

# **FUTURE PROGRAMME DEVELOPMENTS FOR PREVENTION OF DEAFNESS AND HEARING IMPAIRMENT**

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**Report of the Second Informal Consultation  
Geneva, 3-4 February 1998**



**Prevention of Blindness and Deafness (PBD)**

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**World Health Organization**

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## 1. REVIEW OF PROGRAMME FOR PREVENTION OF DEAFNESS AND HEARING IMPAIRMENT

This is the second in an annual series of informal consultations on future programme developments for the prevention of deafness and hearing impairment. As with the first consultation its purpose was to review programme achievements, and to determine future priorities for programme development (see box 1).

Participants were invited from amongst the group of Members of the WHO Expert Advisory Panel on Deafness, from the WHO Collaborating Centres and from organizations, especially Nongovernmental organizations, with which PDH has linkages.

The first presentation included a brief history of the programme and information about the two World Health Assembly resolutions on Deafness and Hearing Impairment in 1985 and 1995<sup>1</sup>. The 1995 resolution (full text given in annex 4) estimated that there were then 120 million persons in the world with "disabling hearing difficulties". This term was defined in the First Informal Consultation and is given in annex 5.

The 1995 Resolution also set out the tasks for the Programme for the Prevention of Deafness and Hearing Impairment (see box 2) and the following review is ordered similarly except commencing with task 2 since this is usually the initial need in a country.

### 1.1 RESOLUTION TASK 2:

#### "To cooperate with countries in assessment of hearing loss as a public health problem"

Achievements during 1997 included

◆ Finalisation of the ear disease survey protocol

This includes survey methods, ear examination form, coding instructions, analysis software, software manual

◆ Multi-centre Prevalence Survey (India, Indonesia, Myanmar, Sri Lanka)

A workshop for principal investigators was

### Box 1: Purposes of the meeting

- To report programme activities
- To discuss objectives, priorities and planned activities for programme development
- To discuss needs and sources of technical advice for the programme
- To identify opportunities for collaboration
- To consider methods and opportunities for mobilisation of resources

### Box 2: Tasks for PDH, as set out by the 1995 WHA Resolution

#### WHA48.9 RESOLUTION ON PREVENTION OF HEARING IMPAIRMENT

The Forty-Eighth World Health Assembly (1995)... requests the Director-General:

- 1 To further *technical cooperation* in prevention... including development of appropriate guidelines.
- 2 To cooperate with countries in *assessment* of hearing loss as a public health problem.
- 3 To support... *planning, implementation, evaluation* of measures in countries to prevent hearing impairment.
- 4 To develop further *collaboration and coordination* with nongovernmental and other organizations.
- 5 To promote/support applied & operations *research* for prevention and treatment...
- 6 To mobilise extra-budgetary resources...

<sup>1</sup> For further information see section 2 of the *Report of the First Informal Consultation Future Programme Developments for the Prevention of Deafness and Hearing Impairment 23-24 January 1997, WHO/PDH/97.3, WHO, Geneva*

held, protocols and project proposals were written, and contractual service agreements set up with the South East Asian Regional Office. During 1998/99 assistance with conduct & analysis of multi-centre study will be provided by WHO and its collaborating centres, the protocol+software will be distributed, countries in other regions will be advised & assisted to conduct surveys

◆ A Project Proposal: "Global Epidemiology of Deafness and Hearing Impairment" was written and submitted for funding to the National Institute for Deafness and Other Communication Disorders, Washington, USA. The objectives of this proposal are listed in box 3.

**Box 3 Objectives of the project proposal "Global Epidemiology of Deafness and Hearing Impairment"**

- To develop methodologies for rapid, small-scale population-based surveys of prevalence and causes, especially for developing countries.
- To conduct population-based surveys in selected developing countries
- To help develop National Programmes for prevention
- To construct a global database
- To measure the costs of hearing impairment and the *benefits* of prevention.

**1.2 RESOLUTION TASK 1**

**"To further technical cooperation in prevention...including development of appropriate guidelines".**

The third WHO meeting in the series "Strategies for Prevention"<sup>2</sup> was held in October 1997 on *Prevention of Noise-induced Hearing Loss*. Recommendations made by this meeting included:-

- establish National Programmes for Prevention
- increase public awareness of effects and prevention
- reduce occupational, traffic, firearms & leisure noise
- introduce legislation and effective hearing conservation
- obtain prevalence & longitudinal data
- develop effective screening methods
- prioritise research on mechanisms, risk factors, interaction with other ototoxic agents, medications for prevention, and technical measures for noise abatement
- develop greater collaboration

The report of this meeting is available from WHO-PDH.

During 1998 a further meeting in the series will be held on *Hearing Aid Services - Needs and Technology Assessment*. Guidelines will be produced during 1998 on the Prevention of hearing impairment from ototoxic drugs. Future topics will include guidelines on the prevention of hearing impairment from chronic otitis media, prevention of noise-induced hearing loss, hearing aids services for developing countries, primary ear care programmes, and development of National Programmes for the Prevention of Deafness and Hearing Impairment.

PDH contributed to the continuing development of the International Classification of Impairments, Activities and Participation (ICIDH-2) which is a revision of the International Classification of Impairments, Disabilities and Handicaps (ICIDH-1) published by WHO in 1980.

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<sup>2</sup> Previous meetings in the series were held in November, 1994 on *Prevention of Hearing Impairment from Ototoxic Drugs*, and in November 1996 on *Prevention of Hearing Impairment from Chronic Otitis Media*. Reports of these meetings are available from WHO-PDH.

The revision began in 1993 and inputs for the voice, speech and hearing sections from PDH collaborating centres and NGOs in official relations were submitted in 1996/97. Systematic Field trials and consultations on the Beta-1 Draft will continue during 1997-1999. More information on the process can be found on the WHO web site at <http://www.who.int/msa/mnh/ems/icidadh/index.htm>

### **1.3 RESOLUTION TASK 3**

#### **"To support... planning, implementation, and evaluation of measures in countries to prevent hearing impairment"**

During 1997, consultancy visits were made to two countries to assist with the development of national plans for prevention of deafness and hearing impairment.

Assistance was given in September 1997 to the Ministry of Health of the Government of Uganda to develop a comprehensive 5 year plan for primary, secondary and tertiary prevention of hearing impairments/deafness and to help define the direction in service development. This included assessment of the policy statements standards and guidelines produced by the Task Force on Prevention of Deafness and Hearing Impairment in the Rehabilitation Section of the Ministry of Health.

PDH contributed to the development of a *Programme on Disability Prevention, Early Detection and Management in Palestine* as a member of the Joint IMPACT/WHO Technical Follow-Up Mission to the West Bank and Gaza which took place in December 1997. The PDH component helped to elaborate, with the Palestinian National Authority and other organisations, a framework for the development of a national plan for the prevention of deafness and hearing impairment, which included recommendations for a national survey and development of primary ear care, hearing screening, strategies for prevention and rehabilitation, and development of services and training.

### **1.4 RESOLUTION TASK 4**

#### **"To develop further collaboration and coordination with nongovernmental and other organizations"**

During 1997 links were strengthened with IMPACT<sup>3</sup>, Christoffelblindenmission (CBM), the International Federation of Oto-Rhino-Laryngological Societies (IFOS), the International Agency of Logopedics And Phoniatics (IALP), and Hearing International (HI). These are organisations that have official relations with WHO, or are developing a working relationship.

Links were initiated with the International Society of Audiology (ISA), Lions Clubs International (LCIF), International Federation of Hard of Hearing People (IFHOH).

