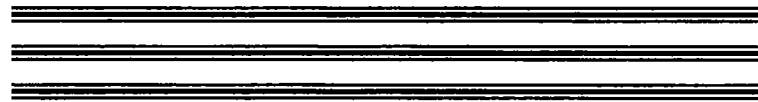


Report of the

**INTERNATIONAL WORKSHOP
ON
PRIMARY EAR AND HEARING CARE**



Cape Town, South Africa

12-14 March 1998

Co-sponsored by

The WHO Regional Office for Africa, Harare, Zimbabwe

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WORLD HEALTH ORGANIZATION

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TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
PREAMBLE.....	1
1. SUMMARY OF THE MAIN RECOMMENDATIONS OF THE WORKSHOP: THE CAPE TOWN DECLARATION	2
1.1 Prevalence.....	2
1.2 Disability	2
1.3 Impact of the disability.....	2
1.4 Prevention and Treatment.....	2
1.5 Primary Health Care.....	2
1.6 Training for Primary Ear and Hearing Care.....	2
1.7 Facilities at Primary Level.....	2
1.8 Referral.....	3
2 IMMEDIATE AND FUTURE OUTCOMES OF THE WORKSHOP	3
3 JUSTIFICATION FOR PRIMARY EAR AND HEARING CARE PROGRAMMES.....	3
3.1 The medical effects of ear disease.....	3
3.2 The problem of hearing impairment and deafness.....	4
3.3 Lack of Human Resource Development.....	4
4 WHO PROVIDES PRIMARY CARE SERVICES.....	5
4.1 First level: the community.....	5
4.2 Second level: the "Community Health Worker" or Health Promoter.....	5
4.3 Third level: the Primary Care "Nurse Practitioner/Clinical Assistant"	5
4.4 Fourth level: Primary Care Health Workers with special training and skills.....	5
5 WHO IS TO PROVIDE TRAINING FOR THESE PRIMARY CARE WORKERS?.....	6
6 WHAT IS THE RELATIONSHIP WITH TRADITIONAL HEALERS?	6
7 HOW SHOULD NATIONAL EAR AND HEARING CARE SERVICES BE ORGANISED?...	6
8 OBJECTIVES AND PRINCIPAL ELEMENTS OF EAR AND HEARING CARE TRAINING PROGRAMMES FOR PRIMARY CARE	7
8.1 Elements of an Ear and Hearing Care Training Programme for "Community Health Workers"	8
8.2 Elements of an Ear and Hearing Care Training Programme for "Nurse Practitioners"	8
8.3 Elements of an Ear and Hearing Care Training Programme for "Specialist Nurse Practitioners/Medical Officers"	9
9 OUTCOMES-BASED BASIC TRAINING PROGRAMMES	9
9.1 For Community Workers.....	9
9.2 For Nurse Practitioners/Medical Assistants.....	10
9.3 Outcome-based Basic Training Programme for Specialist ENT Nurse Practitioners/Medical Assistants.....	12
10 SOME NOTES ON SCREENING FOR HEARING IMPAIRMENT/DEAFNESS IN PRIMARY CARE.....	12
11 LIST OF PARTICIPANTS	14
12 TABLE OF WORKSHOPS.....	16
13 PROGRAMME	17



PREAMBLE

In the report on the workshop on "Prevention of Hearing Impairment from Chronic Otitis Media (WHO/PDH/98.4) the following Key Points were made:

- Opportunities for cost-effective prevention of Chronic Otitis Media and its sequelae occur particularly in the community and at the primary level of health care, through targeting risk factors and implementing primary ear care.
- Primary health care workers need to be given training and equipment for prevention, detection and management of Chronic Otitis Media.
- The diagnosis of Chronic Otitis Media needs to be made earlier in childhood to prevent its long-term effects, especially on hearing impairment.

As a direct result of this workshop and in particular of these issues raised, the *1st Cape Town International Workshop on Primary Ear Care* was held in March 1998 under the auspices of the University of Cape Town and with the collaboration of the World Health Organisation.

