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Report of the Informal Working Group on Prevention of Deafness and Hearing Impairment Programme Planning

Geneva, 18-21 June 1991

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INTRODUCTION

An informal working group on the Programme for the Prevention of Deafness and Hearing Impairment (PDH) was convened in WHO headquarters, Geneva, from 18 to 21 June 1991. The list of participants is attached as Annex 1.

The meeting was inaugurated by Dr N. P. Napalkov, Assistant Director-General of the World Health Organization. Dr Napalkov, in his opening address, referred to the development of the PDH Programme and the key role that nongovernmental organizations could play in its future development, particularly in the existing climate of resource constraints. The text of Dr Napalkov's address is attached as Annex 2. The scope and purpose of the working group are set out in Annex 3.

Professor P.W. Alberti and Professor Y.P. Kapur were unanimously elected Chairman and Vice-Chairman respectively. The WHO Secretariat, in consultation with the Chairman and Vice-Chairman, was assigned responsibility for preparing the report.

The tentative agenda (Annex 4) was adopted, with a slight change in the order of agenda items necessitated by the planned early departure of some of the observers at the meeting.

1. DATA ON DEAFNESS AND HEARING IMPAIRMENT

Epidemiological data on deafness and hearing impairment, in relation to both prevalence and incidence, were incomplete and fragmentary, especially in the developing countries. Owing to the absence of an internationally accepted epidemiological assessment method, the data available defy standardization and comparison.

The estimated figure widely quoted is 42 million persons over the age of 3 years, worldwide who have a moderate to profound hearing impairment (hearing loss corresponding to 42 dB or more in the better ear). However, it is recognized that, on the basis of studies carried out in some developed countries, this is a gross underestimate. Moreover, unilateral hearing loss can have consequences, especially in children, which cannot be ignored.

There was consensus on the presently adopted grades of hearing impairment, with some modifications as set out in the following table. However, there was a need to prepare an examination format, together with an instruction manual, for easy application in the field. These should be complemented with a manual on survey methodology in respect of the epidemiological assessment of hearing impairment.

Sensorineural loss was considered to be the major pathway to deafness and hearing impairment worldwide. However, in developing countries, where middle ear infections are still rampant, conductive loss resulting from untreated or inadequately managed otitis media may require priority attention, both to prevent the development of hearing loss in newly incident cases as well as to cope with the backlog of chronic otitis media.

GRADES OF HEARING IMPAIRMENT

Grade of impairment	Corresponding audiometric ISO value (Average of 500, 1000 and 2000 Hz) ¹	Performance	Recommendations	Comments
0 No impairment	*25 dB or better (better ear)	No or very slight hearing problems Able to hear whispers		*20 dB also recommended People with 15-20 dB levels may experience hearing problems. People with unilateral hearing losses may experience hearing problems even if better ear normal.
1 Slight impairment	26-40 dB (better ear)	Able to hear and repeat words spoken in normal voice at 1 metre.	Counselling. Hearing aids may be needed.	Some difficulty in hearing but can usually hear normal level of conversation.
2 Moderate impairment	41-60 dB (better ear)	Able to hear and repeat words using raised voice at 1 metre.	Hearing aids usually recommended.	
3 Severe impairment	61-80 dB (better ear)	Able to hear some words when shouted into better ear.	Hearing aids needed. If no hearing aids available, lip-reading and signing should be taught.	Discrepancies between pure tone thresholds and speech discrimination score should be noted.
4 Profound impairment including deafness	81 dB or greater (better ear)	Unable to hear and understand even a shouted voice.	Hearing aids may help in understanding words. Additional rehabilitation needed. Lip-reading and sometimes signing essential.	Spoken speech distorted, the degree depending on the age at which hearing was lost.

¹ Speech discrimination in a background of noise requires good high-frequency hearing. It is therefore recommended that epidemiological studies include testing and reporting of the hearing threshold at 4000 Hz.

Note: Performance test for speech discrimination levels should be carried out using the hearing alone, i.e., without any visual clues.

