

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC



Report of the

FIRST MEETING OF THE REGIONAL ADVISORY PANEL
ON ACUTE RESPIRATORY INFECTIONS

Manila, Philippines
27-28 September 1979

Manila, Philippines
February 1980

ICP/BVM/010

14 February 1980

ENGLISH ONLY

FIRST MEETING OF THE
REGIONAL ADVISORY PANEL ON ACUTE RESPIRATORY INFECTIONS

Sponsored by the

WORLD HEALTH ORGANIZATION REGIONAL OFFICE FOR THE WESTERN PACIFIC
Manila, Philippines

27-28 September 1979

REPORT

NOT FOR SALE

PRINTED AND DISTRIBUTED

BY THE

REGIONAL OFFICE FOR THE WESTERN PACIFIC
OF THE WORLD HEALTH ORGANIZATION
Manila, Philippines

February 1980

NOTE

The views expressed in this report are those of the members of the Panel and the temporary adviser in the meeting and do not necessarily reflect the policies of the Organization.

This report has been prepared by the Western Pacific Regional Office of the World Health Organization for Governments of the Member States in the Region and for those who participated in the First Meeting of the Regional Advisory Panel on Acute Respiratory Infections which was held in Manila, Philippines, from 27 to 28 September 1979.

CONTENTS

	<u>Page</u>
1. OPENING AND AGENDA	1
2. TOPICS DISCUSSED	1
2.1 Terms of reference	1
2.2 Global programme (Dr Hitze)	1
2.3 Keynote address (Dr Douglas)	2
2.4 Regional programme on acute respiratory infections (Dr Lindner)	2
2.5 Progress of the regional ARI control programme (Dr Riley)	3
2.6 Research proposals	5
2.7 Research priorities (Dr Douglas)	5
2.8 Newsletter	5
2.9 Terminology	5
2.10 Objectives and target	6
2.11 Technical presentation on acute respiratory infections to the thirtieth session of the WHO Regional Committee for the Western Pacific, Singapore, 2-8 October 1979 (Dr Douglas)	6
2.12 Next meeting	7
3. RECOMMENDATIONS	7
ANNEX 1 - AGENDA	11
ANNEX 2 - LIST OF MEMBERS, TEMPORARY ADVISERS AND SECRETARIAT	13

1. OPENING AND AGENDA

The meeting was opened and the members welcomed by Dr S.T. Han, the Acting Regional Director. The members introduced with brief autobiographical accounts. Dr Jegathesan was elected Chairman and Dr Alpers Rapporteur. The provisional agenda (Annex 1) was approved with the addition of items to review the terms of reference of the Advisory Panel and to discuss research proposals presented to the Panel. The list of members, temporary advisers and secretariat is attached (Annex 2)

2. TOPICS DISCUSSED

2.1 Terms of reference

The terms of reference of the Panel - and the objectives of the meeting - were modified and agreed upon, as set out in recommendation 1.

2.2 Global Programme (Dr Hitze)

The Tuberculosis and Respiratory Infections Unit in Geneva had been given the task of collecting data on acute respiratory infections (ARI) on a global scale and establishing a coordinating role for WHO in this field. This was aimed initially at stimulating a new commitment by governments and at drawing world attention to the problem of ARI. The data collected had been published in the WHO Bulletin.^{1/} The Thirty-second World Health Assembly on 25 May 1979 had passed a resolution on respiratory diseases (WHA32.33) requesting WHO and Member States to take action in the control of respiratory diseases and to establish national targets for the reduction of both morbidity and mortality.

The major principle adopted by the Unit had been that control programmes should be community-based and developed from the base upwards. The starting point in fact was the family with the mother as the first primary health care worker. Research must be relevant and supportive for the programme, which had the principal aim of preventing premature death. Most research projects had to be closely related to the health services of the country concerned so that the results could have a specific and immediate application there.