Inadequate provision of good Primary Ear and Hearing Care throughout most of Sub-Saharan Africa not only exposes patients to the potentially life threatening complications of ear disease but results in the common problems of chronic ear disease and disabling deafness. The frequency with which all of these occur would be considerably reduced if strategies were developed to teach primary health care workers the fundamentals of identification and treatment of common ear diseases.

Unfortunately it seems to be a common misconception with many involved in provision of Primary Care services that ear disease and hearing disorders are a specialised field of practice that requires a sophisticated, and hence, largely unaffordable, level of skill and equipment in order to adequately treat and manage these problems at this level.

This workshop was convened to address this situation and to develop strategies, applicable in the Primary Care field of practice, to teach core knowledge, simple skills, affordable treatment protocols and guidelines for referral to basic health care workers. By involvement in the workshop of key personnel from both Primary Care and Specialist areas - including Health Management, Disability, ENT and Audiology - it was hoped to develop recommendations for training in a system of Primary Ear and Hearing Care that is not only simple enough to understand but practical enough to be uniformly applied throughout Sub-Saharan Africa.

The workshop was attended by representatives/delegates from 19 countries - predominantly from Southern and Sub-Saharan Africa.

1. SUMMARY OF THE MAIN RECOMMENDATIONS OF THE WORKSHOP: THE CAPE TOWN DECLARATION

Delegates from ten Southern Africa countries gathered in Cape Town, under the auspices of the University of Cape Town and with the support of WHO and International Federation of Oto-rhino-laryngological Societies (IFOS), to consider primary ear and hearing care in the context of primary health care, and agreed on the following points and recommendations.

1.1 Prevalence

Ear disease in developing countries is common, and the prevalence of chronic ear infections is a good indicator of the effectiveness of primary health care services in a community.

1.2 Disability

Ear disease is a cause of significant disability because of both the effects of chronic infection and complications and the effects of the resulting hearing impairment.

1.3 Impact of the disability

Deafness and hearing impairment impact on the individual, affecting speech and language development, educational potential, prospects for employment, and social interactions. They impact on the community and society by causing loss of productivity of affected persons, and hence slowing development. The impact would also include the costs of treatment, education for learners with special needs, and rehabilitation.

1.4 Prevention and Treatment

Ear disease and its associated disability are potentially preventable through early identification and treatment of disease.

1.5 Primary Health Care

Early identification and treatment of ear disease and hearing impairment are most appropriately and cost-effectively undertaken as part of Primary Health Care.

1.6 Training for Primary Ear and Hearing Care

A module of training for Primary Ear and Hearing Care including communication strategies should be incorporated into all training programmes for primary health care workers. These modules should be appropriate for the level of knowledge and skill of the health worker (see Box 1). Trainers and the trained should be enabled to feel a sense of ownership of the training protocols. Guidelines should be developed for establishing individual country training programmes.

1.7 Facilities at Primary Level

All primary health care facilities should be equipped with public awareness material, the basic instruments required for diagnosis of ear disorders, the materials and medication required for

their treatment, information on rehabilitation and information on education for learners with special needs.

1.8 Referral

All primary health care facilities should be supported by a referral system

- to community services;
- to a facility staffed by a medical practitioner;
- to rehabilitation facilities.

2 IMMEDIATE AND FUTURE OUTCOMES OF THE WORKSHOP

- Cape Town Declaration (see above).
- Prime messages for training for use in regional training manuals (distributed to participants, Directors of medical services, medical officers of health, NGO's).
- Guidelines for primary ear and hearing care.
- Local workshops to involve village health workers and community health workers.
- Implementation of primary ear and hearing care nationally and locally. (Local workshops are important to determine what the community wants and to give ownership to the community.) These should be followed with evaluation and further workshops.
- Outcomes for WHO
 - extend primary ear and hearing care into all regions that need it;
 - devise global level guidelines with training packages and materials that can be adapted to regional and national needs;
 - link primary ear and hearing care with strategies for prevention;
 - encourage guidelines to be a component of each national plan for prevention.