### **1.5 RESOLUTION TASK 5**

#### **"To promote and support applied & operations research for optimal prevention and treatment..."**

During 1997, two visits were made to Nepal to assess the Nepal Ear Foundation component of the project "support to the Nepalese deaf and hard of hearing people". This project is funded by DANIDA and managed for them by the Danish Federation of Hard of Hearing People (LBH) together with the National Association for the Deaf and Hard of Hearing of Nepal (NADH). An **operational research protocol** was devised for Nepal Ear Foundation to assess the impact of its Mobile Ear Care Camps project and evaluate the number of beneficiaries with satisfactory use of hearing aids.

### **1.6 OPPORTUNITIES TO PRESENT THE WHO PDH PROGRAMME DURING 1997**

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<sup>3</sup> IMPACT is an International Initiative against Avoidable Disablement, and is sponsored by UNDP, WHO and UNICEF. See Section 5.1.1

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Presentations were made, describing the role of WHO in prevention of deafness and hearing impairment, at the following events:-

- Otolology Update Course, Otological Centre, Siriraj Hospital, Bangkok (a WHO Collaborating Centre), February 1997.
- DEPT of ORL, Cipto Mangunkusumo Hospital, University of Indonesia, Jakarta, February 1997
- XVI World Congress of Otorhinolaryngology, Head & Neck Surgery, Sydney; March 1997
- ORL Society of Japan (Tokyo Branch) with the Society for Promotion of International ORL, Tokyo; March 1997
- International Centre for Otologic Training, Savannah, Georgia, USA; July 1997.
- Meeting of Hearing International (UK), London; November 1997

### 1.7 REPORTS AND PUBLICATIONS

The following report on the first PDH planning meeting became available in 1997:

- Report of the First Informal Consultation on Future Programme Developments for the Prevention of Deafness and Hearing Impairment, World Health Organization, Geneva, 23-24 January 1997, WHO/PDH/97.3. (*English and Spanish; French in preparation*)

PDH produced the following papers which were published during 1997:-

- "The World Health Organization's Programme for the Prevention of Deafness and Hearing Impairment". *ENT News* 1997; 5(6):15-16.
- "The World Health Organization's Programme for the Prevention of Deafness and Hearing Impairment" in *Ear Care Programmes for Eastern Europe and Eastern Mediterranean Countries*, Eds Quaranta A, Lundborg T, Kapur Y. *Scandinavian Audiology* 1997; 26, suppl. 45: 11-14
- "Hearing Loss from Ototoxicity" [with Ian Mackenzie, Hearing Impairment Research Group, Liverpool School of Tropical Medicine], *WHO Drug Information* 1997; 11(1): 7-10
- "Ear Infections" Issue of *The Prescriber*, UNICEF, Number 14, May 1997. Frontispiece introduction (with David Robinson, CHD, WHO), and editorial consultant to the issue. Published in English, French, Spanish, Portuguese, Russian and Arabic.
- "Preventing Deafness and Hearing Impairment". *Child Health Dialogue* (issue 7) with *CBR News* (issue 25), AHRTAG 1997, 7-8. [With Ian Mackenzie, Hearing Impairment Research Group, Liverpool School of Tropical Medicine].

The following relevant article (not produced by PDH) also appeared in 1997:-

**WHO and its role in the prevention of deafness and hearing impairment.** Editorial (R. Hinchcliffe). *Journal of Laryngology and Otology* 1997 III, 699-701

## 2. PRIORITIES FOR PROGRAMME DEVELOPMENT

### 2.1 JUSTIFICATION FOR THE PDH PROGRAMME

The justification for the existence of the Programme for the Prevention of Deafness and Hearing Impairment (PPDH) is that it gives a public health orientation to this subject and it seeks ways to make a difference in population terms. It therefore targets conditions which have a high prevalence and, at the same time, an effective means of prevention or control, especially at the primary level.

WHO is currently developing a series of strategies for prevention to be accompanied subsequently by guidelines for practical use in the field. The strategies will have various characteristics. They will address these topics of major public health importance but also focus on vulnerable groups. They should be appropriate for insertion into National Plans for Prevention. The guidelines should be useful in training curricula, in the construction of case management schedules / algorithms, and in health education / promotion campaigns

The objective and target of the PDH Programme are shown in box 4. At present, there is not sufficient data in this field to be able to set a prevalence "ceiling" below which programmes should aim to reduce the prevalence in their area of implementation.

#### Box 4: Objective and Target of the PDH Programme

##### Objective

- To assist member states to eliminate avoidable hearing impairments through appropriate preventive and curative measures

##### Strategic target

- To eliminate 50% of the major causes of avoidable hearing loss by 2010

### 2.2 DEVELOPING A NATIONAL PROGRAMME

A possible model for the process of developing a national programme is shown in figure 1. It should be noted that this model has not been specifically tested in the field even though the various components are in use

Depending on what has already been achieved, the phases of development of the plan could consist of 3 phases: survey, development of national plan, and implementation of the programme. The first phase would include identifying survey investigators, devising the study design and protocol, recruiting teams, running a training workshop, conducting the population-based survey and its analysis and using the results.

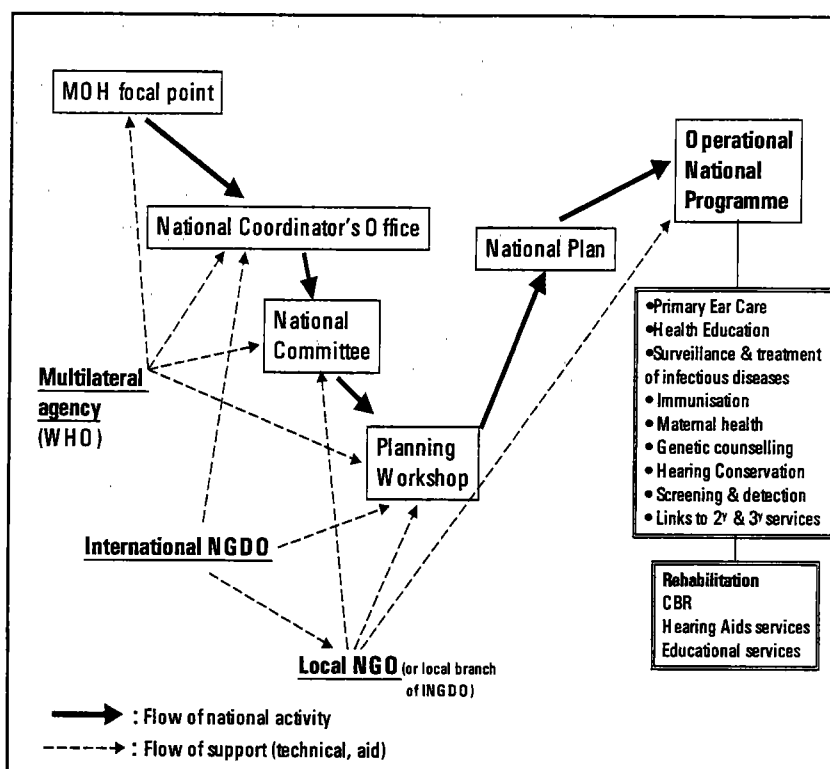


Figure 1: Possible model for process of development of a National Programme for prevention of deafness and hearing impairment

The second phase would include designating a national focal point and coordinator, setting up a planning workshop (to present the survey results and determine priorities for prevention and key elements of the National Programme), creating the National Committee, and producing the National Plan. The third phase could start with a National Workshop to present the plan, which would in any case be followed by its implementation as a National Programme and later its evaluation. Possible elements of the programme are shown in the box in figure 1. A key focus would be on primary ear care. Appropriate audiological referral and support facilities, including provision of ear moulds and hearing aids would also need to be developed. It would be important to determine training needs and strategies.