2. ASSESSMENT TECHNIQUES AND METHODOLOGIES

Some appropriate equipment is required for epidemiological assessment of hearing impairment. While such equipment has to be scientifically sound, it needs to be simple to operate and maintain, and available at an affordable cost. The technology should take into consideration the existing resource constraints, poor infrastructure, and the dearth of suitably trained human resources. Consideration should also be given to local climatic conditions, the availability of power sources or batteries, and calibration facilities. These prerequisites would also apply to hearing aids and amplification devices.

There has been some experience in the case of portable simple audiometers, low-cost pneumo-otoscopes, disposable otoscopes and low-cost hearing aids. There is a need to collate these experiences and refine as necessary such technology, particularly in a manner that would find application in developing country situations.

This is an area where applied research could prove helpful.

3. GLOBAL DATA BASE

Although data are presently available from a number of sources, from both developed and developing countries, a need was expressed for central collection and analysis, including meta analysis of published and unpublished reports on the varied aspects of the programme. Such a data base would provide insights into the global and regional prevalence of different causes and risk factors of hearing loss, their trends, the relative country situations, and options for management. The setting-up of a data base requires expertise in epidemiology and biostatistics, backed by the availability of computer hardware and software for data recording, analysis and retrieval. The various functions of such a centre might be best fulfilled by a WHO Collaborating Centre, identified and commissioned to set up the global data base, in consultation with other interested parties. There is a particular need to address the problem of data collection and analysis so that results are useful in an epidemiological as well as clinical sense.

4. PRIMARY EAR CARE

The basic tenets of primary health care would form the basis for the delivery of ear/hearing health care. These include scientifically sound interventions that are accessible, affordable and acceptable to the community served. The emphasis should be on people-oriented services, with community participation as an integral part of the system.

It was recognized that ear care at the community level should be backed up by services at the intermediary and tertiary levels, where increasing grades of sophistication would be available to deal with more complicated problems. It was considered necessary to develop these levels concurrently, as far as possible. Given the potential for prevention of, and protection against, a number of causes of hearing loss through simple interventions as part of the essential elements of primary health care, emphasis should be placed on strengthening such interventions.

Strategies for prevention traditionally fall under three categories:

- Primary prevention: aiming to prevent the occurrence of a disease/injury in a population.
- Secondary prevention: once the disease/injury has occurred, efforts may be made to prevent permanent hearing disability from occurring.

- Tertiary prevention: to minimize the hearing disability and its sequelae, through habilitation/rehabilitation.

In operational terms, preventive measures against hearing impairment and deafness cover three components in one continuum, to which should be added rehabilitation.

(i) Health promotion and preventive measures

These include the identification and strengthening of existing preventive and prophylactic campaigns of immunization, improved antenatal care, safe birth practices, improved nutrition, management of acute respiratory infections, noise control, etc.

Critical components of such a strategy are community awareness through information, education and communication on the one hand and general development measures, e.g. water/sanitation, nutrition, environmental and personal hygiene, etc., on the other.

(ii) Programmes to detect hearing loss as early as possible

Early identification, especially of infants with impaired hearing, is essential if the harmful sequelae of such hearing loss in respect of the child's development, for instance the ability to learn, communicate and socialize, are to be prevented. Such early detection should be possible through the family, community and primary health level workers, with support especially from audiology-trained personnel.

(iii) Application of corrective measures

The health care system should be strengthened at various levels, so that cases identified could receive further investigation and appropriate management.

Rehabilitation

Apart from medical rehabilitation, the aspects of social rehabilitation need to be considered. These include special education, vocational training, etc., preferably as a part of community-based rehabilitation.

The group discussed the commoner causes of sensorineural and conductive hearing loss, and considered the possible primary, secondary and tertiary preventive interventions in respect of each of these conditions.

The following table outlines the interventions in a summary form.

