Foreword

Helen Keller, who was deaf and blind, said "Blindness separates us from things, but deafness separates us from people."

80% of deaf people live in low and middle-income countries. Deafness has a great impact in these low-income countries because of a lack of services, equipment, understanding and trained people. Hearing impairment in childhood has severe consequences for the development of speech, language and cognitive skills. Hearing impaired children in developing countries often do not have access to any form of education. Also, if occurring at later stages in life, hearing impairment leads to difficulties in obtaining and in keeping work.

CBM's vision is of an inclusive world in which all persons with disabilities enjoy their human rights and achieve their full potential. Keeping this in view, CBM with other NGOs initiated programme of Sound Hearing 2030 which was an initiative of eliminating avoidable deafness by 2030. WHO SEARO has been supporting this initiative. Under this initiative as a pilot project, existing vision technicians of Dr. Shroff's Charity Hospital were given skill based training in diagnosing, managing and referring patients with common ear diseases. This project was supported by CBM through Society for Sound Hearing.

The evaluation of the pilot project has clearly indicated that the strategy of integrating eye and ear care services has worked well and if scaled up would create a pool of trained eye and ear technicians who would provide primary ear care services to the beneficiaries in low and middle income countries.

Sara Varughese

Dr. Sara Varughese
Regional Director, CBM SARO

Preface

Provision of quality ear care services to prevent the avoidable cause of deafness is the mandate of Society for Sound Hearing. The Society has achieved a lot in a short span of its existence of 7 years due to untiring efforts of Dr. Sara Varughese and Ms. Silvana Mehra of CBM and EC members of SSH. One of the strategies for making the quality ear care services accessible to common people is by integrating the ear care with already existing eye care services at grassroots level. In this model of ear care delivery system, existing vision technicians or ophthalmic assistants can be given skill based training in diagnosing, managing and referring patients with common ear diseases. This model would prove cost-effective in long term and can be started early as ground work and facilities are already available at many levels.

Dr. Shroff's Charity Eye Hospital took the initiative and proposed to train three of their vision technicians in ear diseases and provide ear care services through its vision centres. CBM through Society for Sound Hearing 2030 has supported the project for nearly a year. Though the project has ended the hospital is still providing the ear care services to the marginalised section of the society through its vision centres. The efforts of this single health care institute should not be seen in isolation. The programme needs to be evaluated thoroughly with an aim of seeing the feasibility and scalability of the integration of ear and eye care services at primary level.

Dr. Shelly Chadha has conceptualised and finalised the whole evaluation process. Dr. Suneela Garg led a team of evaluators comprising of Dr. Ritesh Singh and Ms. Deeksha Khurana. Mr. Vikas Katoch, designated funding officer of SSH provided valuable inputs at crucial junctures. Dr. Ritesh Bansal and Dr. Tapas Nair both post graduate residents at Maulana Azad Medical College helped the evaluation team in successfully completing the evaluation process in a timely manner. The rigorously conducted evaluation of the project has shown positive results.

The evaluation convincingly shows that integration if properly done will provide faster results in recognising more cases of hearing impairment at early stages and at much lower cost. As a nodal person in National Programme for the Prevention and Control of Deafness I strongly believe that the help of such facilities wherever available should be taken to provide quality ear care services to the common people.

Dr. Arun Kumar Agarwal
President, Society for Sound Hearing
Nodal Person, National Programme for the Prevention and Control of Deafness

Message

Hearing is an essential sensory part of an individual for development of speech which is crucial for verbal communication and personality development. Deafness and hearing impairment is one of the most frequent sensory deficits in human beings. Hearing impairment touches our soul in our personal, family and social life.

Hearing impairment and deafness is an illness that afflicts large numbers of people from all backgrounds. Its diagnosis, treatment and prevention are one of the major health challenges in our society. It is believed that hearing impairment and deafness can be prevented by early detection and effective treatment. As a part of our efforts to make people aware about ear health and make ear care services available to marginalized section of our society, planned approach of integrating eye and ear care services was adopted. Integrated eye and care based on Primary Ear and Hearing Care (PEHC) model is a pilot project run by Dr. Shroff's Charity Eye Hospital (SCEH) in collaboration with CBM and Society for Sound Hearing with the goal of leveraging existing Vision Centres (VC) to provide primary ear and hearing care services to beneficiaries in resource poor setting.

The evaluation of the pilot project has yielded positive results and delivering ear care through existing Vision Centres has emerged as an effective way of addressing needs of the community with respect to ear care with optimum utilization of existing manpower and infrastructure. The need of the hour is to scale up the project in a major way. I would like to thank and congratulate everyone who has contributed to the conceptualization and implementation of the project. I look forward to your support in next step of scaling up the project.

Ms. Silvana Mehra
Regional Director, CBM

Acknowledgements

If you want to be incrementally better: Be competitive. If you want to be exponentially better: Be cooperative.

Author unknown

This evaluation report of integrated eye and ear care model of Dr. Shroff's Charity Eye Hospital would not have seen this day had it been not a cooperative effort of all the below mentioned individuals and organizations.

I would like to thank the CBM team particularly Dr. Sara Varughese (Regional Director, CBM SARO) and Mr. Vikas Katoch (Senior Programme Officer - Designated Funding) for providing the leads and support for facilitating the conduct of the evaluation and extending their cooperation at all the stages.

I would like to put on record my sincere thanks to Dr. A.K. Agarwal, President, Society for Sound Hearing and nodal person for National Programme for Prevention and Control of Deafness (NPPCD), Government of India along with his executive team for guiding us in the evaluation programme throughout.

I express my deepest gratitude to Team Leader Dr. Suneela Garg for her untiring effort throughout the duration of the evaluation right from the conceptualization the project to dissemination of the evaluation findings.

Evaluators Dr. Ritesh Singh and Ms. Deeksha Khurana, deserve special acknowledgement for conceptualising and conducting the evaluation process, analysing the data and writing the report.

Special Thanks to Ms. Silvana Mehra (Regional Director, CBM) for her valuable inputs during the conceptualization of the project.

I also convey my deep gratitude to Dr. Shelly Chadha for helping us in conceptualizing the project and fine tuning the terms of references and making framework for the evaluation and providing us the background materials for the evaluation.