At the same time it was recognized that there should be a few centres throughout the world carrying out research into more basic questions and principles, regarding etiological agents, methodology for epidemiological surveillance, critical clinical signs for decision-making, innovative treatment regimens and appropriate use of vaccines. It was suggested that one such research centre could be established in the Western Pacific Region, with the support of WHO, from both Headquarters and the Region.

^{1/}Bulletin of the World Health Organization, 56: 481-498 (1978).

2.3 Keynote address (Dr Douglas)

It was pointed out that this group constituted the first regional advisory panel that had ever been set up by WHO. The history of the development of the ARI programme in the Region, leading up to the establishment of the Panel, was reviewed. Dr Douglas formulated a list of 11 major questions to which he considered the Panel should attempt to provide clear answers and a consensus view for inclusion in its report to WHO. The Panel was finally able to consider and provide answers for all but three of Dr Douglas' questions.

2.4 Regional programme on acute respiratory infections (Dr Lindner)

The document prepared by Dr Lindner (WPR/ARI/79.2) on the regional programme for the control of ARI was discussed in detail and accepted by the Panel with minor modifications, which were:

- (5.3) 'Consultant visits to national health education units' was given a priority advancement from B to A2.

It was agreed that the bulletin to promote awareness of research needs and progress should come out more often than annually: 'an annual' was therefore changed to 'a regular'.

- (5.4) 'Cost effectiveness studies in one sentinel unit' was given the target date of 1982.
- (5.5) The formal review of the achievements of the Programme was set for 1983 instead of 1985.

The meetings of the Regional Expert Advisory Panel were changed from 'annual' to 'as required'.

- (5.6) The words 'should be assured' was added to complete the sentence.
- (6) An epidemiologist appointed in 1979 with A1 priority was added and the title of 'Field Development Officer' changed to 'Technical Officer'.

Decisions regarding the bulletin or newsletter and the controversial objectives and target are to be found in sections 9 and 11 of this report.

It was reported that the meeting on ARI sentinel unit methodology had been carried out in Goroka in January 1979 and that a meeting on respiratory viruses had been held in Geneva in April. Clinical management guidelines were expected to be produced in Geneva in 1980 following a meeting being organized by Dr Sterky. It was agreed that a handbook on bacterial and mycoplasmal respiratory pathogens should be prepared, to permit proper standardization of the work of the ARI units. It was indicated that if a request for assistance with this handbook was sent to Geneva it would be favourably received.

Regarding the consultant visits to national health education units, it was made clear that this implied national consultants reporting to WHO on knowledge, attitude and practice in traditional medicine and primary health care. It was intended that the proposed clinical management guidelines would be prepared on the basis of these reports. Dr Hitze and Dr Lindner agreed to exchange information and keep in touch on this matter.

Dr Hitze indicated that the International Union against Tuberculosis might wish to actively support some aspects of the regional ARI control programme. The Panel agreed that Dr Hitze should present the programme to the forthcoming International Union against Tuberculosis (IUT) meeting for consideration.

It was noted that the visit of the consultant concerning the development of an evaluation methodology for ARI units had been postponed till June 1980.

The role of the technical officer was discussed. Such an appointment was considered essential for the establishment and development of new ARI units and for the uniform collection, analysis and reporting of data (recommendation 7).

At present the programme was supported financially by the Australian Government and the Japan Shipbuilding Industry Foundation. The need for extrabudgetary support was emphasized. It was agreed that this could best be achieved by the preparation of packages, each describing a specific project which was a well-defined component of the programme, and offering these packages to funding agencies for their support (recommendation 6).

The rate of planned expansion in the programme and the targets that should be set were discussed. The close relationship between targets, the operational rate of expansion of the programme and funding was acknowledged, and a subgroup was commissioned to draft recommendation on these matters. The Panel finally agreed to a 12-month period of consolidation before further expansion took place. The Goroka ARI unit should be used for training staff from other countries. It was further emphasized that any new development should be compatible with national needs and resources and must be based on a genuine (i.e. budgetary) commitment by the country concerned (recommendations 4 & 5).