Disorder	Primary prevention	Secondary prevention	Tertiary prevention
<u>Prenatal</u>			
Rubella	Vaccination	Early detection through screening and identification of at-risk groups	Hearing aids Special education Rehabilitation
Syphilis	Antenatal treatment, health education		
Iodine deficiency	Nutrition and supplementation		
Genetic causes	Genetic counselling		
Ototoxicity	Avoidance or rational use of drugs concerned		
Congenital malformations		Surgery, when appropriate	
<u>Perinatal/neonatal</u>			
Low birth weight	Nutrition, antenatal care	Early detection through identification and screening of at-risk groups	Hearing aids Special education Rehabilitation
Birth trauma	Improved birth practices	Surgery, when appropriate	
Anoxia			
Jaundice	Rh-incompatibility detection and management		
Ototoxicity	Avoidance or rational use of drugs concerned		

Disorder	Primary prevention	Secondary prevention	Tertiary prevention
<u>Postnatal</u>			
(i) Childhood:			
Otitis externa	Health education Removal of foreign bodies and cerumen	Hygiene, education and treatment	Surgery, where indicated
Foreign bodies	Education	Appropriate removal	Surgery
Otitis media:	Individual and environmental hygiene	Education for early recognition of otitis media	Hearing aids and special education
- acute	Housing	Prompt and adequate treatment, including surgery	Surgery, where applicable
- with effusion	Proper management of upper respiratory infections	Appropriate surveillance of cases)
- chronic)))
Measles	Immunization))
Mumps)))
Meningitis	Antibiotic prophylaxis Immunization	Appropriate medical management	Hearing aids, if indicated Rehabilitation and special education (Cochlear implant)*
Trauma	Legislation: helmets, seat-belts	Prompt and adequate treatment including surgery, where indicated	Hearing aids, if indicated Rehabilitation and special education (Cochlear implant)
Ototoxicity	Avoidance or rational use of drugs concerned		Rehabilitation and special education. Hearing aids (Cochlear implant)

* NOTE : Cochlear implants are currently relevant only to a very small proportion of the deaf population. Their use at present would be limited to selected cases and that too in centres where specially trained surgical personnel and sophisticated instrumentation are available together with skilled rehabilitation teams.

Disorder	Primary prevention	Secondary prevention	Tertiary prevention
Postnatal (continued)			
(ii) Adulthood:			
Ototoxicity	Avoidance or rational use of drugs concerned		Rehabilitation and special education. Hearing aids (Cochlear implant)
Noise	Education Hearing conservation programme Legislation	Change of environment	Hearing aids Rehabilitation
Metabolic	Management of underlying disease	Treatment of underlying disease	Hearing aids Rehabilitation
Presbycusis	Avoidance of ototoxic agents	Avoidance of ototoxic agents	Hearing aids Rehabilitation
Otosclerosis	Genetic counselling, if appropriate	Early detection in children of unknown cases Surgical treatment	Rehabilitation (Cochlear implant)
Trauma	Legislation: helmets, seat-belts		Hearing aids, if indicated Rehabilitation and special education (Cochlear implant)
Menière's syndrome	-	Prompt and adequate treatment including surgery, where indicated	Hearing aids Rehabilitation

In the treatment of conditions such as otitis externa in a primary care setting the use of selected topical ear preparations was considered helpful.

The use of Essential Drugs : Model List of Essential Drugs (1990)¹ does not include ear drops.

The following were identified as being simple, useful and safe :

- (a) 2% acetic acid
- (b) 2.5% sodium bicarbonate solution

Consideration should be given to including this in the Model List of Essential Drugs.

5. MANPOWER DEVELOPMENT ISSUES

The dearth of suitably trained human resources at all levels of the health care delivery system is a major constraint in most countries facing the problems of avoidable hearing loss. As such, the training of personnel becomes a priority activity in the programme. To determine levels at which health and related personnel need to be trained, the numbers needed and the levels of competency for which knowledge and skill transfer would be necessary, it was considered useful to identify four levels:

- (a) Individual, family, community levels.
- (b) Primary health care level.
- (c) Intermediary level.
- (d) Tertiary level.

