

Public Health Planning for Hearing Impairment: Training clinicians to consider the ear and hearing needs of a population



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Introduction

360 million people worldwide have disabling hearing loss (5.3% of the world's population). 90% live in low and middle income countries^{1,2}. Most causes are preventable or treatable.

Patient barriers to uptake of ear and hearing health services include poor awareness, limited access and affordability for services which are not often available, particularly amongst poor socioeconomic groups.

Health care provider challenges include minimal human resources allocated to ear and hearing health³, poor infrastructure for service delivery particularly in rural settings, lack of awareness within health systems and the general population and very limited awareness and advocacy with policy makers to prioritise ear and hearing health.

ENT and Audiology clinicians are trained to diagnose and manage the health needs of the person in front of them. Addressing needs at a population level requires the development and adoption of a public health approach and **research capacity strengthening** at a local and global level to enable evidence based planning and prevention activities.

CLINICAL APPROACH	PUBLIC HEALTH APPROACH
Patient History	Needs assessment – Survey
Diagnosis	Plan - prevention and control strategies
Treatment – Outcome	Strengthen health systems – Access, Equity and Affordability
Follow up	Monitor and Evaluate , resurvey

Methods

Short course – one week

The aim of the training course is to equip clinicians and health planners with knowledge and skills to enable:



Regional capacity building and partnership: Identify training partners in LMICs to become regional training centres. This is to ensure sustainable local capacity building for a public health approach in ear and hearing health. Each partner is supported directly from LSHTM for 3-4 years. Regional centres are required to be linked with teaching institutions. Each centre is involved in identifying and recruiting key local participants from within their own health system but also from neighbouring countries and regions. Funding for the start-up phase of each training workshop is provided by CBM, to date.

Online community and resource point: ‘Discussions on Ears and Public Health’ (DEAPH). Alumni from each course and faculty are invited to become members of this online community for free. The purpose of the community is to provide a forum to exchange experiences in implementing public health approaches and share resources. It is also used as a portal for sharing research ideas and publications.

Results

Course development: Training materials, planning tools and templates are designed to be adapted for the local setting. A team approach and use of local data is encouraged. 13 short courses have been conducted in 5 training centres (London, Hyderabad, Cape Town, Lima, Nairobi). 362 participants trained to date across 4 continents. The average cost of training is £556 per participant.

Regional centres have been directly involved to increase local capacity building and have trained 73% of the participants to date. 61% of all participants are ENT clinicians and Audiologists and 24% are NGO and Government planners. Each centre creates links with the Ministry of Health and post graduate training schools. Over 90% of participants evaluate the training as relevant and vital for the local practice and in developing a local research agenda.

Online community: Active membership of 144 course alumni, based on local internet access. Outputs include networking for International Ear Care Day, direct networking with WHO, sharing discussions on neonatal hearing screening and data capture.

“This course provided me with the tools to become a leader in hearing impairment in Chile”.

“Training gave me the confidence to plan and start an outreach programme and conduct research onsite”

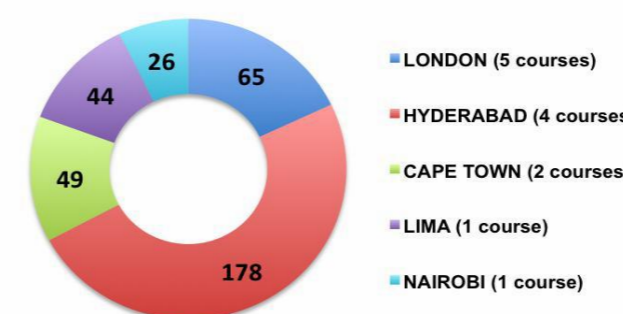
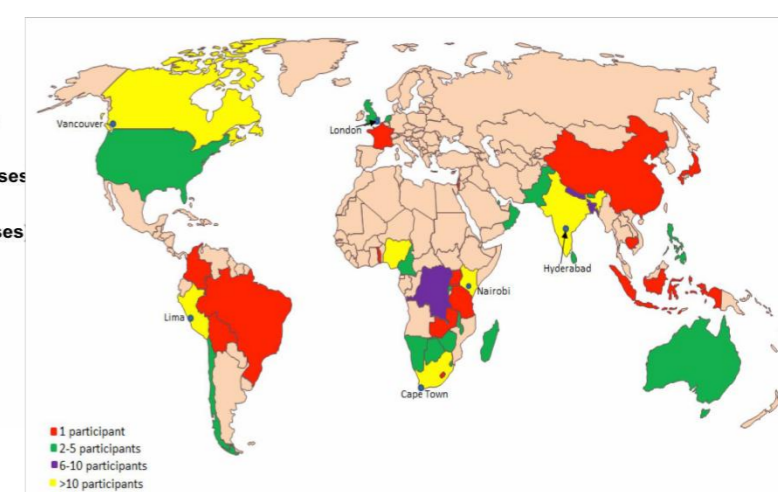


Fig. 1 Courses and participants 2009-2014

Fig. 2 Regional centres and coverage



Conclusions

At present less than 40% of LMICs have a national plan for ear and hearing health. The PHPHI training provides an opportunity for clinicians to understand local needs and challenges using a public health approach. It stimulates discussion, identifies local priorities, and influences the research agenda. The course provides knowledge for public health approaches, skills for planning, an overview of research, and an understanding of team approaches for advocacy and change. Capacity building in LMICs through development of regional centres has been effective in creating local interest groups and networks between clinicians, Ministries of Health and teaching institutions. Translation of learning is linked with funding opportunities particularly in setting up local research priorities and strengthening prevention of hearing impairment activities.

Online networking via DEAPH has had limited uptake to date, but this is likely to change as internet access improves in LMICs.

Research capacity strengthening for early disease detection and evidence based prevention are key outputs at a local level.

References

1. MBD, WHO DHL 2012 estimates
2. WHO/NMH/PBD 2013.04
3. Multicountry assessment of national capacity to provide hearing care, WHO 2013/NLM, WV270