I gratefully acknowledge the valuable inputs and cooperation extended by the team at Shroff's Charity Eye Hospital headed by Mr. A.K. Arora (CEO) and team members Mr. Shantanu Dasgupta (DGM-Marketing), Dr. Nishi Gupta (Associate Director), Dr. Sandeep Buttan (Consultant Ophthalmology), and Dr. Neeraj Chawla (Consultant ENT). The hospital is not only providing highest quality affordable eye care services in Delhi and adjoining areas but also expanding its scope by opening ENT and Paediatrics facilities at its main hospital campus at Daryaganj, Delhi in spite of limitations of space and heritage nature of the main hospital building

I express my sincere thanks to Dr. Ritesh Bansal and Dr. Tapas Nair for facilitating the Evaluation process by providing support in data collection, analysing the data and writing the report.

Last but not the least, a special mention of Ms. Indu Bala and Ms. Janki Mehta, who provided administrative support during the evaluation process and also supported the field work.

Dr. Bulantrisna Djelatik
COO, Society for Sound Hearing

About the evaluation of integrated eye and ear care project run by Dr. Shroff's Charity Eye Hospital

Though hearing impairment is the second most common cause of disability after musculoskeletal disorders, it has never found prominence in any national health programmes of our country. The launch of National Programme for the Prevention and Control of Deafness in 2006 is right step in the direction of preventing and treating the preventable and avoidable causes of hearing impairment in our nation. The programme is at nascent stage and it needs to look into the success stories. For it to become a success constant introspection and evolution is required.

One way of providing ear care services to the community is by integrating it to already existing eye facilities established by the Government of India under National Programme for Control of Blindness. Different states have dedicated staffs that provide eye care services under the National Rural Health Mission. There are many private eye hospitals in the country with outreach facilities. Through these peripheral eye centres a health care worker recognises patients with eye disorder and refers or treats them appropriately. Those who require surgery like for cataract are being referred to the main eye hospital for surgery.

Dr. Shroff's Charity Eye Hospital (SCEH) is based in Daryaganj area of New Delhi. It has peripheral centres besides 15 vision centres located in states of Rajasthan, Uttar Pradesh and Delhi. The vision technicians posted at each vision centre screen the population for any eye disorder and refer them to the main hospital at Delhi. They provide refraction services and spectacles are dispensed there only. SCEH has now become a known centre for providing quality ENT services also.

The full time consultants of SCEH along with Society for Sound Hearing decided to start a project wherein the skills of vision technicians would be enhanced to detect common case of ear disorders. The CBM was approached for funding the project. Seeing the novelty of the project, it was approved in no time. The technicians were trained from August to November 2010. The project ran for ten months from January 2011 to October 2011.

SCEH is still continuing to provide ear care services to the marginalised section of the people through its two vision centres. The framework and infrastructure of the project is still in place. Society for Sound Hearing with a view to see the feasibility and scalability of the project decided to critically evaluate the project with the help of independent assessors.

Dr. Arun Kumar Agarwal, current President of Society for Sound Hearing and Dr. Shelly Chadha, Current Technical Officer, WHO at Geneva conceptualised the evaluation process. Competent evaluators were identified after talking with all the stakeholders. The evaluators were told to define the terms of references for the evaluation of integrated eye and ear care model of Dr. Shroff's Charity Eye Hospital. The evaluation framework and time schedule was later decided keeping all the stakeholders in loop. It was decided to use both the qualitative and quantitative methods during the evaluation process. The tools were developed after much deliberation amongst the members of the evaluation team.

The ground work of evaluation started in last week of October 2012. Terms and references for the evaluation were sent by evaluation team to the stakeholders. Later tools were finalized. The ground work of the evaluation was carried in the last week of November 2012 wherein visits to the vision centres and SCEH were made. The report preparation took another two weeks. The following pages describes the comprehensive evaluation of the Primary Ear and Hearing Care Project run by Dr. Shroff's Charity Eye Hospital in detail and is the culmination of hard work of evaluation team for nearly two months.

I sincerely acknowledge the contribution of Dr. Ritesh Singh (Assistant Professor, College of Medicine and JNM Hospital, Kalyani, Kolkata, WB), Ms. Deeksha Khurana (Independent Evaluator) and Mr. Vikas Katoch, (Senior Programme Officer- Designated Funding CBM SARO, Bangalore) in planning and implementing the evaluation. I also acknowledge critical inputs provided by Ms. Janki Mehta & Ms. Indu Bala throughout the duration of the project.

Dr. Suneela Garg
Director-Professor,
Department of Community Medicine,
Maulana Azad Medical College, New Delhi.
Team Leader- Evaluation

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Abbreviations

CHC	Community Health Centre
CSOM	Chronic Suppurative Otitis Media
EC	Executive Committee
ENT	Ear, Nose and Throat
IEC	Information, Education and Communication
IPHS	Indian Public Health System
KAP	Knowledge, Attitude, Practice
MIS	Management Information System
NPCB	National Programme for Control of Blindness
NPPCD	National Programme for the Prevention and Control of Deafness
OPD	Out Patient Department
PEHC	Primary Ear and Hearing Care
PTA	Pure Tone Audiometry
SEARO	South East Asia Regional Office
SSH	Society for Sound Hearing
SCEH	Dr. Shroff's Charity Eye Hospital
WHO	World Health Organization
VC	Vision Centre
VT	Vision Technician

Executive Summary

Hearing impairment is common throughout the world and it is estimated that 50% of them are preventable. Although it is not fatal, the implications of hearing impairment at the individual, family and community level and the disruption that it causes to the lives of the people is considerable. In order to address the above issue, CBM and Society for Sound Hearing are helping nations to build capacity for the integration of ear care services in their national health programmes. Dr. Shroff's Charity Eye Hospital had initiated a project to assess the feasibility of integrating ear and eye care services at the primary level.

During the project, the Vision Technicians posted at two of the 15 vision centres were trained in primary ear care using the WHO 'Intermediate module for PEHC workers' for duration of three months. Basic equipment to provide primary ear care at primary level were provided at two vision centres, one located in Mustafabad Delhi and the other in a Rajgarh block of Rajasthan. The evaluation of the integration of SCEH was carried out to devise strategies for sustainability of such project and the feasibility of provision of such services through already existing public health infrastructure of the country. Terms of references and evaluation matrix including the time schedule of evaluation were finalised in consultation with the stakeholders and the Executive Committee members. The comprehensive evaluation of the project was carried out using both qualitative and quantitative approach. The research tools adopted during the evaluation were Focused Group Discussions, in-depth interviews of various personnel and observation check-list.