The presently available and/or desirable mix of trained personnel for prevention of deafness and hearing impairment at each level was determined. This is set out in the following chart.

¹ Sixth List, Technical Report Series No. 796, 1990.

Primary care level (community/district)
(population: approx. 50 000)

Health-related personnel: teachers, community health volunteers, religious heads,
traditional healers, traditional birth attendants

Health worker

Nurse

Nurse practitioner

General physician

Intermediary care level (provincial/regional hospital)
(population: 200 000 - 1 million)

Medical

Non-medical

General physician

Audiologist/audiometric technician

General surgeon

Nurse

Internist

Health educator

Radiologist

Gynaecologist/obstetrician

Paediatrician

Otorhinolaryngologist

Tertiary care level

Otorhinolaryngologist

Neurologist

Audiologist - medical doctor
- non-medical

Speech language pathologist

In the first instance, the available health personnel should be given orientation and simple training in the basic aspects of PDH, integrated into their regular training courses. Presently used training manuals could be reviewed and relevant aspects of PDH included as necessary.

It was considered useful to identify the specific tasks that the trained personnel would be expected to carry out at each level, so that their training could be task-oriented and problem-based.

In respect of the primary ear care level personnel, tasks could be broadly divided into the following:

(a) Health promotion activities.

(b) Clinical activities.

The former would include a number of the health educational interventions already included under "Primary ear care".

Clinical activities, which the health worker should be trained to carry out, could be categorized under the following headings:

Conditions that require:

(a) identification and treatment;

(b) identification, treatment and referral;

(c) identification and referral.

The tasks expected of the health worker would vary from country to country, depending on the levels of sophistication to which the health delivery system has developed and the rules and regulations regarding clinical practice in a specific country. Training schemes and the level of competence expected would therefore be country-specific. It is unquestionably a national prerogative to determine these criteria and rules.

The training manual on Primary Ear Care prepared by the WHO Collaborating Centre in Bangkok, Thailand could form the basis for adaptation to meet specific country situations.

Training in audiology

The group emphasized the need for training in audiology. The category of personnel trained in audiology varies from country to country. While in some countries audiological training is imparted to qualified otologists, in others audiology may be practised by suitably trained non-medically qualified personnel.

This is again a country- or, at best, a region-specific requirement. It was recognized that, to provide comprehensive audiological services, a fully trained and qualified audiologist was desirable. However, many audiological, diagnostic and "treatment" functions could be carried out by an audiological assistant under immediate (or sometimes remote) supervision.

The training of audiological assistants or technicians should also be task-oriented to avoid a mismatch between the training imparted and the knowledge and skills expected, leading often to frustration and non-optimal performance.

Audiology training courses

(a) Central and Eastern Europe/Baltic States

A need had been identified for training in audiology in this region. This had the support of the International Federation of Oto-Rhino-Laryngological Societies (IFOS). The group felt encouraged by the offer of support from Switzerland and Finland for these efforts. The working language of some of these courses may be German. Positive recognition of the course by WHO would require the pursuance of laid-down procedures and meeting requirements of the Organization.

(b) Training and research centre in Italy

This was proposed as a part of the IFOS network of centres. While such a centre could contribute indirectly to the PDH Programme, particularly through working also in developing countries, attention needs to be paid to the geographical distribution of the countries served. It may be desirable in the long term, to conform to the WHO regional structure, so that facilitation through the relevant Regional Office becomes possible.

In the first instance, centres such as the one proposed in Italy and possibly elsewhere should be developed within the context of national programmes. In the development of such centres, local needs and sensitivities should be seriously considered.

6. FORMULATION AND DEVELOPMENT OF NATIONAL PROGRAMMES

Activities for the prevention and control of deafness and hearing impairment in a country should follow a definitive plan. Such a plan would be the outcome of a felt need and a policy commitment by the government, followed by the formulation of a national programme.