### **2.3 DEVELOPMENT OF PRIMARY EAR CARE AS PART OF PRIMARY HEALTH CARE**

Primary ear care is a set of methods to prevent and control ear disease and deafness and hearing impairment, that incorporates the principles of primary health care, and focuses especially on what can be achieved at the primary levels of health intervention. The key elements of primary ear care are shown in box 5.

Certain skills and knowledge are needed to implement these methods and hence appropriate training is an essential prerequisite. In setting up training it is first necessary to decide on what categories of staff are needed and at what level. It is better

to start bottom-up rather than top-down for this and should start at the community level (eg teachers, community leaders, religious leaders, community volunteers). Categories of staff at other levels are listed in the previous report in this series (see footnote for reference). This training should integrate with what is already available and be part of a national training policy and programme, if there is one. Government commitment and at least partial funding is preferable.

As well as for primary ear care<sup>4</sup>, training will be needed at an intermediate level (in some developing countries this includes the medical or clinical officer cadre) and also at tertiary level. Training should include aspects of public health otology and audiology. Some higher-level training may initially have to be done outside the country concerned but should preferably be in the same region.

Training problems that may be encountered, particularly but not uniquely in developing countries, include the lack of trained and qualified personnel especially in remote/rural areas, frequent movement of staff, unsatisfactory career paths, inadequate and/or inappropriate training, not enough trainers, lack of equipment, and variations by country.

#### **Box 5: Key elements of primary ear care**

- Principles and Activities of Primary Health Care
- Promotive, preventive, and therapeutic measures for ear care to the individual and community
- Priority to essential ear care at the primary level.
- 2-way referral to Secondary and Tertiary levels
- Develop in context of Public health otology/audiology,

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<sup>4</sup> The key principles of training for primary ear care and possible staff categories for a national programme for prevention are listed briefly in box 5, page 10 of the previous report in this series: *Report of the First Informal Consultation on Future Programme Developments for the Prevention of Deafness and Hearing Impairment, World Health Organization, Geneva, 23-24 January 1997, WHO/PDH/97.3.*

## 2.4 RESEARCH & DEVELOPMENT NEEDS

Because the size, nature and importance of deafness and hearing impairment are generally not known or not appreciated in developing countries, some of the major tasks of the programme are to show that these problems are public health problems and to measure their burden in populations. To show the social and economic costs to society of these problems and the benefits of their prevention would considerably enhance the ability of health planners to prioritise and target them.

### Box 6: Research and development needs for PDH

#### **Epidemiological Research**

- Methodologies for rapid population-based surveys
- Field research into survey test methods particularly for children under 5 years of age
- Burden of hearing loss:
  - costs of HI to individuals and communities
  - costs and benefits of prevention.

#### **Development**

- Development of standard criteria for definition, measurement and comparison
- Criteria for assessing quality of surveys
- Methods for database collection & construction

#### **Clinical research**

- Field research on interventions against major public health ear problems  
(eg topical/systemic antibiotics or antiseptics for CSOM)

## 2.5 PROGRAMME/TECHNICAL DOCUMENTATION OUTPUT BY PDH

A list of documents currently available from WHO on prevention of deafness and hearing impairment is given in Annex 6.

Items planned to be ready before the next planning meeting include:

- PREVENTION OF HEARING IMPAIRMENT FROM CHRONIC OTITIS MEDIA, Report of a WHO/CIBA Foundation Workshop, London, 12-21 November 1996<sup>5</sup>.
- PREVENTION OF NOISE-INDUCED HEARING LOSS. Report of a WHO-PDH Informal Consultation, Geneva, 28-30 October 1997
- WHO EAR AND HEARING DISORDERS SURVEY PROTOCOL (including software for data entry and basic analysis, and software manual)

Items under development include:

- EAR HEALTH CARE AND CONSTRAINT ASSESSMENT: Questionnaire for use during a Prevention of Deafness & Hearing Impairment fact-finding mission.
- HEARING AID SERVICES - NEEDS AND TECHNOLOGY ASSESSMENT FOR DEVELOPING COUNTRIES. Report of a WHO/CBM workshop. 24-26 November 1998

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<sup>5</sup> Now available as WHO document WHO/PDH/98.4

## 2.6 EXAMPLES OF RELEVANT RECENT INITIATIVES:

### (1) FIRST NATIONAL CAMPAIGN TO PREVENT DEAFNESS AND HEARING IMPAIRMENT, SAO PAULO, BRAZIL.

*Invited Presentation by Prof Dr Ricardo Ferreira Bento and Dr T. Ganz Sanchez, Sao Paulo, Brazil*

In 1986, a study of more than 2000 schoolchildren in Brazil with severe and profound hearing loss found the main causes to be congenital rubella (18%), meningitis (9%), ototoxic drug use (8%), hypoxia (6%), malformation (6%), and kernicterus (5%). The fact that most of these problems are preventable was the reason behind this campaign, symbolised by the slogan "Prevenir é Ouvir" (To Prevent is to Hear).

The campaign took place throughout the whole country and lasted 3 days. The major objective was to educate and make aware the Brazilian population about deafness and hearing impairment, emphasising prevention. Secondary objectives were:- (1) to provide information about the steps to take when hearing loss is first noticed; (2) to raise awareness amongst employers and employees about occupational hearing loss; (3) to raise awareness in government about all aspects of hearing loss; (4) to provide information about prevention and treatment of hearing loss for individuals, institutions, and the work-place; (5) to emphasize the psycho-social importance of deafness; (6) to gather data about hearing loss in Brazil; (7) to promote otorhinolaryngology as a medical specialty.

The campaign was supported by various professional organizations and government ministries; other institutions and private companies gave operational support. National organization was carried out by an 11-member executive commission, based in Sao Paulo, and 25 out of the 26 states in Brazil had a state coordinator from the Brazilian Society of Otology.

In the whole country, 306 screening posts and 95 health information posts were established. The screening posts were staffed by ENT doctors, audiologists, and volunteers. Those without an audiometric cabin were set up in a quiet place. A questionnaire on personal data and hearing (see box) was administered, otoscopy and an audiometric screening test (air conduction pure-tone audiometry at 0.5 - 8 kHz) performed. Persons were excluded if they had wax in the ear canal, were under 12 years of age, or had evidence of middle ear disease. Persons tested who had normal screening thresholds were given a certificate stating this. Those with raised thresholds were advised to seek complete audiometry nearer home. Materials distributed through the health information posts and elsewhere included pamphlets for children ("Test your kids hearing"), adults ("Do you hear well?"), and for the workplace. Over 400 media interviews were given on ear function and prevention and treatment of hearing loss.

During the 3 days of the campaign, 90,000 free screening audiometric examinations were performed, over 3,000 volunteers assisted. Over 80% of the population were found to have heard from the campaign at least once about hearing loss. Outcomes of the campaign included the

#### Box 7: Hearing screening questions

- 1 Is it difficult to understand when people talk to you?
- 2 Do people complain that you don't hear well?
- 3 Is it difficult to understand conversation amongst many people?
- 4 Do people complain that you watch television quite loud?
- 5 Have you ever worked in a noisy place?
- 6 Have you ever had ear discharge
- 7 Do you often have ringing in the ears?

inauguration of an annual national day (November 10th) of hearing loss prevention, extension of vaccination against micro-organisms such as rubella and Hemophilus influenzae causing vaccine-preventable hearing loss, creation of a committee to study the sale of ototoxic drugs, dissemination of video-tapes to schools and the general population on ear function and treating hearing loss, and conclusion of technical rules on the distribution of hearing aids and cochlear implants. Further analysis of the data obtained is being conducted.