2.5 Progress of the regional ARI control programme (Dr Riley)

The establishment of the ARI unit in Goroka and its progress to date were described. Apart from Dr Riley, the staff consisted of an epidemiologist, field supervisor, statistical clerk, eight field staff (reporters) and senior laboratory technologist (bacteriologist), with national laboratory technical staff and collaborating colleagues in virology, nutrition and paediatrics; in addition, an immunologist was about to be appointed to the unit. It was hoped that national staff would be trained to run the unit and that within four years it would be handed over to the Papua New Guinea Government.

A population-based study, using a cluster sample of 5 000 of the 50 000 people of the Asaro valley, had already been going for three months. Morbidity and mortality monitoring was being achieved by fortnightly household visits by the field reporters. Each reporter covered about 1 000 people. The qualifications of the reporters were described, the major one being a ready identification with the people. As well as obtaining community morbidity in terms of the number of individual disease episodes experienced, the study planned to identify high-risk individuals. Deaths were followed up with detailed questioning. The reaction of the people to illness and the response of the health services were also assessed. A serological test for circulating bacterial antigen was badly needed and was currently being developed. It was pointed out that this was an area where assistance from colleagues in developed countries would be very useful.

Associated hospital-based studies on the etiological agents involved and the most appropriate forms of therapy were also being carried out. It had been found that 80% of pneumococci isolated from children with pneumonia were insensitive to penicillin. A trial of chloramphenicol alone versus penicillin and chloramphenicol had been started in the Goroka hospital. It was hoped to develop innovations in clinical diagnosis and therapy appropriate for use in aid posts. Familial spread of infection was being investigated. In the long term, it was hoped to obtain on the relationship between repeated acute infections and chronic obstructive lung disease.

The Tari epidemiological study which we initiated by Dr Riley in 1970, was being continued, in collaboration with land-use agronomists, nutritionist and the provincial health service staff. In particular, the relationships between nutrition, infection and child development were being investigated and it was hoped to derive a functional definition of malnutrition for this population.

It was proposed to institute a field trial of a polyvalent pneumococci vaccine in children as part of the research programme, in the hope of defining vaccine effectiveness according to age, nutritional status and other variables. The results of this trial would be given to the health authorities in Papua New Guinea as soon as they became available. The full proposal for this trial was later considered by the Panel.

The need for proper computational facilities to analyse the data obtained from these studies was emphasized. It was hoped eventually to develop standard software packages for use in each of the established ARI units.

In the Philippines, a start had been made in establishing an ARI control programme in conjunction with the Disease Intelligence Centre. A National Interdisciplinary Coordinating Committee had been formed but had not yet met. An initial draft research proposal had been submitted from the Department of Medicine, University of the Philippines, for consideration by the Panel. The Australian Development Assistance Bureau (ADAB) had indicated interest in funding research on ARI in the Philippines.

The Panel considered Dr Riley's report, commended him on the progress so far achieved and endorsed the approach and methodology established for the ARI unit in Goroka (recommendation 3). The Panel urged Dr Riley to make his previous publications on ARI in Papua New Guinea and the details of current investigations available to the editor of ARI News for distribution to Panel members, those on the WPR circulation list for the newsletter and WHO Headquarters.

2.6 Research proposals

(1) Field trial of a polyvalent pneumococcal polysaccharide vaccine in children in Papua New Guinea (Dr Riley)

This proposal was presented to the Panel for information by Dr Riley and discussed in some detail. It was supported by the Panel and endorsed, subject to ethical clearance from national and WHO committees (recommendation 9). No funding was requested.

(2) Acute respiratory infection: microbiologic and clinical aspects - Section of Infectious Disease, Department of Medicine, U.P. College of Medicine

This preliminary proposal was considered by the Panel. It was agreed that a decision on it would have to be deferred because in its present state there was insufficient information on which to base a proper evaluation.

