findings pilot projects, covering a total population of twelve million, had been launched in 1960 and 1961 in all states and the Union territory of Delhi. The vaccine employed had been the liquid lymph type, except in Orissa, where freeze-dried vaccine donated by the Netherlands had been used. No complications had occurred except for a mild case of encephalitis in a child in Orissa.

Following the pilot projects, a full-scale eradication campaign had been launched in October 1962. So far only 75 000 000 persons, or less than 20 per cent. of the population, had been covered, so no appreciable impact on the incidence of the disease could yet be expected, but tangible results were expected by the following year, when coverage would be greater. Evaluation work had begun in the New Delhi area and it was expected that conclusions would soon be available.

Experience in the campaign had drawn attention to certain essentials, the first being a really satisfactory vaccine. The liquid lymph type used in the past gave good results when obtained fresh and stored in proper conditions, but in the field its potency tended to vary, affecting the success of operations. Freeze-dried vaccine had proved more reliable, and when used for revaccinations gave up to 70 or 80 per cent. of success compared with only 40 or 50 per cent. with liquid vaccine. Freeze-dried vaccine (250 000 000 doses) had been donated by the Union of Soviet Socialist Republics.

In India they were resorting to three or four insertions for primary vaccination and two or three for revaccination, instead of only one as recommended in certain countries, the report of the expert committee having indicated that immunity was proportionate to scar area.

Staffing and supervision were other important factors. A deputy director-general had been appointed to direct the campaign at the national level, and for every 3 000 000 persons a provincial unit had been established with a staff of sixty vaccinators and twelve supervisors under the overall direction of a senior medical officer. The technique of vaccination was well known and success depended mainly on ensuring that all the population was covered; close attention was therefore paid to enumeration and registration.

His country's experience with regard to health education might be of interest. It had been found that to inform the population by drum-beat or leaflet a few days in advance of the arrival of the vaccinators was insufficient. To break the barrier of apathy and superstition it was essential to begin weeks ahead and impress on the population the benefits they would derive from vaccination.

Guidance in the development of the campaign was supplied by an advisory committee at the national level, under the chairmanship of the Director-General of Health, which met every few months to examine the situation and remedy any defects.

Dr HAQUE (Pakistan) thought that, as his country was one of the endemic smallpox areas of the world, the Committee would wish to know the situation there.

East Pakistan, with a population of 50 000 000, had had, until recently, 80 000 deaths a year from smallpox. With WHO assistance, and the use of freeze-dried vaccine donated by the Union of Soviet Socialist Republics, a pilot project had been carried out in 1961 in two districts with a total population of about 10 000 000. Since then, there had not been a single case in the areas concerned—a very satisfactory result achieved through thorough preliminary surveys to ensure that nobody was left out. A full-scale eradication programme had now been launched throughout East Pakistan.

To meet the needs of the campaign, a freeze-dried vaccine plant had been established. It was now producing 2 000 000 doses a week, which covered national requirements and made it possible to supply vaccine to neighbouring countries.

In West Pakistan, where the incidence of the disease was lower, it was also planned to undertake eradication, but in conjunction with the campaign of BCG vaccination. Pilot projects would first be conducted to see whether such a combined operation was feasible.

The great strictness now exercised by the health authorities of Pakistan in issuing vaccination certificates had contributed greatly to an improvement in the situation. The incidence of smallpox was now down to 1000 to 2000 for the whole country, as against the previous figure of 80 000 for East Pakistan alone.

Professor GERIĆ (Yugoslavia) observed that, in spite of the successes achieved against smallpox by WHO and its Member States, outbreaks were still occurring both in countries where the disease was endemic and in countries that had been freed from it. While the latter group of countries were naturally, in their own interest, anxious to see smallpox eradicated from the world, it was the first group that would benefit most directly. Unfortunately, those same countries suffered from a great shortage of qualified

staff and of money, which was why international agencies, in particular WHO, should do much more to help than they had done hitherto. He fully agreed with the Soviet Union delegate that, in view of its technical feasibility, smallpox eradication should be given priority. The disease represented at least as great a problem as malaria, the only difference being that its eradication would be easier to achieve. He hoped that, in drawing up the proposed programme and budget estimates for 1965, the Director-General would take account of the suggestions made during the present discussion and give greater emphasis to smallpox programmes.

Dr CHANDAVIMOL (Thailand) said that his country had long been preoccupied with the problem of smallpox control. As it had become a centre of communications in the South-East Asia area, it sometimes happened that cases were imported. His Government was therefore participating in the eradication campaign, with assistance from international agencies.

Cases were still recorded every year, though the number had declined from 1548 (with 27 deaths) in 1959 to 33 in 1960 and 34 in 1961. Up to September 1962 there had been only one case, imported by air.