## **(2) TRAINING FOR OTOSCOPY IN PRIMARY HEALTH CARE**

Invited presentation by Dr R. Eavey, Boston, USA and Dr S Stool, Denver, USA

This presentation described a technique to intensively train primary care physicians and other primary care health workers in otoscopy in primary health care. This began in early 1980's by staff teaching physician-students from medical education courses at the Harvard Medical School and the Massachusetts Eye & Ear Infirmary, and simultaneously teaching non-physician health care workers in the South Pacific how best to manage ear disease on an isolated island. The goals were to teach individuals about ear disease, especially otitis media, with practical, hands-on activity and to measure educational efforts in order to determine short term cognitive benefit as well as long term management impact.

Those carrying out these activities eventually became a not-for-profit group, called the Latin American Otitis Media Research and Training Program, which has received endorsement from the Pan-American Health Organization (PAHO) and the American Academy of Otolaryngology-Head and Neck Surgery, as well as funds from the latter. Members of the group provide an educational venue in Latin American countries up to three times a year; in all 20 conferences have been provided so far. Individual members also carry out similar activities in cooperation with local professionals in other countries.

The course typically lasts one intensive day but can be varied between 3 hours and one week. First is an unexpected 33 question written test which is graded anonymously by code for later comparison with an identical test at the end of the day. 4 to 5 hours of didactic otitis media instruction on anatomy, physiology, microbiology, complications, medical and surgical management and audiology are given and students then rotate through several stations for hands-on activity. Teaching methods include video otoendoscopy, video and photograph teaching examples, along with pneumatic otoscopy on mannequins of an infant head on which interchangeable tympanic membranes are placed, audiology and tympanometry. Hand-outs are provided.

Statistically significant short term cognitive benefit has been demonstrated<sup>6</sup> and long term (2 years) practice impact results from Chiapas, Mexico, have demonstrated a significant improvement in practice pattern such as the increased use of an otoscope for diagnosing ear disease from 40% to 93%. Otitis media is a reportable disease in Mexico and this may also assist in tracking the effectiveness of training. The group has particularly focused on Mexico where courses have been conducted in 13 cities and 15% of pediatricians in the country have been received training, and training of trainers will shortly commence in 15 states. The group may be able to extend their activities to other developing countries outside Latin America in future.

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<sup>6</sup> Educational outcomes of an otitis media workshop for primary care providers in Latin America. Villasenor et al. *Otolaryngology, Head & Neck Surgery* 1998; 118:394-6

### 3. ADVISORY SOURCES FOR PDH

There are primarily four sources:

(1) **The Expert Advisory Panel on Prevention of deafness and hearing impairment.** This was established by the Director-General in 1985 and appointments are made in consultation with National Authorities. The members are experts in relevant subjects and from different parts of the world and advice can be given by correspondence or attendance at meetings. An appointment is usually made for up to 4 years but this is renewable. WHO Expert Committees are normally made up using members of Expert Advisory Panels.

(2) **Informal Advisory Groups.** These consider subjects of particular importance to the PDH Programme and are run on an ad hoc, informal, low-cost formula. They are coordinated by PDH and may be attended by other WHO technical programmes. Each group may have a particular sponsor and may be set up to carry out specific tasks (for example, preparation of particular guidelines). Communication may be by E-mail, mail, fax, telephone conference, informal meetings.

(3) **WHO Collaborating Centres<sup>7</sup>.** This is defined as an institution designated by the Director-General to form part of an international collaborative network carrying out activities in support of WHO's programme at its different levels (country, inter-country, regional, inter-regional, global). Institutions may already have international standing, or have a growing capacity to do relevant activities. Centres are only designated within formally recognised institutions. Terms of reference and a plan of action are agreed for the designation which is usually for four years and is renewable. The designation process is carried out jointly by the Regional Office and the headquarters technical unit. The concurrence of the Head of the Institution & the National Authority is needed. The final recommendation to the Director-General for designation is made by the Regional Director.

#### Box 8: Functions of WHO Collaborating Centres

- collection, dissemination of information
- standardization of terminology, technology, methods, substances
- development and application of appropriate technology
- provision of reference substances or other services
- participation in collaborative research
- training
- coordination of activities by several institutions in one country on a particular subject

(4) **Non-Governmental Organizations.** Advice may be sought from appropriate Non-Governmental Organizations with which WHO has relations. At the global level, these relations generally evolve through the stages of informal contacts, followed by working relations (where there has been an exchange of letters setting out the agreed basis for collaboration), and finally official relations. The last stage is the only category of formal relations.

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<sup>7</sup> The roles and procedures of WHO Collaborating Centres are currently under review.

#### 4. OTOLOGICAL PREPARATIONS FOR THE ESSENTIAL DRUGS LIST

A presentation and discussion were held on the priority and strategy for inclusion of otological preparations for the WHO Essential Drugs List. The main criteria for selection of a drug for inclusion in the *WHO Model List of Essential Drugs* are listed in box 9. The Model List is mainly targeted at developing countries, where each country can develop their own list using the WHO list as the model but modifying it according to local considerations such as the pattern of diseases, treatment facilities, treatment facilities, training and experience of personnel and financial resources.

The question whether Otological preparations should be included in the *WHO Model List of Essential Drugs* needs further

investigation and debate. There are currently no otological preparations in the present list and the previous application was turned down primarily because of the inability to assure safety particularly in the use of ototopical antibiotics. In order for preparations to be included, an application needs to be made to the Who Expert Committee on the Use of Essential Drugs which meets every 2 years. The next meeting is in December 1999 and applications must be received by 31 July 1999.

There was debate amongst participants about whether it would be appropriate for otological preparations to be included. However it was agreed that a working group should be established to look at the possibility of finding a consensus on topical medications for ear disease. If WHO criteria were met an application could then be developed to be presented to the WHO Committee on Essential Drugs.

##### Box 9: Criteria for selection of essential Drugs

An essential drug should...

- ▶satisfy the health needs of the majority of the population
- ▶have proven safety and efficacy
- ▶have assured quality, bioavailability, stability

The choice of an essential drug should...

- ▶assess relative efficacy, safety, quality, price and availability
- ▶consider total treatment costs, and cost/benefit ratio
- ▶prefer single-compound drugs

## 5. COLLABORATION WITH OTHER ORGANIZATIONS

### 5.1 COLLABORATION AMONGST UN AGENCIES

#### 5.1.1 IMPACT

##### *Concept*

IMPACT was formed 15 years ago by UNDP, WHO & UNICEF as an "International Initiative against Avoidable Disablement". It is an advocacy initiative and support mechanism working with national governments, NGOs and the bilateral partners to mobilise talent and resources. It seeks to achieve prevention principally through existing Primary Health Care delivery systems and through community action.

UNDP provides core staff and operational backstopping for the Impact Global Programme, together with facilitation of its role and activities at country level. These links help ensure that IMPACT projects are consistent with national development plans, and that they form part of the promotion of health and reduction of disablement that are essential ingredients of poverty elimination, one of UNDP's goals. IMPACT looks to WHO to provide technical guidance for its disability prevention activities, and to UNICEF to be an operational partner in the field at grassroots level.

##### **Box 10: IMPACT's activities in the task of preventing avoidable disability**

- co-ordinates activities at local, national, & international levels.
- promotes interaction among local support networks
- facilitates collaboration with and within the UN System
- supports action-oriented low-cost programmes at national & community levels

##### *Review*

In 1997 UNDP reviewed IMPACT's activities in relation to its own new mandate to concentrate on integrated cross-sectorial anti-poverty strategies. The latter included the conclusion that disability should be addressed comprehensively through a holistic concept linking prevention, rehabilitation, equity and human rights. It was felt that IMPACT should expand its efforts to address disability in this way; this would lead to a widening of the scope for its intervention, and, taking into consideration the socio-economic implications of disability, provide an immediate and cost-effective means of poverty reduction.