2.7. Research priorities (Dr Douglas)

Dr Douglas presented a list of research priorities, which were debated, amplified and approved. The final list appears as recommendation 2.

2.8 Newsletter

The Panel resolved to establish a bulletin on newsletter called ARI News to be published four times a year. It was agreed to request the Regional office to distribute it widely in the Region and to WHO, Geneva, including the editor of WHO Chronicle (recommendation 8).

Dr Douglas was appointed editor of the newsletter for a period of one year in the first instance. It was agreed that the editorship should rotate within the Panel.

2.9 Terminology

The original term used for the units being set up under the ARI control programme was 'sentinel surveillance unit'. Following objections raised within WHO, Geneva, the term was later changed to 'surveillance unit'. Further objections were raised by members of the Panel and after discussion it was agreed that the approved term should be 'ARI Unit', for example, the Goroka ARI Unit or the Papua New Guinea ARI Unit.

2.10 Objectives and target

The Panel was not satisfied with the objectives and targets in the original regional programme for the control of ARI and many amendments were proposed and discussed at various stages of the meeting. A consensus was not obtained as to whether a morbidity target should be included, but the Panel finally agreed to the following, to replace sections 2 and 3 in the original document (WPR/ARI/79.2 of 18 September 1979); the numbering of subsequent sections would be changed accordingly:

2. Goal

To reduce in all age groups the morbidity and premature mortality from ARI in each country of the Western Pacific Region.

3. Objectives

3.1 To establish valid methods for the collection and analysis of data on ARI from all countries of the Western Pacific Region;

3.2 To develop appropriate methods for the detection, management and control of ARI;

3.3 To reduce mortality from ARI in children under 5 years as a first priority.

4. Targets

4.1 To reduce mortality from ARI in children under 5 years by 50% between 1980 and 2000 in every country of the Western Pacific Region;

4.2 To establish an ARI unit in five countries of the Region by 1983;

4.3 To achieve the operational targets set for each planned activity of the regional ARI control programme.

2.11 Technical presentation on acute respiratory infections to the thirtieth session of the WHO Regional Committee for the Western Pacific, Singapore, 2-8 October 1979 (Dr Douglas)

It was noted that a few general modifications based on decisions of the Panel on terminology and targets would be made, and that ARD would be changed to ARI. Changes in Table 4, the table of causative microorganisms in ARI, were suggested by Dr Forbes, Dr Seo and others, and incorporated. When the presentation was delivered, it was stressed that the central importance of the relationship of ARI units to existing health services must be given a strong emphasis.

The presentation was approved by the Panel and Dr Douglas was commended for his work in preparing it. He pointed out that he had hoped to base his report in part on the results of questionnaires sent to the public health authorities in all Member States of the Region. Only two replies had been received. Members of the Panel agreed to be responsible for obtaining answers from their own countries to Dr Douglas' questionnaire (copies of which were distributed).

The importance of this presentation in influencing budgetary decisions of the Regional Committee was made clear. Dr Douglas was requested to inform Panel members of the outcome of his presentation and the response it received.

2.12 Next meeting

Though it was agreed that it was better not to plan on having regular annual meetings, the Panel felt that a tentative date for the next meeting should be set (recommendation 10).

3. RECOMMENDATIONS

1. Terms of reference

- (1) To review and, where necessary, recommend updating of the regional ARI control programme proposed by the Task Force;
- (2) To comment on the steps being taken to implement the above-mentioned programme and to discuss mechanisms for getting extrabudgetary financial support; and
- (3) To obtain direct and permanent involvement and support from the regional scientific community and health professions for the programme on the control of ARI.

2. Sequence of research activities

It is suggested that the following are areas of high priority for research, which could have an early bearing on applicable strategies to ARI prevention and control. Furthermore, it is emphasized that research in developed countries should be encouraged which would assist developing countries in improving their ARI control programmes.