The guidelines for the formulation of national programmes will be the major objective of the forthcoming Regional Workshop on Formulation of Guidelines for Management of Programmes for the Prevention of Deafness and Hearing Impairment, to be held in New Delhi in September 1991, and will not be discussed further in this report.

The setting-up of a multidisciplinary national committee in each country, generally under the auspices of the ministry of health with nongovernmental organization and private sector participation, is a useful mechanism in the planning, implementation and evaluation of national programmes. Often, nongovernmental and professional organizations can advocate and initiate such a development at the national level.

7. RESEARCH NEEDS AND OPPORTUNITIES

The working group recognized the need to include basic biomedical as well as clinical, behavioural/social and health systems research in the PDH Programme. The following areas were identified and listed on a priority basis. Some of these would be field studies, while others would be institution-based in specialized research laboratories.

(a) Incidence and prevalence of communication disorders, particularly related to hereditary causes, otitis media, noise and presbycusis (communication disorders refer to disorders of hearing and language expression)

(b) Development of a vaccine against otitis media

(c) Strategies for early identification of hearing impairment in the neonate, with a view to identifying high-risk groups, in both rural and urban settings in developing and developed countries

(d) Evaluation and further development of methodologies for screening and testing hearing loss

(e) Development of appropriate technology, with particular reference to audiometry, otoscopy and hearing aids

(f) Therapeutic trials in otitis media

(g) Molecular genetic studies in genetically determined hearing loss

(h) Social/anthropological studies in developing countries on attitudes of, and understanding by, the community with regard to hearing impairment, its causation and traditional management

(i) Evaluation of training programmes for various health worker groups in the area of PDH

Resources to support the research agenda need to be mobilized. Industry could lend support to studies on appropriate technology development, in regard to both instrumentation and vaccines.

8. MOBILIZATION OF RESOURCES

The PDH Programme was developed in WHO on the premise that extrabudgetary resources would be needed for its implementation. This decision was the outcome, on the one hand, of the stage in the regular budgetary cycle at which the programme was set up and, on the other hand, WHO's overall financial constraints.

The group recognized the need to explore all sources of funding, both within and outside the Organization. The critical need was funding for a position of Programme Manager and for secretarial support. It was felt by the group that, given the special technical issues inherent in the programme, the manager should have professional expertise in the area of deafness and hearing impairment. Among the modalities proposed to be explored were:

(a) regular budget funds;

(b) extrabudgetary funds;

(c) secondment of a suitable professional from an interested country or institution.

In respect of programme activities, IFOS, its agency and other organizations would need to mobilize resources. Bilateral funding also needed further exploration, both through WHO and directly between countries.

9. COLLABORATION WITH OTHER PARTNERS

(i) Collaboration of the PDH Programme with other technical units and programmes within WHO (e.g. Control of Acute Respiratory Infections (ARI), Health of the Elderly, Rehabilitation, Maternal and Child Health, Occupational Health, etc.) could be mutually beneficial in achieving common objectives. The main objective of ARI is to prevent and control acute respiratory infections in children. The programme specifically targets

pneumonia in children, particularly in countries with an infant mortality rate greater than 40 per 1000 live births. However, proper case management of acute upper respiratory infections can reduce the incidence of sequelae such as hearing loss, resulting from acute otitis media. The programme has prepared a manual (WHO/ARI/90.5) that sets out the management of acute otitis media at the small-hospital level in developing countries, which has been adopted by 30 countries. It has also introduced the use of low-cost pneumo-otoscopes available through UNICEF. The group appreciated the initiatives taken in the ARI programme to address acute otitis media. It was felt that close linkages of the PDH and the ARI programmes, particularly at field level, would be of critical importance in those countries where there is a high incidence of acute otitis media.

(ii) IMPACT is an international initiative against avoidable disablement, co-sponsored by UNDP, UNICEF and WHO, in 1981. It has identified avoidable disablement of sensorial origin as one of its priority areas, and prevention of deafness and hearing impairment comes very much within its sphere of interest and activities. The IMPACT strategy stresses community participation, private sector involvement and close collaboration with governmental and nongovernmental organizations and with its sponsoring United Nations agencies. Close links with the PDH Programme are envisaged in needs assessment, technical back-stopping and mobilization of resources, adding an element of mutual complementarity to the implementation of activities.