##### *Collaboration with PDH*

Prevention of deafness and hearing impairment constitutes one of IMPACT's major concerns and IMPACT could collaborate in each of the four major areas of activity of PDH:-

- *Support to countries to plan National Programmes for Prevention of Deafness and Hearing Impairment.* When requested by a country, IMPACT Global Programme could collaborate with PDH in this process, as exemplified by the recent IMPACT-coordinated development of a national programme in Palestine for prevention, early detection and management of disability in which PDH took part. National IMPACT Foundations may also be able to contribute to the development of national programmes in particular countries.
- *Determination of Global Epidemiology and the Costs of Hearing Impairment.* The disability information system that has been proposed to be developed as part of the

Palestinian project referred to in the preceding paragraph could be integrated in the PDH global database.

- *Development of Primary Ear Care as part of Primary Health Care.* IMPACT national foundations may be able to contribute to and participate in primary ear care projects.
- *Strategies and Guidelines for prevention of deafness and hearing impairment* from ototoxic drugs, chronic suppurative otitis media, and noise. The IMPACT Global Programme and the IMPACT National Foundations could advocate and/or implement these strategies and guidelines.

In addition, in relation to the new UNDP mandate, there is now a broader scope for collaboration between IMPACT and PDH. This could occur in quantifying the contribution that disabilities make to the causes and consequences of poverty and carrying out analyses of costs of disabilities and cost-effectiveness of prevention.

## **5.2 COLLABORATION WITH NON-GOVERNMENTAL ORGANIZATIONS**

### **5.2.1 International Federation of Oto-Rhino-Laryngological Societies (IFOS)**

IFOS is the global, political, advocacy arm of National Societies of Oto-rhino-laryngology (ORL) and head and neck surgery. Through them it represents Otolaryngologists from more than 125 nations, including all the largest countries apart from China. IFOS has official relations with WHO.

The main role of IFOS is to organise a 4-yearly World Congress. The most recent, the XVI World Congress of Oto-rhino-laryngology, head and neck surgery took place in Sydney, in March 1997 attended by 3500 people from 96 nations. The next world congress will be held on October 21-26, 2001 in Cairo, Egypt with the theme of "Oto-rhino-laryngological problems in developing countries"<sup>8</sup>. In the periods between congresses, IFOS will also sponsor smaller regional and national meetings, especially to enable access for members who could not attend the world congresses.

IFOS recognises that the main impact of the PDH Programme should be in developing countries throughout the world especially in the Eastern Mediterranean, South East Asian and African regions (in more developed regions such as in Eastern and Central Europe where there are significant problems of training and supply, IFOS and the European community could more appropriately take the lead).

A key role of IFOS is in lobbying within countries. IFOS can help bring together other adjacent professional groups (eg audiologists, teachers of the deaf) in order to enhance the effectiveness of this lobbying. WHO and the PDH Programme need the local generation of commitment and support in order to raise the profile of the problem with the National Government.

IFOS supports the need for the PDH Programme to address urgently:- (1) the problem of noise damage to hearing; (2) the provision of hearing aid services in developing countries; (3) the promotion of the concept of public health otology/audiology through encouraging the setting up of specific training courses. IFOS can also help coordinate a time-bank of developed-country professionals willing to volunteer to work in developing countries (including collection of epidemiological data). IFOS wishes to see an otologist working in the PDH Programme, in support of present staff.

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<sup>8</sup> Further details of IFOS conferences, newsletters and officers can be found on the IFOS website <http://medelec-www.uia.ac.be/ifos/ifos.html>

IFOS has links with CIOMS<sup>9</sup> especially through its International ORL Nomenclature Committee for the joint CIOMS/WHO *International Nomenclature of Diseases*.

IFOS is addressing the terms of its mission statement, especially the need to deal with the problems and diseases of individuals. The standing committees will be redefined following the new mission statement and will include a committee on ear care which will cover all aspects up to the global level.

### 5.2.2 Hearing International

Hearing International is an Agency which links professional organisations and Institutions, service agencies, industry, individual consumers, consumer organisations and other interested individuals. It is a relatively new Agency which is developing a structure of autonomous National Committees which will reflect the multifaceted nature of the international organisation.

It is anticipated that a number of National Committees will be established in the next few years and that these will be well placed to promote the aims and objectives of the PDH Programme in these countries. They can be effective groups for advocacy in setting up National Programmes, for raising public awareness, for carrying out service projects and/or research and fund-raising to support these activities.

A key activity of Hearing International is the accreditation of HI/IFOS/ISA Centres, and on-going support for these; a Centre Committee has been established for this purpose. At present there are fifteen such Centres which are either fully accredited or are deemed Affiliated Centres and are in the process of being accredited. These Centres are mainly in developing countries. It is anticipated that the number of Centres will increase in the next few years.

Hearing International intends to further develop its support for these Centres and is encouraging them to submit proposals for modest service projects. Hearing International is at present actively seeking funding for two of the project proposals which fulfilled the selection criteria. A Project Committee is being set up to further Hearing International activities in this area. The accreditation and support of Centres in developing countries will be of increasing assistance to the PDH Programme by identifying and enabling those vehicles by which the Programme can achieve its objectives in these particular countries.

Hearing International has the support of consumers and professionals of a variety of disciplines associated with hearing impairment. It is, therefore, well placed, for example, to provide advice and technical assistance to the PDH Programme in areas such as training in Primary Ear Care, projects for early detection of hearing impairment, raising of public awareness. Hearing International can be of assistance in publicising the activities of the PDH Programme. In this respect assistance has already been given in writing Editorials in Scientific Journals. The Hearing International Newsletter has given prominence to PDH activities, and will continue to do so.

Through its Membership Hearing International has already held one International Conference in Thailand in 1998 which gave a platform to Primary Ear Care. In 1999, through its IAPA Membership, an International Symposium will be held, providing a further platform for the Primary Ear Care activities of the PDH Programme as well as promoting its interest in the prevention of ototoxicity.

Hearing International is a fund-raising body and will, in 1998, be able to make a further direct contribution towards the expenses of the PDH Programme. Support will initially be modest, but as Hearing International grows increasing such support will be one of its objectives.

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<sup>9</sup> CIOMS: Council for International Organizations of Medical Sciences

Hearing International would be assisted in its world-wide activities if the World Health Organisation could establish a World Health day for the Prevention of Deafness and Hearing Impairment as it has done on two previous occasions for the Prevention of Blindness. This would help in drawing government attention and in encouraging public awareness and would provide a focus for committed individuals and organisations to promote their message of prevention.

### 5.2.3 International Society of Audiology

#### Definition of role

The International Society of Audiology (ISA) represents the professional field of Audiology in its widest meaning, that is the multidisciplinary approach to auditory and language communication and the associated communication problems. While IFOS focuses on the ear itself, ISA focuses more on multidisciplinary aspects such as diagnostics, therapy (restoration of communicative abilities in a human by whatever means), hearing aids, auditory training, sign or cued language, and assistive devices. The specific professional groups dealing with services may differ considerably from country to country depending on the particular national health model. A goal of ISA, expressed in its constitution, is to promote international exchange of knowledge and experience. We want to show our commitment in this process.

#### Professional areas and activities represented directly or indirectly in ISA include:-

*Auditory Testing:* This may be a diagnostic service for ENT doctors who would base their preventive measures (against OME<sup>10</sup>, ototoxicity, genetic causes) and therapeutic efforts (surgery, drugs) on the outcome of tests. The tests are done either by or under supervision of the ENT-doctor or by audiologists, audiology assistants, speech-language therapists.