For training community health workers, the emphasis should be on:

- Education in basic knowledge of ear disorders and hearing impairment;
- Recognition of ear disorders through symptoms of disease and disability;
- Education in prevention through general care (e.g. avoid cigarette smoke, encourage breast-feeding, and treat URTI's adequately) and specific ear care;
- Education in continuing treatment programmes;
- Training for awareness raising and health education in the community with respect to ear and hearing disorders;
- Integrated training in the workplace.

For training the Nurse Practitioner/Medical Assistant/Medical Officer the emphasis should be on:

- The effects of disease on structure and function;
- The causes of disease and hearing impairment;
- Basic diagnostic skills;
- Basic skills for identification of hearing impairment;
- Treatment and referral protocols;
- Treatment skills;
- Training for awareness raising and health education in the community with respect to ear, hearing and communication disorders.

Box 1: Training module essentials

3 JUSTIFICATION FOR PRIMARY EAR AND HEARING CARE PROGRAMMES

3.1 The medical effects of ear disease

The following compares statistics from the developed and underdeveloped countries of the world:

- The incidence of acute middle ear infection is similar in both.
- Complication rates have been reported as occurring in 1 per 1000 cases of acute infection in the developed countries and 60 per 1000 in underdeveloped countries.
- Death is the most serious end result of complications from ear infection. In developed countries, 1 per 100,000 of cases with complications die, and in underdeveloped countries, 1,000 per 100,000 cases with complications die.

3.2 The problem of hearing impairment and deafness

WHO estimates that there are 120 million people world-wide with disabling hearing impairment defined as being unable to hear normal conversational voice with the better hearing ear¹. This figure is probably an underestimate but more, and more accurate, data is needed to ascertain the correct numbers.

It has been estimated that 50% of this deafness would have been prevented if adequate Primary Care Health services had been available and these had been supported by public awareness and health education campaigns. The most common potentially preventable causes are:

- Chronic ear disease (ear disease becomes chronic with inadequate treatment, lack of compliance, repeated infection, ignorance that the condition is not normal and is often associated with low socio-economic status);
- The infectious diseases of childhood including meningitis;
- Noise-induced hearing loss;
- Ototoxicity;
- Deafness and hearing impairment related to consanguinity.

3.3 Lack of Human Resource Development

In most underdeveloped countries there are an inadequate number of doctors to provide access for all persons to a primary health care facility staffed by a doctor. In consequence nurses and medical assistants are being trained to fulfil the role of the primary care service provider.

Many countries in Africa have neither personnel trained in identification and rehabilitation of deafness and hearing impairment nor equipment and facilities to undertake these tasks. In those countries with such personnel and equipment availability is grossly inadequate to meet the need for such services.

In general the content of training courses for primary health care workers is inadequate to provide the skills required for diagnosis and treatment of the common ear diseases, hearing impairment, deafness and the communication deficit resulting from these.

In developed countries the number of ENT specialists ranges from 1 per 30,000 to 1 per 150,000 of the population. In Africa, excluding the relatively well-developed countries, South Africa and Egypt, it has been estimated that there is on average, only one ENT specialist per two million of the population and in some countries there are no ENT specialists. The situation is similar with regard to personnel with audiological training.

Recommendation

A module on Primary Ear and Hearing Care should be incorporated into the training programme for all primary health care workers.

¹ The Audiometric definitions are:

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 Meeting, WHO, Geneva, 1991. With adaptations from Report of the First Informal Consultation on Future Programme Developments for the Prevention of Deafness and Hearing Impairment, WHO, Geneva, 23-24 January 1997, WHO/PDH/97.3.*

4 WHO PROVIDES PRIMARY CARE SERVICES?

Depending on the situation in any particular country there are four levels of primary care worker for whom appropriate training modules need to be developed. The names and responsibilities of these types of workers may vary somewhat between countries.

4.1 First level: the community

This includes the family, teachers, community groups (including youth groups) and leaders, health committees, church groups and schoolchildren. At this level the aim should be health promotion and health education, prevention, ear and hearing care and ear hygiene using posters, pamphlets, drama, radio, locally-made videos (for clinics, shopping centres, community groups, etc).