(iii) Nongovernmental organizations, both national and international, have a key role to play in creating an awareness among policy-makers of the implications and consequences of avoidable hearing loss and of the imperative for its prevention. These nongovernmental organizations, which may be professional or "lay" groups, are particularly suited to play an advocacy role, besides mobilizing resources in support of programme activities.

IFOS and its agency and similar organizations have a special interest in the programme, and should strengthen the collaborative relationship with the WHO Programme at all levels of the Organization.

10. PRIORITY AREAS FOR ACTION

The group recognized that sensorineural hearing loss is the predominant problem worldwide. However, causes of conductive loss resulting from infections still pose a major problem in developing countries, particularly in regions where health care services are poorly developed and where socioeconomic and environmental conditions predispose to such infections. In these situations, priority should be given to the prevention and control of acute otitis media.

In such countries, there is already a backlog of chronic otitis media, resulting from untreated or mismanaged acute otitis media requiring surgical treatment and correction. Facilities for such treatment are often limited. A priority need in developing countries would be to strengthen such facilities.

Worldwide, there is a need to intensify efforts at early identification and appropriate management of all forms of sensorineural hearing loss. Early identification would include identification of those at risk, adequate screening procedures, diagnostic evaluation and habilitation of those with hearing impairment. Ideally, screening of high-risk newborns, preschool children and those adults exposed to noise hazards should be instituted or made available.

Given the competing demand for limited resources, some of these efforts are more feasible, in the short term, in developed than in developing countries. However, their importance in relation to the overall objective of minimizing communication disorders should not be lost sight of in drawing up national plans of action, even in developing countries.

CONCLUSIONS AND RECOMMENDATIONS

Hearing loss is the most common sensory impairment, and hearing is the sense upon which spoken human communication depends. It has far-reaching implications in social, economic and quality-of-life terms.

It is estimated that around half of all deafness and hearing impairment, whether sensorineural, conductive or mixed, is preventable. Intervention strategies for prevention have been identified and are applicable as an integral part of primary health care.

ORGANIZATIONAL SETTING

1. The WHO Programme for the Prevention of Deafness and Hearing Impairment (PDH) developed from the WHO Member States' collective concern of the problem, recognizing the opportunity for its prevention and control. The Programme as presently organized falls within the Division of Health Protection and Promotion (HPP) and is linked in a managerial context with the Programme for the Prevention of Blindness (PBL). It is strongly recommended that, as soon as feasible, PDH be made an independent programme with its own identity, in view of the particular needs and issues inherent in this programme.
2. The WHO Programme is in urgent need of full-time staff for the further development of activities. It is, therefore, strongly recommended that all possible consideration and priority be given to mobilize needed funds for a post of Programme Manager at headquarters, with secretarial support.

EPIDEMIOLOGICAL ASSESSMENT

3. There is a need for a comprehensive review of available epidemiological data on the magnitude and causes of hearing impairment. It is recommended that this work be undertaken through the network of WHO collaborating centres in consultation with other interested institutions.
4. Comparable methodologies are needed for the assessment of the epidemiology of hearing impairment and its causes. It is recommended that these be worked out as soon as possible, in collaboration with interested institutions and organizations, including the development of suitable training material for field assessment.
5. It is recommended that a global data base on deafness and hearing impairment be established. This function may be assumed by WHO or by a collaborating centre, making available, on request, current information required and issuing regular reports.

EAR CARE AS AN INTEGRAL PART OF PRIMARY HEALTH CARE

6. The health delivery system based on primary health care (PHC) lends itself easily to the delivery of primary ear care, of a promotive, preventive and clinical nature. Given the varied structure and stage of development of the PHC system in different countries, it is recommended that the concept of delivery of primary ear care be defined and developed in the context of the specific local situation.