A three-year mass vaccination campaign had been started in 1961 with the aim of vaccinating one-third of the population each year, but so far only 60 per cent. had been covered; the campaign was therefore being prolonged for two more years.

Thanks to assistance from UNICEF and WHO, a freeze-dried vaccine production plant had been set up in 1960.

Dr OKWU (Nigeria) said that the problem of smallpox was world-wide and its solution called for operations on a world scale. His delegation considered that it had not been tackled vigorously enough, and that if half the effort being spent on malaria eradication were devoted to smallpox the disease would be wiped out in a very few years. He did not, of course, wish to minimize the importance of malaria, which was also a deadly menace and must be attacked with all available weapons.

The distribution of smallpox in Nigeria was peculiar; it was endemic in the Northern Region, part of the Western Region, and the Federal territory of Lagos, but for some years past it had been almost unknown, apart from imported cases, in the Eastern Region. That result had been attained by years of constant, daily vaccination, which had covered an estimated 70 per cent. of the population. If the disease threatened anywhere, mobile epidemic units were ready to go into action, and all auxiliary health workers were qualified to perform vaccinations in an emergency.

Nigeria produced potent and stable freeze-dried vaccine, which it would supply at nominal cost to any African country requiring it.

After stressing the importance of international co-ordination of eradication campaigns, he said that, while some individuals objected to vaccination on religious or other grounds, in the interests of the people as a whole legislation should everywhere be introduced to make it compulsory.

Mr MARADAS-NADO (Central African Republic) said that his country was indicated in Table VI of the report before the Committee as among the countries that had an eradication programme ready, whereas in fact it should be grouped with those which had completed eradication campaigns but where residual isolated foci were still reported. For the past fifteen years mass vaccination had been continuously carried out in three-year cycles and over 80 per cent. of the population had been vaccinated. Since 1954 not a single case, apart from one very doubtful one, had occurred until in 1962 a woman and her child, who had caught the disease on a visit to the neighbouring Republic of Chad, started a minor epidemic in the north. About fifty secondary cases had occurred in their village among non-vaccinated persons, but the outbreak had been rapidly brought under control by emergency vaccination. Since then there had been no further cases in the country. The campaign was continuing and over the past three years more than 1 300 000 vaccinations had been performed, for a total population of 1 200 000.

In conclusion, he suggested that, to promote co-ordination of campaigns among neighbouring countries, WHO should supply dried vaccine of tested potency to be used according to a standard method. Smallpox eradication should receive high priority because, unlike some other programmes, it could be successfully achieved in a relatively short time.

Dr DOLO (Mali) said that his delegation had studied the important report submitted by the Director-General with great interest, since smallpox had constituted a problem in his country for more than twenty-five years.

The four-year vaccination programme set up had decreased morbidity but had not achieved eradication. Over the last five years or so Mali had had a yearly average of 1500 cases of smallpox, with epidemics every three or four years and a mortality rate ranging from 2 per cent. to 10 per cent. In view of that persistent endemicity his Government had drawn up, with the help of WHO, a plan of eradication over four years, a campaign having been started at the end of 1962 following a thorough country-wide campaign for health education of the public in that respect. An

independent health service had been set up for the purpose, with an independent budget. The programme was progressing favourably. Ten vaccination teams, each with a supervisor, were constantly travelling round the country and were being very well received by the population, 80 per cent. attending for vaccination. It was expected that 300 000 persons would have been vaccinated by the end of June.

He called attention to certain difficulties that had arisen due to the size of the country, communication difficulties, the rainy season, and nomadic populations in certain regions. WHO had been requested to extend its assistance in that programme by the supply of transport and of equipment for storage of vaccines. WHO had also been requested to supply a doctor to assist in the eradication programme and it was hoped that that medical officer would be recruited very shortly.

He emphasized the problem facing Mali in connexion with adequate control of persons crossing its frontiers, since the country was in the interior. There could be no doubt that the only effective way of eradicating smallpox on the African continent would be to organize simultaneous and co-ordinated programmes among neighbouring States.

He expressed his delegation's gratitude to WHO and to the Government of the USSR for the help they had given.

Dr SUBANDRIO (Indonesia) congratulated the Director-General on the excellent report submitted, which should prove most valuable, particularly for the countries directly concerned.

Indonesia was a country where smallpox was endemic and she gave an account of measures being taken for the control of that disease.