4.2 Second level: the "Community Health Worker" or Health Promoter

Essentially defined as a non-medical, non-nursing/clinical assistant person from the community. At this level the aim should be:

- to disseminate health and hygiene information to parents/carers and the community (this helps to develop community empowerment which leads to political commitment and empowerment);
- to gather patients with symptoms of ill-health for referral to the local primary care facility.
- to supervise ongoing treatment and follow-up after referral back from a higher level.
- basic treatment may be given at this level, and the first management decision may be at this level.

4.3 Third level: the Primary Care "Nurse Practitioner/Clinical Assistant"

Essentially defined as either someone with a basic nursing training who has undertaken further training in community health or a clinical assistant with community care training. At this level the aim should be:

- to diagnose and treat common diseases (A few countries may not allow nurses to provide treatment and management);
- to recognise the need for referral to a higher level of medical care;
- to supervise and collaborate with community health workers.

In some countries mobile ear and hearing care workers may be trained and be available. Some countries may have a separate Health Education Officer to oversee and train health promoters.

4.4 Fourth level: Primary Care Health Workers with special training and skills

At this level the aim should be:

- to diagnose and treat common diseases in their special area of expertise;
- to recognise the need for referral to specialist services in their special field of expertise;

- to train nurse practitioners/clinical assistants about management of the common diseases in their special area of expertise;
- to educate communities for whom they are responsible in order to increase awareness of the disorders in their special area of expertise;
- to co-ordinate relevant visiting specialist services to communities for whom they are responsible.

5 WHO IS TO PROVIDE TRAINING FOR THESE PRIMARY CARE WORKERS?

Trainers should have:

- Innate teaching skills – it is essential that those unsuitable for teaching should be identified and redirected to another task;
- Empathy with their students' needs through being involved in these needs in their own practice;
- Appropriate ongoing experience in their field from their own practice;
- Good preparation for training;
- Suitable training "packages" which should include graphic charts and models and media such as slides and video (where video facilities are available);
- Opportunity to provide clinical experience to students;
- Ongoing support through refresher courses.

6 WHAT IS THE RELATIONSHIP WITH TRADITIONAL HEALERS?

In any community, care has to be taken to ensure that a community health worker does not operate in conflict with the traditional healer. This may be achieved by:

- Consultation to ensure co-operation between "Western" concepts and local traditions;
- Providing traditional healers with insight into the scientific basis for "Western" medicine;
- Involving traditional healers in understanding how to recognise significant disease;
- Enabling traditional healers to act as an alternative or supportive referral channel when effective western treatment is available.

7 HOW SHOULD NATIONAL EAR AND HEARING CARE SERVICES BE ORGANISED?

It is recommended that in countries with inadequate numbers of doctors and ENT specialists the national organisation of ear and hearing care services should be as follows:

- Primary Ear Care Services should be as outlined above, and integrated with other appropriate services such as community-based rehabilitation (CBR).
- When new health problems are actively being sought in a community, adequate facilities for treatment and management should first be made available;
- Medical Officers with appropriate ear and hearing care training should be located at District Hospitals. Where personnel and equipment are available an Audiological Service should be established at District Hospitals.
- Guidelines should be established for referral from District Hospitals to the available ENT and Audiological Services.

- Visiting "Ear Camps" for diagnosis and on-site treatment should be encouraged to be conducted from District Hospitals by ENT specialists (local and voluntary expatriate teams). These should also be used for practical training of Primary Ear and Hearing Care Workers and Medical Officers.
- There is a need to influence Governments, as the main provider of services to under-privileged communities, on the problem and in the setting up of policy, strategies, and programmes. Governments need to be convinced of the feasibility, sustainability, cost-effectiveness and resource (funds and human) availability for new programmes, including for prevention. These actions can be done through:
 - conferences and seminars to which government personnel are invited;
 - local studies and surveys;
 - linkages and technical support from WHO;
 - activities by disability and human rights groups;
 - community mobilisation, e.g. public hearings, community action initiatives;
 - direct contacts with politicians;
 - raising key issues prominently ("bandwagon effect" which politicians may join);
 - involving prominent people, lobbyists and activists to enhance advocacy;
 - A National Committee for prevention of deafness and hearing impairment should be established, and co-ordinated with a budget within the Ministry of Health with links with Ministries of Education and Social Welfare. User, advocacy, caring, donor and professional groups should be represented and should be committed to the public health approach and primary health care. This committee would organise national workshops to address advocacy, gathering of data to assess needs and cost effectiveness of programmes (i.e. to test if it costs more not to do something than to do something), and fund-raising, part of which should be raised locally (such as for deaf schools).