- (1) Research into improving clinical management
 - (a) Testing of decision trees
 - (b) Evaluation of antibiotic usage by primary health care workers
 - (c) Operational research into effectiveness of these packages and of the health care delivery system itself
 - (d) Laboratory investigation of causative agents in community-acquired ARI, including development of rapid and simple field methods.
- (2) Epidemiological research

Community based surveillance of acute respiratory infectious diseases and deaths in defined populations, including monitoring of the effects of intervention.

(3) Vaccines

- (a) Pneumococcal vaccine applicability in childhood
- (b) Epidemiological studies on the role of respiratory syncytial virus
- (c) Attenuated virus vaccine research, such as SRV and prainfluenza viruses.

(4) Nutrition

- (a) Evaluation of the effect of an integrated nutrition programme on ARI incidence and mortality
- (b) Single agent supplementation to malnourished groups with epidemiological follow-up (e.g. vitamin C)
- (c) Evaluation of nutritional education to mothers of hospitalized children

(5) Traditional medicine

- (a) Astragalus membranaceus - follow-up Chinese findings.
- (b) Identification of community attitudes to ARI.

(6) Environmental

Comparative studies of housing design and customs on carriage of pathogens and predisposition to ARI.

(7) Identification of susceptible individuals and their social, genetic and biological characteristics.

(8) Research leading to the development of appropriate technology for local problems.

Regional ARI control programme

3. The Panel endorsed the approach taken by the ARI Unit in Goroka. The work which is planned by the unit is appropriate to Papua New Guinea, and consistent with the functions of an ARI unit as defined by the Goroka Working Group. The Panel recognizes, however, that ARI units will vary widely in their sophistication, and that although their functions will be similar in principle, methodologies appropriate to one country may not be appropriate to another especially in the early developing stages of a unit.

4. With the exception of the Philippines, the Panel feels it would be unwise to establish ARI units in other countries within the next year. The methodology of the Goroka Unit needs to be tried, and evaluated. There should be a 12-month period of consolidation before the planned expansion to ARI units in five countries by 1983 takes place. The Goroka Unit should be used for the training of staff from countries other than Papua New Guinea.

5. It is important that any new ARI units are developed on the basis of genuine commitment by the country concerned. It is also important that the ARI unit that is developed is compatible with national needs and resources.

6. The Secretariat should develop "packages" for funding of the regional programme, which could be offered to funding agencies for their possible support. These packages could vary in size and amount from, for example, funding of a national seminar on ARI unit methodology to the funding of an entire new initiative for development in a country which does not currently appear on the regional programme.

7. Technical officer

Having heard the justification for the appointment of a technical officer, the Panel supports the need for such an appointment at this stage of the programme.

8. Newsletter

A newsletter entitled ARI News should be established under the editorship of Dr Douglas. The newsletter should be in English, should be attractively presented with the capacity to include photographs and diagrams and should be distributed widely throughout the Region. It should include information about the programme, its goals and methods and should draw attention to proposed, completed and desirable future research. It will act as an information source on ARI control and its distribution is requested by WPRO.

9. Research proposal

The Panel endorsed a research proposal of Dr Ian Riley to carry out a field trial of a polyvalent pneumococcal polysaccharide vaccine in children in study areas in Papua New Guinea, subject to ethical clearance from national and WHO committees.

10. Next meeting

The Advisory Panel recommends that its next meeting be held in Manila, when the consultant report on evaluation methodology for the programme and the protocol of the Philippines ARI Unit should be reviewed. (Suggested dates 21-22 November 1980).