HUMAN RESOURCE DEVELOPMENT

7. There is a great shortage of professional personnel capable of testing hearing and undertaking habilitation and rehabilitation of the hearing-handicapped. It is therefore recommended that there be established training programmes in audiology, speech-language pathology and special education, both at a professional and at a technical level, with a particular initial emphasis on the needs of central and eastern Europe and of developing countries.
8. The prevention of deafness and hearing impairment should receive a high profile at national and international otolaryngology and allied specialties conferences, so as to create professional awareness of, and stimulate commitment to, this cause.
9. Much work in the prevention and management of ear disease and hearing loss could be undertaken by existing health care professionals, if they were provided with appropriate guidance and training. It is therefore recommended that training and refresher courses be developed in primary ear and hearing health care for care-givers such as nurses, general medical officers, and paediatricians.

NATIONAL PROGRAMME DEVELOPMENT

10. The formulation of a national policy and programme could be a prerequisite to the implementation of planned activities aimed at prevention of hearing impairment. It is recommended that guidelines be prepared to facilitate such national programme development. These efforts should be supported by intergovernmental and nongovernmental organizations.

MOBILIZATION OF RESOURCES

11. There is an urgent requirement for funds to develop programme activities. It is therefore recommended that IFOS, in consultation with other interested nongovernmental organizations and agencies, mobilize needed resources to undertake this work.

COORDINATION

12. The global programme that is being developed requires cooperation between WHO, as a coordinating body, and professional groups worldwide. It is therefore recommended that there be continuing close collaboration and communication between appropriate WHO offices, IFOS and its agency and other interested parties.

PRIORITY-SETTING

13. Sensorineural hearing loss is the major cause of deafness and hearing impairment in children and adults worldwide. Approximately half of this is preventable. It is therefore recommended that steps be taken in this direction. In developing countries, there is an additional burden of hearing loss resulting from ear infections. Where needed, priority should be given to the use of resources for prevention and early management of hearing in these cases.

CENTRES

14. It is recommended that there be an ongoing effort to build up a global network of supportive institutions for the WHO Programme.

RESEARCH

15. There is an urgent need for research on a broad range of issues related to the PDH Programme. It is recommended that the priorities identified in the present report be addressed and that support be sought from interested institutions.

ANNEX 1

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INFORMAL WORKING GROUP ON PREVENTION OF DEAFNESS
AND HEARING IMPAIRMENT PROGRAMME PLANNING

Geneva, 18-21 June 1991

OPENING STATEMENT BY DR N. P. NAPALKOV
ASSISTANT DIRECTOR-GENERAL

Ladies and Gentlemen,

It gives me pleasure, on behalf of Dr Nakajima, Director-General of the World Health Organization, to welcome you to Geneva and to thank you for having accepted our invitation to participate in this informal working group on prevention of deafness and hearing impairment programme planning.

This meeting comes at a timely phase in the developments and efforts to mount national programmes for the prevention of deafness in several developing countries, particularly in Asia. The potential role of nongovernmental organizations is of the utmost importance in this context, and there is great interest in the countries concerned, the Organization, and other technical agencies to further collaborative work in this field.

The Programme for the Prevention of Deafness and Hearing Impairment goes back to World Health Assembly resolution WHA38.19, adopted in 1985, which attempted to give an overview of the global problem. The Fortieth World Health Assembly in 1987 took one further step in approving an updated report as the basis for WHO action. An estimate of at least 42 million people in the world with moderate, severe or profound hearing impairment was made in this report. Furthermore, the major possible causes of loss of hearing were identified, and the need for the strengthening of preventive and curative action was stressed.

However, the major difficulty experienced with the establishment of the Programme for the Prevention of Deafness and Hearing Impairment was the budgetary situation, as it was not possible to provide more than a token regular programme budget. Thus, activities under this programme will be implemented to the extent to which extrabudgetary resources become available, and this will be the situation during the period of the Eighth General Programme of Work of WHO, that is until 1995. The difficulties in raising extrabudgetary funds for this programme explain its slow start and apparent limitation of activities. Nevertheless, all the basic administrative work has been carried out. There is a medium-term plan for the Programme, an Expert Advisory Panel, and the beginning of a network of collaborating centres.