8 OBJECTIVES AND PRINCIPAL ELEMENTS OF EAR AND HEARING CARE TRAINING PROGRAMMES FOR PRIMARY CARE

The long-term aim of a Primary Ear and Hearing Care Programme is to reduce the incidence of preventable deafness within communities.

The immediate aims of a Primary Ear and Hearing Care Programme are:

1. to improve recognition and treatment of ear disorders by health workers;
2. to reduce complication rates from ear disease through early recognition and referral;
3. to improve community recognition of
 - the link between unsafe ear practices, ear disorders and hearing impairment
 - the need to seek medical attention.

Recommendations

A module on Primary Ear and Hearing Care should be incorporated into the training programme for all primary health care workers – Community Health Workers and Nurse Practitioners/Medical Assistants. Training materials may be locally produced, commercial or WHO-sponsored. Materials and training should be culturally appropriate. Guidelines should

be developed for establishing individual country-training programmes with templates for within-country development and adaptation. "Packages" that include posters, models slides and regionally appropriate graphics should be produced.

Training programmes should be linked with:

- Health Education programmes for people (e.g. parents, children) to increase awareness about deafness and hearing impairment and give a basic understanding of ear diseases and how to prevent and treat them. A child-to-child programme could be considered.
- Training of medical officers (general practitioners) and specialists.

Teaching ENT Departments should incorporate these further training programmes into their programmes of training and should also establish training programmes for Primary Ear and Hearing Care tutors.

Teaching ENT Departments should consider establishing a system of visiting "Ear Camps" on a regular basis to selected District Hospitals throughout the country. These "Ear Camps" would have a primary function of diagnosis and on-site treatment but should also be used to provide training for Primary Ear and Hearing Care Workers and Medical Officers from throughout the District. The emphasis should be on the practical exposure opportunity provided by the concentration of 'Ear' patients attending these 'camps'.

8.1 Elements of an Ear and Hearing Care Training Programme for "Community Health Workers"

- Decide how much knowledge should be given, and how simple the teaching can be made;
- Education to create awareness of the link between ear disorders/unsafe ear practices and deafness/hearing impairment;
- Emphasise that deafness and hearing impairment is often preventable;
- Basic description of structure and function;
- Basic description of common ear disorders;
- Basic description of common hearing disorders;
- Description of symptoms caused by ear and hearing disorders and important signs to recognise;
- Description of preventive ear and hearing care;
- Basic description of treatment and follow-up of ear and hearing disorders; treatment flow charts should be produced;
- The opinion/wishes of parents and the community should be respected.

8.2 Elements of an Ear and Hearing Care Training Programme for "Nurse Practitioners"

- Education to create awareness of the link between ear disorders/unsafe ear practices and deafness;
- Emphasise that deafness and hearing impairment is often preventable;
- Basic description of structure and function;
- Basic description of common ear disorders and their symptoms and signs;
- A simple classification of ear disorders;
- Skills for examination, diagnosis and treatment with clinical demonstrations and practise;
- Protocols for treatment and referral;
- Recognition of hearing impairment and deafness and the importance of infant and child screening for hearing problems;
- Skills for communication and co-operation with and supervision of "Community Health Workers";

- Description of preventive ear and hearing care and skills required for establishment of prevention of programmes;
- The opinion/wishes of parents and the community should be respected.