The stakeholders were strongly in favour of integrating the ear care services to the already existing eye care services established under National Programme for Control of Blindness. Trainers feel that the 'Intermediate module for PEHC worker' developed by World Health Organization is self-sufficient book and is a good resource material for the health workers. However it was suggested by the stakeholders that field testing of training material should be carried out and necessary modifications should be made. Though they felt that the project is not financially viable presently, in long term the demand will increase many fold and become self-sustainable, once the people know that such services are being provided at their door step.

The trained vision technicians were highly motivated and were proud of the fact that they had been selected and trained to deliver both eye and ear care services. The clinical aspect of service provision was up to the mark. The awareness generating activities amongst the population by them requires strengthening. The vision centres of Dr. Shroff's Charity Eye Hospital are well equipped for primary ear and hearing care activities. IEC materials prepared by Society for Sound Hearing were designed keeping in mind the socio-demographic features of majority of common people. These materials should be used extensively for making people more conscious about the ear health. Additionally user friendly IEC material should be developed in the local language and should be used widely.

The target population of the vision centres were satisfied about the services being provided at the vision centres and the behaviour of the Vision Technicians. People's knowledge about the ear care needs to be improved significantly. They are following many harmful practices regarding ear care. Many myths were found to be prevailing amongst common people.

The case studies and FGDs showed that the ear morbidity is high in the locality and ear care services provided by qualified personnel are lacking or inaccessible to them. The vision centres has provided ear services to a significant number of individuals in its short existence of one and half year. The major cases seen by vision technicians are CSOM, ASOM and wax impaction. A large number of cases had been referred to the mainl hospital at Daryaganj were a number of patients were treated satisfactorily.

Based on the views provided by the Stakeholders, Vision technicians and Clients, the novel idea of leveraging existing Vision Centres (VC) to provide primary ear and hearing care services used in the pilot project has been found to deliver good results. It is an effective way of delivering ear care services to the beneficiaries in the resource poor setting by carrying out optimum utilization of the existing infrastructure and manpower.

Meeting with Stakeholders

Part I: Integrating eye and ear care at primary level

Chapter 1

Background

According to the WHO records, hearing impairment affects 5.3% of the population of the world, about a half of which is preventable. The far-reaching implications demand an urgent need to address the impact and severity of this handicap. Delay in the diagnosis and the rehabilitation of sensorineural hearing loss leads to defective speech development and causes severe learning disorders. Both Children, geriatric population as well as the working population is at risk from avoidable diseases of the ear. Timely treatment of infected ear with awareness creation on prevention could revolutionize the lifestyles of affected individuals and positively impact their overall health and productivity.

In view of the above background, in August 2010, Dr. Shroff's Charity Eye Hospital (SCEH) developed a case for setting up of primary ear and hearing care services in conjunction with existing vision centres to address the ear care needs of the under privileged and marginalized sections of the society by means of a quality oriented, cost effective and scalable service delivery model to achieve the global mission as outlined in Sound Hearing 2030. The rationale behind combining eye and ear care is that both blindness and deafness are important public health issues found in resource poor setting. Both adversely affect the attainment of maximum potential by an individual and there is a lack of trained manpower for handling both. Already under Vision 2020, there are Vision Technicians working in the peripheral health care settings which provides a window of opportunity for integration of Eye and Ear services together. Shroff Eye Centre was found to be ideal having Vision centres in marginalized population in different states.

About Dr. Shroff's Charity Eye Hospital (SCEH)

Dr. Shroff's Charity Eye Hospital was established in 1914 in Daryaganj area of Delhi for provision of quality eye care services to poor people. The ENT services were initiated in late 1960s. It has now evolved into a tertiary level centre dealing with super speciality Eye and ENT surgeries, basic research, as well as a training centre dealing with both national and international candidates across ophthalmic and other related streams. The headquarter of the Dr. Shroff's Charity Eye Hospital Network is located in Daryaganj Delhi with satellite hospitals at Alwar, Gurgaon, Saharanpur, Lakhimpur Khedi and Meerut. There are 15 vision centres located in states of Rajasthan, Delhi and Uttar Pradesh where eye screening is being provided by trained vision Technicians (VTs). The hospital is expanding and now also has paediatrics OPD and indoor facilities.

About CBM

The history of CBM goes back to 1908, when the organisation was founded by the German Pastor Ernst Jakob Christoffel. Since then, CBM has become one of the leading professional organisations for people with disabilities worldwide.

In 2011, CBM was active in 81 countries through of 645 partners in 749 projects. CBM's vision is of an inclusive world in which all persons with disabilities enjoy their human rights and achieve their full potential. CBM started to extend its support to India in 1967 and in 1975 the South Asia Regional Office was established in Trichy, Tamil Nadu to coordinate activities in India, Nepal, Bangladesh and Sri Lanka. In 1994, the Regional Offices in North and South were established to cater to the growing projects supported by CBM. Using its experience of working with partners, governments and communities, CBM in India has identified five strategic areas which include Community Based Rehabilitation, Education, Healthcare services, livelihood and inclusion. Under the healthcare services, in 2006, CBM with other NGOs initiated programme of Sound Hearing 2030 for early detection of hearing loss and to provide affordable hearing aid. Through its partners CBM ensures a quality of service delivery to prevent avoidable deafness and to cater to the needs of persons with hearing disabilities. CBM is also involved in facilitating NPPCD in different parts of the country.

About Society for Sound Hearing

The Society for Sound Hearing (SSH) has been ratified at the first General Body meeting in Bangkok on the 4th of October 2005, with the initial support of WHO SEARO and CBM. Society for Sound Hearing has its office in Delhi with representations from professional societies, governmental focal persons, international NGOs, agencies, and active individuals. Till date, SSH has achieved several milestones in the first term of its Executive Committee (2005-2009), which includes establishment of its office, several regional meetings, symposia for sharing experiences, as well as the formation of five National Committees for ear and hearing health care in India, Indonesia, Sri Lanka, Nepal and Bangladesh.

Chapter 2

Objectives of the Pilot Primary and Hearing Care project of SCEH

Integrated Primary Ear and Hearing Care (PEHC) is a pilot project run by Dr. Shroff's Charity Eye Hospital (SCEH) in collaboration with CBM and Society for Sound Hearing with the goal of leveraging existing Vision Centres (VC) to provide primary ear and hearing care services to the marginalized population.