What is obviously needed now is to get the Programme moving in operational terms, to make it known to Member States, and to do all the necessary homework to be able to present a practical programme strategy and methodology to interested countries. This will imply much work over the next few years if the target set for this programme, to have at least 20 operational national programmes by 1995, is to be reached.

Issues which need to be addressed in this context include:

- assessment methods and technology to obtain proper information on the problem of deafness and its causes in different settings;

Annex 2

- the definition in practical managerial terms of the content of primary ear care in developing countries;
- needs and opportunities for manpower development; and, last but not least,
- a suitable model for ear care services at various levels.

All these components then have to be built into the concept of a national prevention programme, based on primary health care and adapted to local needs and resources. This is by no means an easy task, and there are no simple solutions to some of the problems encountered.

The purpose of the present meeting is to allow for discussions between interested parties with a view to programme planning. As this is one of the first working groups for this programme, you will obviously need to review previous activities and the present situation of the PDH Programme, and then assign specific tasks for priority action. It is obvious that, with the very limited funds available to this programme, not everything can be done immediately; but we hope that the collaborating centres and organizations such as the International Federation of Oto-Rhino-Laryngological Societies (IFOS) will be able to share the workload with us.

The present administrative setup for the PDH Programme is that it will be managed jointly with the Prevention of Blindness Programme within the framework of the recently created Division for Health Protection and Promotion. The PDH Programme will retain its identity and should, hopefully, establish its profile as a worthwhile programme for technical cooperation with Member countries and for support from interested donors. This will be of critical importance over the next few years, if sufficient visibility and priority are to be given to deafness and hearing impairment in developing countries, where there is increasing competition to obtain decreasing resources.

It is expected that this meeting will result in a report with your stated conclusions and recommendations, as guidance for the future. We look forward to the outcome of your work, which will be very important in shaping this new programme.

I wish you all success in your endeavours over the next four days and a pleasant stay in Geneva.

Thank you.

The WHO Programme for the Prevention of Deafness and Hearing Impairment

Informal Working Group on Programme Planning

Geneva, 18-21 June 1991

Scope and Purpose

Although there are no precise data available, it is estimated that there are 42 million persons worldwide who suffer from moderate to profound hearing impairment (hearing loss corresponding to 42 dB or more).

Hearing impairment and deafness therefore rank as one of the major public health problems. The fact that both are largely avoidable makes prevention and treatment imperative.

The Programme for the Prevention of Deafness and Hearing Impairment (PDH) has the following as its stated objective:

"To promote the development of technology, the education for protection of hearing and the strengthening of services, aimed at prevention of deafness and hearing impairment and appropriate in the context of individual national health care systems."

There is a need, at this formative period of the global programme, to address various issues relevant to policy and programme formulation, such as operational definitions of hearing impairment in the context of community-based programmes, methods of assessment, preventive strategies and technologies of intervention. Programmatic issues such as, among others, human resource development, establishment of infrastructure, programme delivery, collaboration with nongovernmental organizations, resource mobilization and research needs would also require attention.

The purpose of this informal working group is therefore to address these priority issues as well as to plan for future activities and the coordination of work in this field.

AGENDA

Opening of the meeting

Election of Officers

Adoption of Agenda

1. Data on hearing impairment:
 - available data on prevalence and determinants of hearing impairment
 - definition of impairment levels
 - assessment techniques and methodologies
 - global data base
2. Primary ear care; concepts and ongoing developments
3. Manpower development issues, including availability of training material
4. Formulation and development of national programmes
5. Research needs and opportunities
6. Mobilization of resources
7. Coordination of programme activities
8. Priority areas for action:
 - in developing countries
 - in developed countries

Conclusions and recommendations

Closure of meeting

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