She called attention to the number of cases of smallpox in Indonesia over the past three years, as shown in Table II of the report. Cases of smallpox had dropped from 5196 in 1960 to 3777 in 1961 and to 586 in 1962. The problem of smallpox in her country had been closely linked with the problem of establishing internal security. She recalled that there had been no outbreaks of smallpox before 1958, as an excellent vaccination system had been in force. Since then, however, because of the armed rebellions that had taken place in parts of the country, particularly in mountain areas, it had become extremely difficult for vaccination teams to make all the necessary contacts with the population. The incidence of smallpox had thus risen to a peak in 1960, the situation improving after that as the result of the termination of armed conflict. A vaccination campaign, with the assistance of the army and of many branches of the civil administration, had been undertaken at the end of 1961, resulting in a striking drop in the number of cases in 1962. Western Java had been the last area to achieve internal security, and that fact was perhaps related to the outbreaks of smallpox that had taken place in 1962 in the mountainous areas of Western Java. The authorities were coping with the vaccination of the total population by using teams of vaccinators which included medical students and student sanitarians. Some 2000 students were also being used in Djakarta. The students had proved most satisfactory.

With regard to future action, Indonesia had not as yet drawn up any eradication plan but was still at the control stage. A board for the control of communicable diseases had been set up under the chairmanship of the executive director of the malaria eradication service. It was proposed to integrate the projects for smallpox eradication with malaria eradication, particularly in connexion with the consolidation and maintenance phases of the latter, with a view to making full joint use of facilities such as transport. Proposals in that connexion had not yet been discussed with WHO or with the Agency for International Development (AID) of the United States of America and she would invite them to study that plan.

Provision had also been made for vaccination, particularly of new-born infants, to be provided through maternal and child health services. Indonesia was planning to use maternal and child health clinics, of which there would be nearly 4000 assisted by UNICEF, as a nucleus for health services, based in the first instance on mothers and children. The smallpox eradication division was being included in the division of epidemiology in her national ministry under one director. Furthermore, in order to facilitate compulsory vaccination, specific legislation relating to epidemics had been adopted the previous year.

Dr MURRAY (South Africa) said that his delegation associated itself with the statement made by the delegate of the United States of America in connexion with the financing of smallpox eradication, and would support any resolution recommending that the eradication campaign should be financed by means of the regular budget of WHO rather than by voluntary contributions. That would not only ensure a more stable flow of funds but would also make it possible to achieve co-ordinated programmes for contiguous territories, thus leading to the ultimate eradication of the disease.

Dr GUNARATNE (Ceylon) complimented the Director-General on his comprehensive report.

Smallpox was not endemic in Ceylon, but occasionally a few imported cases occurred. As the report showed, there had been 34 cases in 1961 and 12

cases in 1962, whereas the country had been free of the disease for several years previously. He drew attention to difficulties in establishing a correct diagnosis of the first cases. Usually, some four to twelve secondary cases were necessary before the first imported case was definitely recognized.

Ceylon had a satisfactory programme for primary vaccination but did not undertake revaccination as a routine measure. The cases that had occurred were probably due to reduction of immunity. He therefore requested WHO to make a considered recommendation regarding desirable age-groups for secondary or subsequent vaccination, since the introduction of that would be the only method to prevent sporadic outbreaks.

Dr KEITA (Guinea) expressed appreciation of the Director-General's excellent report. The question of smallpox was of great interest to all African countries, particularly since some had not as yet initiated any programme for its control and eradication, although the disease was endemic on that continent. He emphasized the urgency of establishing a co-ordinated programme so as not to omit any areas which might become a source of danger in the future.

He contrasted the progress already achieved towards smallpox eradication in Asia and that in Africa. There were fifteen cases of smallpox per 100 000 population in Africa whereas that ratio had dropped to seven in Asia.

He drew attention to the number of cases of smallpox which had occurred in Guinea over the past years, as shown in Table II of the report. The number had fluctuated from 176 in 1960 to 96 in 1961 and 2948 in 1962. Those figures were indicative of the fact that his country was still not free of epidemics. The Institut Pasteur in Kindia was being adapted for the production of freeze-dried vaccine. In that respect, assistance had been requested from WHO and UNICEF in the form of laboratory and refrigeration equipment and transport. It was anticipated that that production centre would be able to supply twenty million doses, which would meet the needs of neighbouring countries as well as those of his own. He stressed the desirability of further studies on the levels of antibodies which gave total immunity. Thus campaigns could be restricted to those sections of the population susceptible to the disease. He also supported the United States view that smallpox eradication activities should be financed under the regular budget in the interests of more effective action.

Dr JALLOUL (Lebanon) said that there had not been a single case of smallpox in Lebanon since 1957. Legislation provided for compulsory mass vaccination every four years. A mass vaccination campaign, which had achieved 80 per cent. participation of the population, had taken place in 1960 and another would be undertaken in 1964. The majority of those who had not received vaccination in 1960 had been vaccinated in the intervening years. Moreover, all infants were vaccinated at the age of two months.