The pilot primary ear and hearing care project was focused towards meeting the following objectives:-

- **To assess the feasibility of integration of eye and ear care services**
- **To sensitize the population regarding ear and hearing care through awareness generation**
- **To provide primary ear care to the beneficiaries in the resource poor setting**
- **To build a referral mechanism for patients and develop adequate linkages**

Based on the guidelines provided by Sound Hearing 2030 the pilot project has been implemented under the following activity levels:

- To identify suitable centres for integration of eye care services with ear care services: Two existing vision centres (primary eye care units) operational since past one year were identified for implementing this pilot. These centres are located at Mustafabad in the North East District of Delhi and Rajgarh in Alwar District of Rajasthan; both are underserved areas with very limited access to eye and ear services.
- To train the Vision worker/CBR worker in carrying out ear and hearing care work. Under the project a comprehensive training program for the vision technicians was conducted in the Department of ENT at Dr Shroff's Charity Eye Hospital from 16thAugust 2010 to 16th November 2010.

Chapter 3

Activity of the integrated PEHC project of SCEH

Under the pilot project which was initiated in August 2010, three vision technicians (two attached to primary eye care units in Mustafabad, North-East Delhi and one attached to Rajgarh, Alwar in Rajasthan) have been trained to provide primary ear care services to the community. The vision technicians were selected for training on the basis of their past performance and their motivation level to deliver both eye and ear related services. The objective of the training was to screen and recognize patients with common ear diseases e.g. wax, discharging ears, foreign body etc., providing basic care for target diseases, counselling and referring patients requiring further medical/surgical care and creating awareness regarding ear health.

The framework of the project comprised of:

- Comprehensive training of Vision Technicians for duration of three months using the WHO "Intermediate module for PEHC workers". The training was carried by Department of ENT at Dr. Shroff's Charity Eye Hospital, New Delhi, India and the methodology adopted included lectures and clinical demonstration. Approximately 300 cases were examined by the trainees during the period of practical training under supervision.

- Provision of essential equipment (Otoscope, Bull's lamp, Head Mirror, Tuning fork (512 Hz), syringe cannula, kidney tray and boiler) through Society for Sound Hearing at the centres over and above the existing infrastructure.

- Community sensitization though ear health awareness materials produced by Society for Sound Hearing (SSH). Combined eye and ear screening camps were organized in different parts of catchment area to detect the cases of common ear diseases. Patients requiring further investigations or surgical treatments were being referred to the base hospital (SCEH, Daryaganj) on pre-defined days.

Simplified one page formats for recording of cases, referral and follow up were developed. (Annexure I)

The total project comprised three months training, six months of operation, one year of continuation and one month of evaluation.

Evaluation Team examining the records

Part II:
Evaluation of Primary Ear and Hearing Care pilot project

Chapter 4

Objectives of evaluation of integrated PEHC project of SCEH

The project is a novel approach to provide combined primary ear and eye care services under one roof especially in the developing countries where there is shortage of resources. The aim of the evaluation was to find out the way of sustainability of such project and the feasibility of provision of such services through already existing public health infrastructure of the country e.g. in the form of ophthalmic assistants of Community Health Centres.

The evaluation was carried out to answer these questions:

- **Have the right things been done? (Relevance of the project)**
- **Have things been done well? (Efficiency of the project)**
- **What results have been achieved? (Effectiveness and impact of the project)**
- **What were the problems encountered?**
- **How could things be done better in the future?**
- **Are the strategies sustainable?**

Chapter 5

Methodology adopted for evaluation of integrated PEHC project of SCEH

Inception of the evaluation

During inception phase, a consultative meeting was carried out with the key representatives from SCEH, CBM and Society for Sound Hearing who were associated with pilot project. The representatives from CBM included Dr. Sara Varughese (Regional Director, CBM SARO) and Mr. Vikas Katoch (Senior Programme Officer, Designated Funding, CBM SARO). The meeting was held with the objective of evaluating the feasibility of integrating eye and ear care and working out modalities of carrying out evaluation. Discussion was also carried out with respect to generating leads for evaluating projects in other countries e.g. Nepal. This was followed by a meeting held between representatives of Society for Sound Hearing cum public health experts and Technical Officer from CBM for discussing the finer issues pertaining to evaluation. During the meeting Dr. Suneela Garg (Team Leader and Treasurer, Society for Sound Hearing) presented the details of the evaluators (Dr. Ritesh Singh and Ms. Deeksha Khurana) to the stakeholders who would be carrying out the evaluation under her guidance.

Subsequently the draft Terms of Reference were prepared by the evaluators in consultation with Dr. Suneela Garg and were circulated to the stakeholders and EC members for their inputs. The inputs provided by representatives of SCEH and CBM were incorporated and the Terms of Reference were finalized.

At all stages of planning, inputs from Dr. A.K. Agarwal (President, Society for Sound Hearing) were sought and incorporated.

Development of Evaluation Matrix

The evaluators drafted the Evaluation Matrix based on the objectives of evaluation.

Evaluation Matrix

Issues	Key objectives	Specific objectives	Data Sources	Methods / Tools	Indicators
Design of the project	• Review the strategies adopted to increase awareness about the ear diseases in community • Review the training methodology and resource materials used for the project • Review as to what extent does the project respond to priority issues of increasing the awareness about the ear diseases in community • Review the utility of the project with respect to clients perspectives	• A through appraisal of the training programme would be undertaken to assess whether it is appropriate in terms of content, duration and methodology • Analyse the role of project in improving the ear care services to the community • Review the roles and responsibilities of vision technicians and the level of coordination and exchange with related projects	• Project protocol • Training material	• Interview with the stakeholders • Interview with the trainers • Interview with vision technicians • Interview with clients	• Project description and activities
Effectiveness	Review the progress and achievements of the PEHC project based on project plan and objectives	Review the contribution of the project in finding out new cases of ear diseases	Progress report	Review of registers and records maintained at vision centres	Cases diagnosed, referred Camps conducted
Efficiency	• Review project inputs for SCEH in the form of human resources, infrastructure, equipment, health education material etc. • Review the process of collection, storage and use of monitoring data • Review the learning processes used by the project team such as self-evaluation	• Assess the adequacy and utilization of infrastructure with an emphasis on building, equipment and IEC material • Manpower assessment available at the Vision Centres along with the knowledge assessment of the Vision Technicians		• Observe physical infrastructure • Observation of vision technicians while at work • Interview with clients • Interview with community leaders • Interview with vision technicians • FGDs of clients • Case studies	• Satisfaction of the clients • Motivation and commitment of the vision technicians • Monitoring and supervision
Sustainability	• Assessment of integration with existing manpower at national level • Feasibility of combining ear and eye care under the same roof	Make appropriate recommendations to strengthen project during next phase and modify inputs to benefit the project objectives and promote efficiency			• Involvement of NGOs • Involvement of Gram Panchayat (at Alwar) • Involvement of ASHA/ AWW/ ANM

Primary Research

Primary research was taken up using both qualitative and quantitative research techniques.