8.3 Elements of an Ear and Hearing Care Training Programme for "Specialist Nurse Practitioners/Medical Officers"

- All of the above;
- More specialist skills in hearing assessment and hearing rehabilitation;
- Training for training;
- To fulfil this role selected Nurse Practitioners/Medical Assistants should undergo further training to become ENT Nurse Practitioners/Medical Assistants to be based at Community Hospitals or at District Hospitals.

Medical Officers at District Hospitals should undergo a similar training.

9 OUTCOMES-BASED BASIC TRAINING PROGRAMMES

9.1 For Community Workers

A Community Worker needs to know:

Why ear disorders are important

- Primary function of the ear is hearing.
- Hearing is important for communication.
- Speech and language develop from hearing and imitating words and speech.
- A child who does not hear does not learn words, does not learn the meaning of words, does not learn to speak, may have education problems, and can never develop to her/his full potential. Every child should have the right to at least primary education.
- Adults with hearing problems cannot function to their full potential and they become socially isolated.
- Ear problems may also cause hearing impairment or deafness (e.g. discharging –'runny' ears).
- Some conditions are not obvious causes of deafness and hearing impairment, such as infections; rubella in pregnancy, birth trauma or hypoxia, jaundice in babies, mumps and measles, meningitis, syphilis, loud noise, some drugs such as certain antibiotics, and marriages between relatives especially if there is deafness in the family.
- Preventing or treating many of these

What should a community worker seek out in the community?

Making sure that:

- all babies are fully immunised
- all girls are immunised against rubella
- all pregnant women are tested for syphilis, all positive cases go for treatment with their babies, and sexual contacts are traced and sent for treatment
- the following have their hearing screened: (*babies by questionnaire, children with a voice test*):
 - all babies and children with deformed ears or 'funny-looking faces' and any baby or child thought to have a hearing problem.
- risky practices are avoided (e.g. putting milk, chicken fat, unbent paper clip into ears).
- all people who work where it is noisy know that:
 - Noise damages hearing.
 - They should wear hearing protectors.
 - Their employers should reduce the noise.
- all patients with possible ear problems attend a clinic for treatment, for example:
 - Fever and URTI
 - Pain in the ear
 - Pus or discharge from the ear
 - Pain with swelling behind the ear
 - Irritable, screaming baby who may also have fever, vomiting
 - Drowsiness, confusion, loss of consciousness especially with neck stiffness, vomiting or convulsions
 - Giddiness with either vomiting or feeling like vomiting
 - Lame face
 - Sudden loss of hearing
 - Hearing impairment or deafness

Box 2: Functions of a community health worker

- causes can prevent deafness and hearing impairment.
- Complaints of possible hearing impairment or deafness always need to be investigated because often something can be done to help the patient – surgery, hearing aids or, in the case of children, special schooling.

The basics of structure and function of the ear

- The visible and deeper parts of the outer ear
- Middle ear, eustachian tube, mastoid and conduction of sound,
- The inner ear - hearing, balance and facial nerve,
- The ear is close to the brain and infection in the ear can spread to the brain (causing meningitis or brain abscess).

The more knowledge a community worker has about ear disorders, the better they will be equipped to seek out and manage patients with ear problems. A post-basic course would not only refresh knowledge of the basics but would go on to teach about ear disease and disorders and the sorts of things that are done to treat these and the sorts of treatments that need to be carried out in the community.

The main functions of a basic-level village health worker are shown in Box 2.

9.2 For Nurse Practitioners/Medical Assistants

A Nurse Practitioner/Medical Assistant needs to know all that the Community Health worker needs to know, plus they need to know that ear diseases are common, and that in order to understand about ear diseases, how to prevent, diagnose and treat them, they need a basic knowledge of structure and function of the ear as well as a basic knowledge of the different diseases, including some basic microbiology in order to understand antibiotic treatment.

1. The basics of structure and function of the ear:

- Familiarity with normal/abnormal (use photographs to illustrate);
- The visible parts of the ear – the outer ear (pinna) and the ear canal;
- The middle ear, eustachean tube and the mastoid air cell complex (which grows with age). Conduction of sound;
- The inner ear – hearing (cochlea), balance (vestibular system) and facial nerve. Perception of sound and nerve impulses to the auditory centre in the brain, perception of motion and nerve impulses to the balance centre in the brain;
- That the ear is close to the brain and infection in the ear can spread to the brain.