*Monitoring and assisting language development* is done by SHL-therapists, speech pathologists or audiologists

*Auditory testing for functional aspects* is done by audiologists and audiology assistants. This often deals with hearing rehabilitation in which we optimize amplification in hearing aids for optimum audibility of speech, add signal processing techniques to compensate for the impaired function of the ear and advise on changes in acoustical conditions (reverberation, background noise levels etc)

*Rehabilitation:* Raising of awareness of hearing impairment, its consequences for participation in society, the need for corrective measures like hearing aids and the adaptation of the hearing impaired person and his associates to the new situation. This is usually done by audiologists and audiology assistants.

*Rehabilitation with hearing aids* by audiologists, ENT-doctors, hearing aid dispensers and hearing technicians. This involves the actual fitting of hearing aids and assistive devices taking into account the users environment, expectations and life-style.

*Rehabilitation of the elderly* with special focus on hearing aid fitting and acclimatization, further environmental measures (acoustics in homes for the elderly), and attention to their often reduced capacity in handling technical devices and information.

*Auditory training*, teaching of lip-reading, cued speech and signed speech skills, often done by audiologists or SHL-therapists particularly in cochlear implants.

*Teaching of hearing-impaired* and deaf children by specialized teachers.

*Psychological coping:* cognitive, social and emotional development of children by

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<sup>10</sup> Otitis media with effusion

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psychologists, social workers and educationalists; in the elderly in dealing with dementia and communication problems; and support for special groups such as those with sudden-onset deafness, tinnitus to raise awareness and assist with acceptance and habituation; occupational situations and accidents (legal aspects, compensation, adaptation of the working environment, exploitation of the patient's remaining resources)

The names of these workers may differ; professionals with different background are important for audiology. Training requirements are receiving increasing attention, especially from ISA's affiliated regional or national societies using multi- and inter- disciplinary approaches.

### Structure of ISA

The ISA was founded 50 years ago by interested and motivated researchers and clinicians. With growing interest in audiology (such as new types of hearing aids, cochlear implants, new insights in development of auditory system) a more general and less scientific approach was needed to promote all aspects of audiology and represent all service providers in the field of auditory and language communication problems.

ISA is in the process of restructuring. It now offers, as well as the old full membership, a category of Associated membership for those without a university degree working in the field of audiology, and Affiliated membership for regional and national societies of audiology. Regional societies the Pan-American Society of Audiology (PASA) and the European Federation of Audiology Societies (EFAS) and the national societies the American Academy of Audiology (AAA) and the American Speech and Hearing Association (ASHA) have joined so that, at present, ISA indirectly represents at least 30,000 people.

### Functions

- Publication of the scientific journal "Audiology" in the field of ENT, Audiology and Acoustics.
- newsletter,
- Organization of a biannual conference (last one, 1996, in Bari, Italy; next, 1998, in Buenos Aires, Argentina; 2000 in The Hague, Netherlands; 2002 in Melbourne, Australia).
- participation in decision making at regional and national levels
- founding organization (with IFOS) of Hearing International
- member of CIOMS

### Support to WHO

It is supporting the PDH programme financially and is eager also to provide policy advice as required through the professional knowledge of the membership.

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**6. TENTATIVE WORK PLAN FOR PDH IN 1998/99**

No	Activity or Assignment	Target date for completion	Comments
<b>1. PROJECTS and PROJECT PROPOSALS</b>			
1.1	Follow up submission of "Research Proposal on the Global Epidemiology of Deafness and Hearing Impairment" to National Institute on Deafness and Other Communication Disorders, Bethesda, USA	Ongoing	
1.2	Disseminate the Who Ear Disease Survey Protocol and software to all countries/institutions requesting it; follow up its use; collect data.	Ongoing	
1.3	Continue to advise and assist 1 country in EMR, 4 countries in SEAR, at least 1 country in AFR, and 1 country in WPR to conduct and analyse national prevalence surveys of deafness and hearing impairment.	January 1999	
1.4	Develop guidelines for prevention of ototoxic hearing loss, disseminate and apply in selected developing countries.	1 October 1998	
1.5	Commence evaluation of guidelines for prevention of ototoxic hearing loss in selected developing countries	December 1998	
1.6	Commence development of teaching and training material for Primary Ear Care and preparation of draft guidelines.	Ongoing	Draft guidelines by 31 December 1998
2.8	Redraft proposal, obtain funding for and commence implementation in 1 country of the project "Development of A National Programme for the Prevention of Deafness and Hearing Impairment in Selected African Countries".	January 1999	
2.9	Assist with the analysis of the National Survey of Deafness and Hearing Impairment in Oman.	September 1998	
1.7	Continue contacts with Lions Clubs International Foundation in field of hearing loss prevention under combatting disabilities core area.	Ongoing	
<b>2. DESIGNATION OF WHO COLLABORATING CENTRES</b>			
2.1	Visit Department of Ear, Nose and Throat Diseases and Hearing assessment Centre, University of Science and Technology, Kumasi, Ghana as part of process of designation.	July 1998	With Regional Adviser, AFRO.
2.2	Continue designation process for proposed Collaborating Centres in Jakarta, Tokyo, Australia		

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No	Activity or Assignment	Target date for completion	Comments
<b>3. MEETINGS TO BE ORGANIZED</b>			
3.1	Provision of Hearing Aids for Developing Countries - needs and technology assessment.	November 1998	Report to be disseminated by February 1999.
3.2	Third Informal Consultation on Future Programme Developments for the Prevention of Deafness and Hearing Impairment, WHO-HQ, Geneva	January 1999	Report to be disseminated by May 1999.
<b>4. MEETINGS TO BE ATTENDED</b>			
4.1	International Workshop on Primary Ear Care, Cape Town, South Africa	March 1998	
4.2	European Consensus Development Conference on Neonatal Hearing Screening, Milan	May 1998	
4.3	PAFOS/Kenya ENT Society Meeting, Nairobi	June 1998.	Panel presentation on Chronic Otitis Media
4.4	Meeting of Global Policy Committee on Deafness and Hearing Impairment of Christoffel-Blindenmission	July 1998.	PDH to chair.
4.5	Task group for WHO Guidelines for Community Noise	August 1998	PDH to be member of secretariat. Organised by UEH.
4.6	2nd European Congress on Tropical Medicine. Section on Hearing Impairment in the Tropics. Liverpool, UK	September 1998.	PDH to Co-chair.
<b>5. PUBLICATIONS</b>			
5.1	Issue of <i>NU News on Health Care in Developing Countries</i> devoted to 'Treatment and Prevention of Hearing Disorders in Childhood in Low-income Countries'.	March 1998	PDH to be editorial adviser and author of several articles.
5.2	"Prevention of deafness and hearing impairment", EMRO Technical Publication.	May 1998	In collaboration with EMRO
<b>6. OTHERS</b>			
6.1	Further ongoing development of WHO-PDH Internet page	New version by April 1998	
6.2	Development of involvement with International Noise Awareness Day.	April 1998.	Annual event of the League for the Hard of Hearing, New York

## **7. CONCLUSIONS AND RECOMMENDATIONS**

The participants affirmed that the programme had made notable achievements during the past year.

### **1 Programme Objectives**

1.1 The World Health Organization Programme for the Prevention of Deafness and Hearing Impairment (PDH) should give priority to addressing the problems of deafness and hearing impairment in children, particularly in relation to early detection and management, and in child and school health services, because of the potential short and long term benefits to the individual and society.

1.2 The development of effective services for the elderly should also be addressed, because of the rapidly increasing numbers of elderly persons in populations worldwide. This may well be done in conjunction with other services and agencies.