Qualitative Techniques

For the purpose of qualitative data collection, the following tools were prepared

- Schedules for In-depth interviews with stakeholders
- Questionnaires for In-depth interviews with Vision Technicians
- Questionnaires for In-depth interviews with Trainers
- Questionnaires for In-depth interviews with Clients
- FGD Guidelines for beneficiaries and non-beneficiaries
- Observational Tool/ Checklist for Vision Technicians
- Outline of case studies

Quantitative Techniques

For the purpose of qualitative data collection, the following tools were prepared

- Questionnaires for assessing KAP of Clients

Implementation

Well defined timelines were drafted in consultation with the stakeholders for implementation of the project.

Day and date	Place of visit	Category of respondent	Respondents	Sample size
Monday, 26th November 2012	SCEH, Delhi	Key officials/ Trainers	Dr. Sandeep Buttan Dr. Nishi Gupta Dr. Neeraj Chawla	Stakeholders-2 Trainers-2
Tuesday, 27th November 2012	Mustafabad, Delhi	Vision technicians	Ms Chinu Sharma Ms Nagma	2 VTs
Wednesday, 28th November 2012	Mustafabad, Delhi	Clients	Patients attending the clinic Survey of local people	30 Clients each for in-depth interviews and KAP 10 male and 10 female beneficiaries/ non-beneficiaries for 2 FGDs
Thursday 29th November 2012	Alwar, Rajasthan	Vision technician Clients Community leaders NGO	Mr Subhash Sharma Patients attending the clinic Gram Pradhan NGO Coordinator	1 VT 30 Clients each for in-depth interviews and KAP 10 male and 10 female beneficiaries/ non-beneficiaries for 2 FGDs
Friday 30th November 2012	MAMC, Delhi	Data Analysis and Report Preparation		
Saturday 1st December 2012	MAMC, Delhi	Data Analysis and Report Preparation		
Monday 3rd December 2012	SCEH, Delhi	Key officials	Dr. A.K. Agarwal Dr. Suneela Garg Mr. Shantanu Dasgupta Dr. Nishi Gupta Dr. Sandeep Buttan Dr. Neeraj Chawla	

In-depth interviews with clients

Recording the case studies

Part III:
Observations during the evaluation of PEHC Project of SCEH

Chapter 6

Stakeholders- views and concerns

The team comprising of team leader Dr. Suneela Garg and project evaluators Dr. Ritesh Singh and Ms. Deeksha Khurana visited the Dr. Shroff's Charity Eye Hospital (SCEH), Daryaganj, Delhi. A meeting was held between the evaluators and the stakeholders of the Primary Ear and Hearing Care (PEHC) of SCEH in the library of the hospital. The meeting was followed by in-depth interview of the stakeholders. All the stakeholders were permanent full time employees of SCEH. The stakeholders included Associate Director, Consultant Ophthalmology and Consultant ENT from Dr. Shroff's Charity Eye Hospital.

Observations of stakeholders' interviews

Background model used for the project

SCEH was thinking of integrating ear and eye care at primary level since a long time. It was felt that there is a lot of scope of improvement in making people aware about the common ear problems and hearing care. Due to many reasons the emphasis on ear care was not as proper as it should be. If a national programme of related specialty, eye can run so smoothly throughout the country why ear care cannot be provided at the grass root level. At the same time replicating eye care model running under the National Programme for Control of Blindness (NPCB) would not be feasible due to operational reasons. The next best solution felt was integrating the ear care with already established infrastructure of provision of primary eye care at grass roots level. Integration of eye and ear care is best at the primary level. Any immediate attempt to integrate these services at higher level would run the risk of losing the importance of individual specialities. No such integration was available anywhere. Later, SCEH in collaboration with SSH and CBM decided to do a pilot project where there is an integration of ear and eye care at the primary level. The financial and technical help were provided by CBM and Society for Sound Hearing.

Starting the project

SCEH has a very wide catchment area due to large number of peripheral centres (called as Vision Centres) spread across three states of Delhi, Uttar Pradesh (Saharanpur, Meerut and Lakhimpur Kheri) and Rajasthan (Alwar). The methodology of integrating the ear and eye care was by first training the vision technicians who are manning the peripheral centres, in ear physiology and diseases, complemented with hands-on training, and later direct them to screen for ear diseases whosoever comes to the vision centres for eye problem. Out of 15 vision technicians available to the stakeholders, two were chosen for the initial round of training. The criteria for choosing were feedback from the vision technicians, seeing their performances down the year and their

motivational level of providing additional service without any apparent monetary benefit. The centres were also chosen as they were serving the underserved section of the society. The training was of three months duration and trainees got to see nearly 300 cases during their ward visits. The WHO training module (Intermediate module) was primarily used for the training on the behest of SSH. It was modified wherever the trainers thought so. The project was functional just within two months of submission of the protocol.

Monitoring and supervision of the Vision Technicians

The trained VTs see the patients of ear diseases independently. They take the clinical history, do the relevant examinations and treat the patient if they can. Otherwise they refer the patient to SCEH for further medical consultation. There is a referral proforma which the VT is scheduled to fill for every referred patient. The vision technician writes her/his clinical findings in the proforma. The clinical audit of each proforma is done at the SCEH. The VTs along with the help of clinic attendant and project coordinator maintain the records of the patients attending the VC. Records of eye and ear care are maintained separately. The management information system (MIS) is maintained by entering the socio-demographic and clinical details of the individual patients in computer and generating the monthly summary data.

Collaboration with other agencies

- There was no formal collaboration with local NGOs or local bodies where the VCs were located.
- Though the rural VC is being run by a local NGO, they do not give special focus to ear component of the integrated services.
- The vision technicians and clinic attendants seek help of local leaders for holding the camps at their own level.