2. The basics about common ear problems and their solutions

A classification of ear and hearing disorders (see box 3) and the essential processes involved in each of these disorders:

Methods of examination of the ear (otoscopy), see below.

Methods of assessing hearing (questionnaire, voice test, noisemakers).

Guidelines on how to treat each of these disorders through standardised protocols.

<u>External Ear</u>	<u>Middle Ear</u>	<u>Hearing</u>
Normal	Normal	Normal
Abnormal:	Abnormal:	Abnormal:
- Deformity	- otitis media	- Moderate
- Impacted wax	- Active chronic OM	- Severe
- Foreign body	- Inactive chronic OM:	
- Otitis externa	- perforation	
	- effusion/glue ear	
	- other	

Box 3: A simple classification system for ear diseases

Guidelines for onward referral of patients, with an understanding of the reasons (types of complications) for referral:

“Red Flag” conditions:

- Pain not responding to treatment (pain can indicate a complication)
- Pus discharge not responding to treatment
- Pain in a discharging ear
- Pain with or without pus discharge associated with a tender swelling behind the ear (mastoiditis)
- Any symptoms or signs suggesting intracranial infection such as drowsiness, confusion or loss of consciousness especially when there is neck stiffness and fever, vomiting or convulsions;
- Giddiness, dizziness (vertigo) with either vomiting or feeling like vomiting;
- Lame face/facial nerve palsy;
- Sudden loss of hearing;

Other conditions:

- Hearing impairment or deafness;
- Tinnitus.

Parents, carers, patients should make informed choices which should be respected by health workers.

Cultural practices should be respected.

3. Some knowledge of treatment/management likely to be given when they refer patients

- Medical, surgical;
- Rehabilitation (total/oral communication; hearing aids, including follow-up and repair);
- Education (placement in special education, integration in normal education);
- Social and occupational support including counselling.

4. Knowledge and practical training in

- Otoscopy through a standardised training programme to be developed by WHO. (Some countries may not agree for nurses to do otoscopy); self/practise is important.
- Criteria for diagnoses by otoscopy;
- Syringing (but no other instrumentation) for wax foreign bodies and debris/discharge;
- Dry mopping/wicking (including training parents, carers);
- Instilling ear drops;
- Screening for hearing impairment/deafness:
 - developmental and hearing questionnaire, voice test or noisemakers (e.g. Manchester rattle);
- when to prescribe topical antiseptics, antibiotics or antifungal agents, and when to prescribe systemic antibiotics.

It must be continually emphasised that ear disorders can cause hearing impairment and deafness, and complaints of possible hearing impairment or deafness always need to be investigated because often something can be done to help the patient - surgery, hearing aids, or in the case of children, special schooling.

9.3 Outcome-based Basic Training Programme for Specialist ENT Nurse Practitioners/Medical Assistants

An 'ENT' Nurse Practitioner/Medical Assistant needs to know all that a Community Health Worker needs to know and all that a Nurse Practitioner/Medical Assistant needs to know,

Plus they need:

- additional practical clinical training and experience in diagnosis and treatment of common ear diseases.
- additional skills
 - Suction of ear discharges;
 - Incision and drainage of post/auricular (mastoid) abscesses;
 - Screening and testing hearing using audiometers and tympanometers when they are available;
 - Hearing aid care.
- training for teaching Community Health Workers and Nurse Practitioners/Medical Assistants;
- Training in data collection;
- Training in organisational skills in order to co-ordinate ENT services such as Ear Camps in their area.

Note: 'ENT' Nurse Practitioners/medical Assistants will not only be responsible for Primary Ear and Hearing Care but also for Primary Nose and Throat Care and will require training in these areas – something that is beyond the scope of this report.

10 SOME NOTES ON SCREENING FOR HEARING IMPAIRMENT/DEAFNESS IN PRIMARY CARE

When performing hearing screening testing it is important that this be done in as quiet an area of the clinic as possible because if there is too much background noise then the testing will be unreliable.