Professor PESONEN (Finland) said that the question of smallpox eradication was of the utmost importance to the whole of mankind, as had been pointed out by a number of delegations including those of the United States of America and the USSR. WHO should intensify its efforts in that sphere. There could be no doubt, from the purely financial viewpoint, that the eradication or effective control of smallpox would result in considerable economies on the national plane, since the need for vaccination would be obviated. Accordingly, all countries should support the Director-General's efforts in that field.

Reference had been made to the need for more vaccinators and vaccines. The valuable report provided by the Director-General showed that generous contributions of vaccines had been received from a number of countries. WHO should seek to obtain further contributions of that kind. It seemed to him that the training of vaccinators was a process which could take place fairly rapidly.

Dr AFRIDI, representative of the Executive Board, called attention to resolution EB31.R33, in which the Board had recommended a resolution for adoption by the World Health Assembly.

Dr KAUL, Assistant Director-General, Secretary, said that the discussion had been most valuable not only in suggesting means whereby programmes could be improved, which would be noted and taken into account in planning future WHO assistance, but also in showing the progress that had been made in eradication. In reply to those delegations that had requested that the report be published and circulated, he said that the Director-General would investigate whether resources would permit its publication in the Official Record of the Sixteenth World Health Assembly or if an alternative means of publication could be found. To those delegations that questioned whether WHO had made sufficient efforts to stimulate smallpox eradication, he said that the Organization was giving as much encouragement as possible; the reasons for slow progress were mainly to be found at the national level where administrative difficulties and grave material shortages had to be overcome. He had noted the remarks of the delegate of the Soviet Union and other speakers on the need for assistance from the Organization under the regular programmes; advisory services were already available to any Member

government that requested them; material assistance, the provision of transport, vaccine and other supplies, was necessarily limited by the extent of the funds available. In view of this, the voluntary contributions, in cash or in kind, of Member States, in support of national smallpox eradication programmes were invaluable; further contributions had been received recently and it was hoped that it would be possible to meet all the requirements for vaccine from that source.

The delegate of the Netherlands had raised the question of smallpox epidemics. A survey of incidence in recent years was included in the report but it was clear that waves of epidemics occurred approximately at five to seven-year intervals. There had been epidemics in Africa in 1950 (41 000 cases) and in 1957 (33 000 cases), as compared with an annual average of 20 000 to 25 000 cases; in Asia, there had been epidemics in 1951 (400 000 cases) and in 1958 (227 000 cases), as compared with an annual average of about 140 000 cases; in the Americas, there had been an epidemic in 1950, but the advanced state of the programme of eradication had prevented any further epidemics except for a limited outbreak centred on Brazil in 1962.

The delegate of the Netherlands had also asked whether the use of high-potency vaccine entailed a greater risk of serious reactions and complications. From the information available, it was clear that high-potency vaccines suitable for revaccination did not cause serious reactions when used for primary vaccination; it appeared that potency and ability to cause reactions were separate characteristics in the strains of the virus.

In reply to the comment of the delegate of the Soviet Union on the slow progress of eradication programmes, he pointed out that, as could be seen from Table VI of the report, since 1958, five countries had completed eradication programmes and were now free from smallpox; four countries had completed eradication programmes but reported isolated residual foci; ten countries were developing eradication programmes, twenty-two countries had such programmes planned and ready and only eight countries in endemic areas had not yet set up plans for eradication.

The delegate of Portugal had made reference to certain figures; those had been received by the Secretariat. It should be noted that statistics used by WHO were based on the figures supplied from Member States in regular and special reports; if there were inaccuracies, the correct figures should be sent to the Secretariat, which would amend its statistics accordingly. The delegate of Portugal had also asked what criterion was used to assess whether smallpox had been eradicated in a country. Referring to the report of the Director-General to the Fifteenth World Health Assembly, he said that eradication was considered to be completed if no cases of smallpox appeared in a a country within three years after its last vaccination campaign.

Replying to the delegate of Kuwait, he said that freeze-dried vaccine did not deteriorate if it was properly prepared and kept under suitable conditions; there was deterioration in vacuum-dried vaccine; consequently, it was hoped that all vaccine would now be prepared by the proper method.

In answer to the question from the delegate of Pakistan as to whether smallpox and BCG vaccination programmes could be carried out simultaneously, he said that studies so far undertaken suggested no contra-indications. Several delegations had emphasized the need for inter-country co-ordination of eradication programmes; WHO would continue to encourage the establishment of co-ordinated plans such as that in West Africa, to which reference was made in the last paragraph of the introduction to the report. The question of the delegate of Ceylon regarding the value and timing of secondary vaccination would come within the field of work of the Expert Committee on Smallpox, which would undoubtedly make recommendations on those points; for the present, it was recommended that revaccination should be carried out at intervals of five to seven years in countries where smallpox was not endemic, and at intervals of three to five years in countries where smallpox was endemic.

Decision: The draft resolution recommended by the Executive Board in resolution EB31.R33 was approved.[1]