Costs associated with the project for the provider and beneficiaries

The project was funded entirely by CBM through Society for Sound Hearing. One time expenditure on buying equipment and training the VTs was incurred. During the project duration a patient attending the VC need not pay anything. The registration charges and the surgery charges were entirely free for the patient. Even the transport of the patients from the VCs to the SCEH was arranged free of cost. Later when the project ended the clinic attendees were charged the prevailing registration fee of Rs. 30 for three visits to the VC. Currently if any patient needs ear surgery s/he is charged half of the treatment cost and has to bear the transportation cost and total comes out to be Rs. 2500 or Rs. 3500 depending upon the procedure performed. This constitutes nearly 50% of the total cost of the procedure and the remaining 50% is borne by Dr. Shroff's Charity Eye Hospital itself.

Achievements of the project

The project has been able to raise some awareness level of the community about ear care. It has trained three vision technicians in ear care till date. Increasing numbers of persons are being screened for ear diseases. The motivation level of VTs is still high and they are eager to learn more and practice more. The success of this projects shows that if properly implemented, integrated eye and ear care can be provided under one roof without any major infrastructural alteration.

Concerns about the scalability of the project

A pilot project gives directions for the future scaling of it. Providing ear care services at the primary level is a tricky business. In a peripheral centre or in an ear camp nothing much can be done for the client as ear practice is mainly clinic and instrument based. If the client thinks that not much help can be obtained while visiting an ear camp or vision centre s/he will think twice before going there.

There is no consensus amongst ENT surgeons regarding the validity of a field test to detect hearing loss. If a VT is not empowered to give common medicines including the antibiotics the attendance would fall in the vision centre as the client would feel that there is not enough advantage in going to the centre. **A standardized screening tool for detecting hearing impairment should be developed by clinicians which should be validated and could easily be delivered by technicians.**

Sustainability of the project

The project should subsequently be taken by the Government. They can replicate the project as they have already eye set up under NPCB. Indian Public Health Standards (IPHS) specifies that there should be one ophthalmic assistant at each community health centres (CHC). S/he can be trained in providing ear care to the masses. Current National Programme for the Prevention and Control of Deafness (NPPCD) does not mention such integration. The policy maker has to find a way. Such projects can provide leads for integrating by sensitizing policy makers. There should be a legal provision of safeguarding the technician and empowering her/him to prescribe some common medicines and treating patients based on standard treatment guidelines. Each such peripheral centre should be linked with a secondary level hospital.

Chapter 7

Training the Vision Technicians

Two senior full time ENT consultants of SCEH primarily imparted the training to vision technicians. Though trainees were taught about the basics of ear, nose and throat, the focus was on examining and managing the ear problem.

Course materials

After a thorough discussion amongst trainers and staff of Society for Sound Hearing it was decided that the training would be imparted based on the contents of 'Intermediate module for PEHC workers' developed by WHO. This was selected as the text book for the training as the contents of the book were sufficient to be understood by an intermediate pass student. Also it covers all the important ear morbidities seen in the community. The book was appropriately modified to suit the local requirements. A Hindi version of the module was developed at Maulana Azad Medical College, Delhi. The trainees were also shown the IEC materials develop by SSH. The trainers feel that some of the IEC materials need to be modified for clarity as one poster instruct the reader not to put anything in ear. This confuses the client as they start thinking even medicinal ear drop should not be instilled in ear. VTs were trained in reading out a flip-chart to the community. **There were no standardized training materials in form of power point presentations being used by the trainers. The main mode of teaching the vision technicians in ear care aspect was through chalk and blackboard. As there was no standardized format of contents of each lecture there is a high possibility of inter-teacher variations in contents of a particular topic if taught by two different teachers. The training materials were not pre-tested.**

Practical training

There were both lectures and practical classes in a day. The lectures were imparted in the morning hours. There were four sessions of two hours of theory classes each day, two in morning and two in evening. In- between theoretical classes, trainees were used to be taken to the OPD or wards. In the OPD trainees were initially observing the consultants seeing the patients. Later they were asked independently to assess the patient and were instructed to make a diagnosis. The trainers used to corroborate the findings of VT with theirs. Trainees were specifically taught about use of head lamp, seeing ear drum through otoscope, removing the ear wax by syringing and removal of foreign body. The trainees were also shown the usage of tuning fork to distinguish the conductive and sensorineural deafness. They were shown enough number of cases to get confidence in independently managing an ear patient at vision centre.

Evaluation of the trainees

The trainees were evaluated periodically by theoretical examinations. The questions were of short answer type. The trainees were free to write in their own language. The marking was lenient to boost their morale. For practical assessment, the evaluation was a continuous one.

View of the trainers regarding training methodology

According to the trainers the course in terms of contents, pedagogy and duration is sufficient for a vision technician. At the end of the training one can diagnose, manage and appropriately refer a patient with ear problem at the primary level with basic equipment. The trainers feel that the VT can be trained in audiometry provided they do it regularly at vision centre.

Monitoring of the vision technicians while working in the community

There was no standardised monitoring plan. Monitoring was mainly done by matching the physical examination and diagnosis of VT with the clinicians at the SCEH. Monitoring was better in Mustafabad as it was nearer to the base hospital (SCEH, Daryaganj). Feedbacks were obtained from the VTs periodically but there was no time frame specifically allotted to feedback. The trainers were not in favour of a doctor visiting the centre regularly to see the patient as it would undermine the credibility of VT. The trainees were informally called to the SCEH regularly and they used to discuss difficult cases with trainers.

Preferential treatment to patients

Any person referred from VC for consultation with ENT surgeon at SCEH gets preferential treatment. There is no separate registration charge for them. They can consult the doctor out of turn. Date for investigation and surgery is given on preferential basis. As the reputation of VC is at stake, all efforts are made to make the client feel comfortable while consulting SCEH.

Scaling-up the project

The plan to scale-up the project to all VCs is already on its way. All 15 VTs are to be trained in ear care. The future model would be a paid model in order to make the project viable and self-sustainable.

Views regarding integration of eye and ear care

As there is negligible focus on ear diseases and there is already a fully established successful eye programme, linking them would benefit ear care in a big way. The integration should be done at primary level. The ophthalmic assistant can be trained in ear care just as vision technicians underwent three-month training. The ophthalmic assistant should ultimately take the job of screening, diagnosing, managing and referring patients with common ear and eye disorders.

Limitations of the project

The project as such is not financially viable. The base hospital is subsidising the ear treatment. Once the project expands the demand for more surgeries, PTA and hearing aids would increase thus also the subsidy. The hospital has to look scaling up the project. Also, once the registration charge was asked from the clients after the project ended the number of attendants dropped in the vision centres.