AGENDA

Thursday, 27 September

- | | | |
|-----------|---|--------------|
| 0800-0830 | - Registration | |
| 0830-0930 | - Opening ceremony | |
| | - Address by the Regional Director | |
| | - Self-introduction by participants | |
| | - Election of officers | |
| | - Approval of agenda | - Chairman |
| 0930-1000 | - Coffee break | |
| 1000-1030 | - Global Programme | - Dr Hitze |
| 1030-1200 | - Keynote address | - Dr Douglas |
| 1200-1330 | - Lunch break | |
| 1330-1430 | - Regional Programme on
Acute Respiratory Infections | - Dr Lindner |
| 1430-1530 | - Progress of the Acute
Respiratory Infections
Programme in the Region
including Draft Programme
for the Control of ARI in
the Philippines | - Dr Riley |
| | - ARI Surveillance - Goroka | |

Friday, 28 September

- | | | |
|-----------|---|--------------|
| 0800-0830 | - Research priorities | - Dr Douglas |
| 0830-0900 | - Drafting of recommendations | |
| 0900-0930 | - Coffee break | |
| 0930-1100 | - Plenary session to discuss
draft report | - Chairman |
| 1100-1200 | - Presentation of exhibit for
Regional Committee | - Dr Douglas |

Annex 1

- 1200-1330 - Lunch break
- 1330-1500 - Final Reading of
recommendations and report - Chairman
- 1500-1530 - Closing ceremony

LIST OF MEMBERS, TEMPORARY ADVISERS AND SECRETARIAT

1. MEMBERS

AUSTRALIA

Dr D.S. Nelson
Director
Kolling Institute of Medical Research
Royal North Shore Hospital
St. Leonards, N.S.W. 2065
Australia

Dr R.M. Douglas
Reader in Community Medicine
Department of Community Medicine
University of Adelaide
Adelaide
South Australia 5001

CHINA, PEOPLE'S REPUBLIC OF

Dr Liu Xiang Yun
Vice-President, Children's Hospital
Shanghai First Medical College
Shanghai
People's Republic of China

MALAYSIA

Dr M. Jegathesan
Head, Division of Bacteriology
Institute for Medical Research
Kuala Lumpur
Malaysia

PAPUA NEW GUINEA

Dr M. Alpers
Director
Papua New Guinea
Institute of Medical Research
Goroka
Papua New Guinea

PHILIPPINES

Dr R. Florentino
Deputy Executive Director
Nutrition Center of the Philippines
South Super Highway
Makati
Metro Manila

Annex 2

REPUBLIC OF KOREA

Dr Byong Seol Seo
Professor and Chairman
Department of Parasitology
College of Medicine
Seoul National University
Seoul
Republic of Korea

2. TEMPORARY ADVISERS

Professor M. Kaji
First Department of Internal Medicine
School of Medicine
Kurume University
67 Asahi-mashi
Kurume 830
Japan

Dr Dang Duc Trach*
Deputy Director
National Institute of
Hygiene and Epidemiology
Hanoi
Socialist Republic of Viet Nam

3. SECRETARIAT

Dr Chin Wen-Tao
Short-term Consultant
Communicable Diseases Unit
WHO Regional Office for
the Western Pacific
Manila

Dr S. Endo
Regional Adviser in
Chronic Diseases
WHO Regional Office for
the Western Pacific
Manila

Dr J.A. Forbes
Short-term Consultant
Communicable Diseases Unit
WHO Regional Office for
the Western Pacific
Manila

*Unable to attend

Annex 2

Dr K. Hitze
Chief Medical Officer
Tuberculosis and Respiratory
Infections Unit
WHO Headquarters
Geneva

Dr R. Lindner
Regional Adviser in
Communicable Diseases
WHO Regional Office for
the Western Pacific
Manila

Dr A.C. Reyes
Short-term Consultant
Intercountry project on
Parasitic Diseases Control and Research
WHO Regional office for
the Western Pacific
Manila

Dr I.D. Riley
Medical Officer
Acute Respiratory Infections Project
c/o Institute of Medical Research
Goroka
Papua New Guinea