Different strategies need to be used for different age groups.

Babies under 1 year of age

At this age responses to sounds are unreliable and the best information about a possible hearing problem is obtained by asking the parent/caregiver what they have noticed by means of a standard questionnaire. If the baby is not doing the sorts of things that a normal baby should be doing there may be a hearing problem

Infants 1-3 years of age

Again the best information is obtained from the parent/caregiver but by this age the infant should respond to testing with simple noise-makers or to voice testing by asking the infant to do simple things like pointing to objects or pictures.

Pre-school children 3-5 years of age

Again useful information is obtained from the parent/caregiver particularly with regard to behaviour and speech development. By this age children should respond well to the voice test by asking the child to point to objects or pictures or to perform simple tasks.

Schoolchildren 6 years and above

At this age children should be able to respond to the voice test by repeating words and sentences. The same test can be administered by Primary Health Care workers and by teachers in schools.

Children and adolescents will be able to self-report hearing problems and loss of hearing and this self reporting should not be ignored.

Adults

Adults will usually self-refer with hearing problems and loss of hearing. The voice test can be administered by Primary Health Care workers and each ear should be tested individually by closing off the other ear.

Rehabilitation of Deafness in Primary Care

Rehabilitation of deafness requires special services and all patients with significant hearing problems (i.e., they cannot clearly understand the spoken voice) should be referred to the following services if they are available.

- Children will usually be referred to special schools for deafness problems;
- Adults will usually be fitted with hearing aids;
- Where the deafness is very severe sign language will usually be taught.

Primary Care Health workers need to be aware of what services are available. Patients under the care of these services may present to Primary Care clinics with either ear problems or with problems with their hearing aids. These patients need to have their ears examined and any ear problems treated and may need to be referred back to the special services for additional management.

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INTERNATIONAL WORKSHOP ON PRIMARY EAR AND HEARING CARE
CAPE TOWN, SOUTH AFRICA, 12-14 MARCH 1998

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12 TABLE OF WORKSHOPS

	Session 1	Session 2	Session 3	Session 4	Session 5
Session:	Teaching core knowledge of the ear	Teaching core knowledge of ear disorders	Teaching the skills required for Primary Ear Care	Development of ear care treatment and referral protocols	Problem areas
Workshop 1	Pinna, ear canal and eardrum	Pinna and ear canal	Otoscopy	Pinna and ear canal	Ear care priorities
Workshop 2	Middle ear and mastoid	Acute middle ear infection	Cleaning an ear and using ear drops	Acute middle ear infection	Establishing training programmes
Workshop 3	Inner ear	Complications of middle ear infection	Assessing hearing	Chronic middle ear infection	Influencing Departments of Health regarding deafness prevention
Workshop 4	Hearing	Other middle ear and ear related disorders		Complications of middle ear infection	Establishing national primary ear care/deafness prevention groups
Workshop 5		Hearing impairment and deafness		Other middle ear disorders	Areas for ear care research
Workshop 6				Hearing impairment and deafness	Future development

13 PROGRAMME

Thursday 12 March

Session 1

Title: Teaching core knowledge of the ear, its structure and function, particularly hearing in Primary Care

Question: How much human biology knowledge does the average primary health care worker have?

Group deliberations: How simple can anatomy and physiology of the ear be made?

Session 2

Title: Teaching core knowledge of ear disorders and their diagnosis, deafness and its assessment in Primary Care

Question: How much knowledge of human disease processes does the average primary health care worker have?

Group deliberations: How simple can the teaching of ear and deafness disorders be made?

Friday 13 March

Session 3

Title: Teaching the skills required for Primary Ear Care

General discussion: Is there any way around teaching primary care workers about otoscopy?

Session 4

Title: Development of ear care treatment and referral protocols

General discussion: What basic information needs to be incorporated into treatment and referral protocols and how simple can they be made?

Saturday 14 March

Session 5

Title: Problem areas

General discussion: Practical application of recommendations