Chapter 8

Assessment of Vision Technicians

During the project duration three vision technicians were trained in ear care. Of 15 available vision technicians, three were selected. The criteria of selection were willingness to provide ear care in addition to the eye care, high motivation level and past performance as VT. One vision technician was running the vision centre of Mustafabad in North-east Delhi, an urban area. The other was selected from a rural area of block Rajgarh of district Alwar in Rajasthan. They were aware in the beginning of the training that their work-load would increase once ear care services also starts in the VC and there would be no monetary benefit for this extra work. Later one more vision technician was trained the same way. The in-depth interview of all trained vision technicians were carried out at their work place.

Observations of in-depth interviews of trained vision technicians

Socio-demographic and work profile of the Vision Technicians

Out of three trained vision technicians interviewed, two were females. They all were in the age group of 25-30 years. They have completed class XII in science stream and are graduates. Beside one none of them had any previous job experience. They were working at vision centre for 3-5 years after finishing the course of vision technician of one and half year duration. The typical job profile of them are screening patients for eye diseases (mainly cataract), refraction of the patients complaining of diminished vision, providing primary eye care in the form of prescribing common antibiotic and pain killers as eye drops. In addition to their above clinical work they conduct camps in the community for screening cataract patients and provide health education to the people in eye care.

In-depth interviews with Vision Technicians

Added responsibility after the training in ear care

In addition to the eye care services, the Vision Technicians currently provide ear care services also in the same centre. They see the patients who complaints of ear disease and try to make a diagnosis. There is no fixed day for ear care. They see patients of both eye and ear problems as and when they come. On an average, out of 30 patients visiting the Vision Centre daily, 25 are of eye patients and rest have ear problems. The most common ear problem they face daily is ear discharge, followed by hearing impairment and ear wax. If any patient comes with ear wax, s/he is given a wax softening ear drop and told to return after 3-4 days. In the next visit syringing is done to remove the wax. They can see the ear drum confidently by otoscope and diagnose ear perforation. They also remove

superficial foreign body from the ear. For patients requiring further medical or surgical care they refer them to SCEH after filling the pre-designed proforma. They also go to community every Saturday to create mass awareness about the ear diseases using the flip chart developed by SSH. Follow-up services to the patients treated at SCEH are also provided by them in the form of stitch removal and addressing the concerns of the patients.

Views regarding the added responsibility

All of them were asked about their feelings regarding the extra work they have to do without any monetary incentive. All three were highly motivated. None of them said that the extra work is a burden on them. They were feeling good about the fact that they are seeing now more patients and more variety of them are coming to their vision centre daily. **They proudly say that they have gained extra knowledge and are privileged to get the training whereas others have not got it yet. They feel that they are ahead of other vision technicians with regard to knowledge.**

Comments on training methodology

Vision Technicians were trained for three months during mid-August to mid-November 2010. One was trained during October to December 2011. They felt that the framework of training comprising of lecture classes in the morning and hands-on training in afternoon was good. Though they feel that the contents of the training were adequate, more classes on PTA test should be there. They do not feel confident in reading a PTA test result. The range of diseases taught during the training was adequate to meet their usual requirement. During the lecture classes the teacher used to teach them with the help of blackboard and chalk. The WHO training module was given to them as a standard text book. Beside that they were not given any other resource material to study. They were also shown the IEC materials developed by SSH. They were also trained in using the flip chart.

Assessment of Vision Technicians

Hands-on training

The trainees used to visit the ward and ENT OPD with the trainers. The teachers used to show them relevant cases. They got to see the tympanic membrane through otoscope. They were also trained in syringing the ear wax. During the practical training, the trainees used to examine the patients attending the ENT OPD of Dr. Shroff's Eye Hospital, Daryaganj and report the findings to the trainers. The trainer then used to verify the diagnosis of VTs. According to the trainees, they have seen around 300 ENT cases during the training period. They have examined around 250 ears through otoscope. Hearing assessment through the use of tuning fork was done in around 50 cases. Wax

removal by syringing was done in around 200 patients under supervision. They removed foreign body lodged in ear in around 50 patients.

Need of refresher training

The VTs have been trained only once. Since then no refresher training has been conducted. **According to them refresher training conducted in the mini-form of primary training every 6 month will refine their knowledge and make them more confident in handling the cases. They want this mini-form of training or refresher training of around 15 days duration. Trainees should be given more practical exercises during the refresher training.**

Organization of camps

In addition to the usual clinical work performed at the vision centre, the vision technician goes to the community every Saturday and organizes screening camps there. They also give talk in importance of maintaining proper ear hygiene. They use flip chart developed by Society for Sound Hearing for making people aware about the ear care. Any person with an eye or ear problem is being referred to the VC for further check-up. Help of local health workers and leaders is sought in organizing the camp.

Collaboration with NGO

The vision centre at Rajgarh, Alwar is being operated by an NGO named Mata Shree Gomti Devi Trust (MSGD). The staffs including the vision technician posted there is appointed by them. SCEH provides technical support in the form of training of VT and acts as the referral centre for eye diseases. The NGO along with VT organizes regular eye and ENT screening camps.

Concerns of vision technicians

The VTs feel that with addition of ear care in their work profile the patient load has increased and the VC would run better if another staff is appointed at the centre. Provision of audiometry facility at the VC would be a good value addition to the services provided to the clients. The VTs also feel handicapped when they diagnose ASOM cases as they cannot prescribe oral antibiotics. There should be some legal provision wherein VT can prescribe some limited common low cost antibiotics to patients who need them. On a scale of one to ten where one was very dissatisfied and ten was extremely satisfied, the average score given by three interviewed VTs was six.

Vision Technician at Work at Rajgarh

Chapter 9

Capacity of Vision Centres

Two vision centres, one at Mustafabad in North-eastern part of Delhi and the other located in Rajgarh block of Alwar district of Rajasthan were visited as part of the evaluation. The Mustafabad vision centre primarily caters to the slum population of Delhi and the Rajgarh VC serves mainly the rural populace. Both VCs serve the underserved population.