1.3 The process for developing national programmes and surveys should be encouraged and initiated both in the community and from government.

1.4 Appropriate methods for training for Primary Ear Care, including otoscopic training for non-specialists, should be developed according to needs and resources available in particular regions.

1.5 A working group should be established to look at the possibility of finding a consensus on topical medications for ear disease. If WHO criteria are met, an application should be developed to be presented to the next meeting of the WHO Committee on Essential Drugs in December 1999.

1.6 A working group should be established to prepare for the meeting on hearing aid services in which an inventory should be made of needs for services and possibilities for global establishment of these services.

### **2 Epidemiology**

2.1 WHO should develop an epidemiological indicator (eg a prevalence ceiling) for deafness and hearing impairment which would show whether or not this is a serious public health problem in a country. A small technical working group should be set up to address this issue.

2.2 The availability of the WHO Ear and Hearing Disorders Survey Protocol should be disseminated as widely as possible through information in different media such as editorials and articles in relevant journals, newsletters, information on the WHO Internet Site and linkages with collaborating centres, international and other organisations. All persons and organisations using or intending to use the protocol should be asked to inform the World Health Organization Programme for the Prevention of Deafness and Hearing Impairment (PDH).

2.3 The WHO Ear and Hearing Disorders Survey Protocol should be used in developed as well as developing countries.

### **3 Raising Awareness**

3.1 The WHO-PDH Internet site should be used to provide information regarding the programme, be linked with other related websites and be regularly updated. Internet address: [http://www.who.ch/pbd/pdh/pdh\\_home.htm](http://www.who.ch/pbd/pdh/pdh_home.htm)

3.2 Opportunities should be found for increasing awareness of the problems of deafness

and hearing impairment in the population as follows:

- National campaigns for the prevention of deafness and hearing impairment should be considered where appropriate and feasible.
- The next available World Health Day should be sought for Prevention of Deafness and Hearing Impairment. A small working group should be set up to produce a submission for consideration by the WHO Global Policy Council.

#### **4 Programme Development**

4.1 The PDH programme should take urgent steps to develop a list of specific funding needs, both for core activity and ongoing programme needs.

#### **5 Linkages**

5.1 The PDH programme should strengthen and widen its multi-disciplinary and horizontal collaboration with the relevant WHO programmes and relevant programmes of the UN system.

5.2 The WHO Programme for Prevention of Deafness and Hearing Impairment (PDH) should strengthen collaborative links with HI/IFOS/ISA centres.

## ANNEX 1: WORKING SCHEDULE

### Tuesday 3rd February 1998

- 08.30 - 09.00 Registration
- 09.00 - 09.30 **OPENING OF THE MEETING** (Welcome speech by Dr R Henderson ADG)  
Introduction of Participants  
Election of officers  
Adoption of the Agenda and Working Schedule
- 09.30 - 10.30 **AGENDA ITEM 1: Review of PDH Programme**  
Achievements in 1997/1998  
Current and planned activities  
Presentation by Dr A Smith, WHO
- 11.00 - 12.00 **AGENDA ITEM 2 (1): Priorities for Programme Development**  
Justification, aim, objectives  
Development of National Programmes including Primary Ear Care  
Strategies for Prevention  
Training and research needs  
Programme/technical documentation  
Presentation by Dr A Smith, WHO
- 12.00 - 12.30 **AGENDA ITEM 2 (2): Examples of Relevant Recent Initiatives**  
**1. First National Campaign to Prevent Deafness and Hearing Impairment in Brazil**  
Presentation by Prof Dr Ricardo Ferreira Bento, Sao Paulo, Brazil
- 14.00 - 14.30 **2. Training for Otoscopy in Primary Health Care**  
Presentations by Dr R. Eavey, Boston, USA and Dr S Stool, Denver, USA
- 14.30 - 15.00 **AGENDA ITEM 3: Development of Advisory sources**  
Expert Advisory Panel  
Informal Advisory Groups  
Collaborating Centres  
Presentation by Dr A Smith, WHO
- 15.00 - 15.30 **AGENDA ITEM 4: Otological Preparations for the Essential Drugs List**  
Priority and strategy for inclusion  
Introduction by Dr A Smith, WHO  
Presentation by Dr I Mackenzie, Liverpool, UK.
- 16.00 - 17.30 **AGENDA ITEM 5: Collaboration with Other Organizations**  
Specific areas of collaboration  
Mechanisms of collaboration at global, regional, country levels  
**(1) Collaboration amongst UN Agencies**  
Presentation by Dr H. Nabulsi, Coordinator, *IMPACT*  
**(2) Collaboration with Non-Governmental Organizations**  
Presentation by Sir John Wilson, *IMPACT*, on General Considerations<sup>11</sup>  
Presentation by Prof P. Alberti, General Secretary, *International Federation of Oto-Rhino-Laryngological Societies*  
Presentation by Prof V. Newton, Secretary General, *Hearing International*  
Presentation by Dr J. Verschuure, Secretary General, *International Society of Audiology*

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<sup>11</sup>Unable to attend the meeting

## Wednesday 4th February, 1998

09.00 - 10.00	<b><u>AGENDA ITEM 5:</u> Collaboration with Other Organizations <i>continued</i></b>
10.00 - 10.30	COFFEE/TEA
10.30 - 11.30	<b><u>AGENDA ITEM 6:</u> Tentative Work Plan for PDH in 1997</b> <ul style="list-style-type: none"><li>• Main activities and targets</li><li>• Planning of detailed timetable</li></ul> <b>Presentation of Work Plan by Dr A Smith, WHO</b> Discussion
11.30 - 12.30	<b><u>AGENDA ITEM 7:</u> Mobilisation of Resources</b> <ul style="list-style-type: none"><li>• Needs</li><li>• Sources</li><li>• Update since previous (January, 1997) meeting</li></ul> <b>Presentation by Lady Jean Wilson<sup>12</sup></b> Discussion.
12.30 - 14.00	LUNCH
14.00 - 15.30	<b><u>AGENDA ITEM 8.</u></b> <ul style="list-style-type: none"><li>• Any other matters</li><li>• Conclusions and Recommendations</li></ul>
15.30 - 16.00	TEA/COFFEE
16.00 - 17.00	<b><u>AGENDA ITEM 8</u> (<i>continued</i>).</b> <b>Date and place of next meeting</b> <b>Closure</b>

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<sup>12</sup>Unable to attend the meeting.

## ANNEX 2: LIST OF PARTICIPANTS

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### ANNEX 3: SPEECH BY DR R.H. HENDERSON, ADG.

Friends and colleagues,

It is a pleasure for me to welcome you to this *Informal Consultation on Future Programme Developments for the Prevention of Deafness and Hearing Impairment*. This is the second of these annual meetings in which we consult you on the priorities and tasks for the Programme for Prevention of Deafness and Hearing Impairment.

Deafness and Hearing Impairment are major but neglected causes of disability. They produce substantial societal and economic costs throughout the world because of their effects on child development and education, and on adult occupational hazard and social isolation. These burdens are particularly heavy in developing countries.

Our estimates of the global prevalence of this problem are rising. Growing recognition of this disability and population ageing are the main contributors to this rise. However, we still do not possess accurate information on the true size and costs of the problem and its causes, especially for most developing countries. Governments need this information to identify priorities, and to determine the resources and costs for developing services. This scarcity of data is a major factor in the lack of programmes and poor provision of services for prevention of hearing impairment in many developing countries.

The WHO Programme for the Prevention of Deafness and Hearing Impairment is assisting member states to address these issues. The two key components of the programme to do this are first, to enable countries to conduct national prevalence surveys, and second, to develop strategies for prevention of deafness and hearing impairment, that countries can use in their development of national programmes.

During the past year, the programme has finalised its Ear Disease Survey Protocol and Software which addresses the first component. This is now being applied in a four-country survey in the South-East Asian Region with support from WHO.

For the second component, the Programme convened last October the Informal Consultation of experts on the prevention of noise-induced hearing loss. Previous consultations have addressed prevention of deafness and hearing impairment from ototoxic drugs and from chronic otitis media, and guidelines on these topics will be finalized by PDH this year. The next strategy consultation, to be held this autumn, will be concerned with hearing aids services for developing countries.

The most cost-effective way to implement these strategies is through primary health care; PDH is encouraging countries to develop and integrate the ear component of this — *primary ear care*. WHO will support an international workshop on this topic in South Africa in March, this year, which should allow us to develop guidelines for the provision of primary ear care.

These are some of the activities currently being addressed by PDH. This meeting will give us the opportunity to discuss the programmes' activities so far, and help us to identify the key issues that we should tackle in the future. We wish to thank you sincerely for attending this meeting, and for your support to WHO. We also wish to thank you for the collaboration that several of your organisations are offering to this programme.

I am looking forward with great interest to the recommendations from this meeting which we will do our best to implement.

Thank you very much.

## **ANNEX 4: RESOLUTION OF THE WORLD HEALTH ASSEMBLY, 1995**

### **WHA48.9 Prevention of hearing impairment**

The Forty-eighth World Health Assembly,  
Recalling resolution WHA38.19 on prevention of hearing impairment and deafness, and  
WHA42.28 on disability prevention and rehabilitation;

Concerned at the growing problem of largely preventable hearing impairment in the world, where at present 120 million people are estimated to have disabling hearing difficulties;

Recognizing that severe hearing impairment in children constitutes a particularly serious obstacle to optimal development and education, including language acquisition, and that hearing difficulties leading to communication problems are a major subject of concern in the elderly and thus one of growing worldwide importance in view of the aging of populations;

Aware of the significant public health aspects of avoidable hearing loss, related to causes such as congenital disorders and infectious diseases, as well as use of ototoxic drugs and exposure to excessive noise;

Noting the persistent inadequacy of resources for hearing impairment prevention, despite the increasing commitment of international nongovernmental organizations,

#### **1. URGES Member States:**

(1) to prepare national plans for the prevention and control of major causes of avoidable hearing loss, and for early detection in babies, toddlers, and children, as well as in the elderly, within the framework of primary health care;

(2) to take advantage of existing guidelines and regulations or to introduce appropriate legislation for the proper management of particularly important causes of deafness and hearing impairment, such as otitis media, use of ototoxic drugs and harmful exposure to noise, including noise in the work environment and loud music;

(3) to ensure the highest possible coverage of childhood immunization against the target diseases of the Expanded Programme on Immunization and against mumps, rubella and (meningococcal) meningitis whenever possible;

(4) to consider the setting-up of mechanisms for collaboration with nongovernmental or other organizations for support to, and coordination of, action to prevent hearing impairment at country level, including the detection of hereditary factors, by genetic counselling;

(5) to ensure appropriate public information and education for hearing protection and conservation in particularly vulnerable or exposed population groups;

#### **2. REQUESTS the Director-General:**

(1) to further technical cooperation in the prevention of hearing impairments, including the development of appropriate technical guidelines;

(2) to cooperate with countries in the assessment of hearing loss as a public health problem;

(3) to support, to the extent that resources are available, the planning, implementation, monitoring and evaluation of measures in countries to prevent hearing impairment;

(4) to develop further collaboration and coordination with nongovernmental and other interested organizations and institutions;

(5) to promote and support, to the extent feasible, applied and operations research for the optimal prevention and treatment of major causes of hearing impairment;

(6) to mobilize extra budgetary resources to strengthen technical cooperation in hearing impairment prevention, including possible support from organizations concerned;

(7) to keep the Executive Board and the Health Assembly informed of progress, as appropriate.

## **ANNEX 5: DEFINITIONS OF DISABLING HEARING IMPAIRMENT**

### **DEFINITIONS:**

Disabling hearing impairment in adults should be defined as a permanent unaided hearing threshold level for the better ear of 41 dB or greater; for this purpose the "hearing threshold level" is to be taken as the better ear average hearing threshold level for the four frequencies 0.5, 1, 2, and 4 kHz."

Disabling hearing impairment in children under the age of 15 years should be defined as a permanent unaided hearing threshold level for the better ear of 31 dB or greater; for this purpose the "hearing threshold level" is to be taken as the better ear average hearing threshold level for the four frequencies 0.5, 1, 2, and 4 kHz."

**FROM:** *Report of the Informal Working Group on Prevention of Deafness and Hearing Impairment Programme Planning WHO, Geneva, 1991.*

## **ANNEX 6: DOCUMENTS CURRENTLY AVAILABLE FROM WHO ON PREVENTION OF DEAFNESS AND HEARING IMPAIRMENT**

1. **Report by the Director General, Prevention of Deafness and Hearing Impairment**, World Health Organization, Geneva (March 1986), A39/14.
2. **Report of the Informal Working Group on Prevention of Deafness and Hearing Impairment, Programme Planning**. Geneva, 18-21 June 1991, World Health Organization, Geneva (1991), WHO/PDH/91.1.
3. **Formulation of Guidelines for Management of Programmes for the Prevention of Deafness**, Report of a Regional Workshop, New Delhi, 9-12 September 1991, SEA/Deaf./2, 3 April 1992.
4. **Report on the Meeting of the Task Force on the Prevention and Control of Deafness and Hearing Impairment**, WHO Eastern Mediterranean Regional Office (EMRO), Alexandria, Egypt, 12-14 October 1992, WHO-EM/PBD/E/L.
5. **Forum Interview: Prevention of deafness and hearing impairment**. *World Health Forum*, Vol. 14, No. 1:1-12 (1993), World Health Organization, Geneva, Switzerland.
6. **Report of Working Group on Prevention of Hearing Impairment & Deafness**, World Health Organization Western Pacific Regional Office (WPRO), Manila, Philippines, 22-25 March 1994.
7. **Report of an informal consultation on strategies for prevention of hearing impairment from ototoxic drugs**, Geneva, 21-23 November 1994, World Health Organization, Geneva, WHO/PDH/95.2.
8. **Prevention of Hearing Impairment, Resolution of the 48th World Health Assembly**, (12 May 1995), World Health Organization, Geneva, WHA 48.9.
9. **Prevention of Hearing Impairment in Africa: Report of a WHO Workshop**, Nairobi, 24-27 October 1995, World Health Organization, WHO/PDH/96.3/AFR/NCD/96.1.
10. **Report of the First Informal Consultation on Future Programme Developments for the Prevention of Deafness and Hearing Impairment**, World Health Organization, Geneva, 23-24 January 1997, WHO/PDH/97.3. (*English and Spanish*)
11. **Prevention of Hearing Impairment from Chronic Otitis Media**, Report of a WHO/CIBA Foundation Workshop, London, 12-21 November 1996, WHO/PDH/98.4.
12. **Prevention of deafness and hearing impairment in the Eastern Mediterranean**. EMRO Technical Publication (in preparation).

### **B. OTHER DOCUMENTS**

13. **Proceedings of the International Symposium on Deafness and Hearing Impairment in Developing Countries**, Manchester, UK, 6-8 July 1995.
14. **Ear Diseases and Hearing Loss, A Manual for Nurses** by Dr Inga Bastos, ENT Department, Malmö General Hospital, Malmö, Sweden. (WHO Collaborating Centre on Prevention of Deafness and Hearing Impairment).