Description of the vision centres

The Mustafabad VC is based in a rented house and located amidst the busy colony of Bhagirathi Vihar phase II in North-east Delhi. The space for Rajgarh VC is provided by Mata Shree Gomti Devi (MSGD) trust. Both the centres have almost the same structure with one room where attendants sits and sell the spectacles. This room also has a waiting area where 5-6 patients can sit. The other room is being utilised by vision technician. The vision centres were clean. The Mustafabad VC has a washroom attached to it. Both the centres are easily accessible by community. But there is lack of signage which may cause difficulty in locating it by a stranger. **Also a board detailing the services available, timings and name of the staff at the vision centre is desirable.**

Table 9.1 Description of vision centres

Item	VC, Mustafabad, New Delhi	VC, Rajgarh, Alwar, Rajasthan
Accessibility	Good	Good
Signage/ Board	Inadequate	Inadequate
Waiting area	Sufficient	Insufficient
Cleanliness	Good	Good
Display of IEC materials	Should be in local language, Urdu or Hindi	Less ear related IEC material
Board showing the facilities available	Yes	Yes
Crowd management	Good, no separate person available to manage it	Good, no separate person available to manage it
Washroom	Available	Not available

Equipment available at the centres

The following ear related equipment were available at the centres: head mirror, Bull's lamp, Otoscope, syringe for removing wax, kidney tray and boiler. Tuning fork was missing.

Equipment available at Vision Centres

Waste Disposal

A waste bin was there in which waste of all types is being dumped.

Observation of vision technician at work

Vision technicians were observed by the evaluators while at work. The overall interaction with clients was good. VTs explained each patient the cause of the discomfort in simple language. The anatomy and physiology of the ear was also explained to the client by them to some extent. They were able to take relevant history. Ear examination by otoscope was satisfactory. They were filling the referral form properly. There were no patients of ear wax or lodgement of foreign body in ear on the days of visit. In order to observe those procedures the Vision Technician was asked to come to the main Hospital, Daryaganj where the procedures were observed. Two cases were observed, one of wax removal by syringing and the other foreign body removal. The VT was confident and performed the procedures satisfactorily without the supervision of ENT Consultant. Separate records were maintained for ear and eye cases. The registers were neat and up to date.

Vision Technician at Work at Mustafabad

Chapter 10

Clients' feedback

The most vital link in the project is the client. In-depth interview with 60 patients (30 each in Mustafabad and Rajgarh) attending the VC whether for eye or ear problem were conducted. The salient findings of the clients' interview are as follows:

Socio-demographic profile of the patients

There were 30 (50%) males. The age range of the clients' was from 6 years to 84 years. The mean age was 44.5 years. Majority (70%) were either illiterate or have studied upto primary class. The mean per capita income of the respondent was Rs. 925 per month.

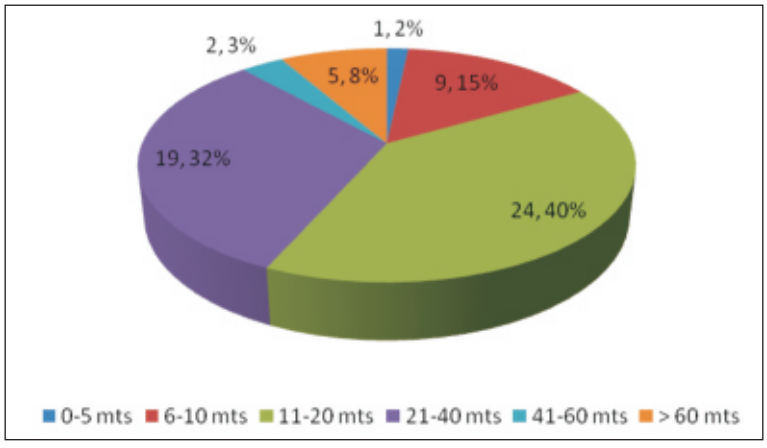
Visit to the centre

Of 60 interviewed patients attending the two VCs on three days, 35 (58.3%) came with any ear problem. Rest 25 (41.7%) have some eye problem. The present visit was first for the 27 (45%) patients. Majority of the patients for which this was a repeat visit were ear patients (table 10.1). Nearly two-third of the patients took less than 20 minutes to come to the centre. The average waiting time for majority of patients are up to 40 minutes (figure 10.1).

Table 10.1: Purpose of the visit to vision centre

	Eye problem (%)	Ear problem (%)Total (%)
First visit	13 (49.1)	14 (51.9)27 (100)
Repeat visit	22 (66.7)	11 (33.3)33 (100)
Total	35 (58.3)	25 (41.7)60 (100)

Figure 10.1: Waiting time of patients at the vision centre (n=60)

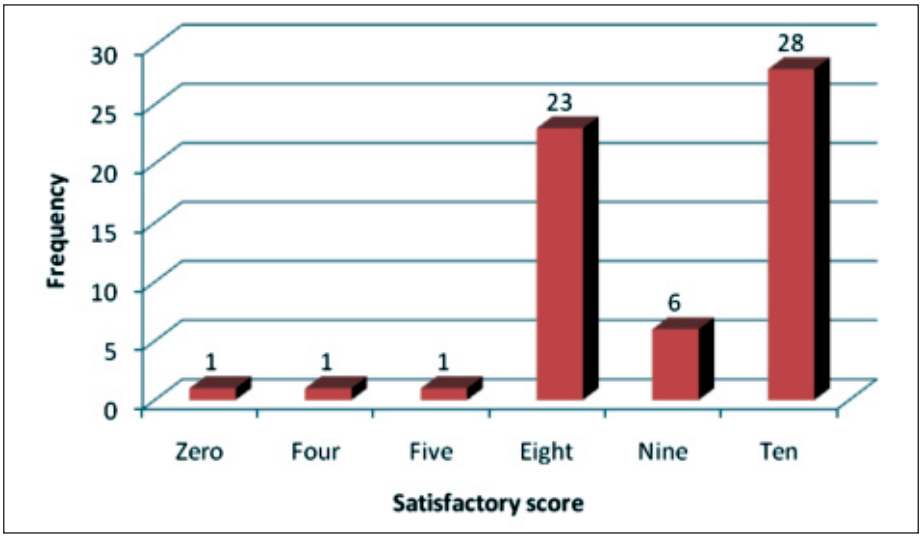


Services provided at the vision centre

Most of the patients particularly those visiting the VC for first time did not know what all facilities were available there. They only knew that they could get their ear and eye check-up done at the VC. Around 62% of the clients knew that ear care services are being provided at the VC. The major source of this information was through awareness camps organised by vision technicians & Project Coordinator. Except one respondent none of them said that the cost incurred at the VC was prohibitive for them to attend the centre regularly. They pay Rs. 30 as registration charge for three visits. For Rajgarh VC this charge is Rs. 20 for 3 visits to the centre.

Clients were asked to rate the VC on a scale of one to ten, where one means very dissatisfied with the services of the centre and ten means very much satisfied with VC. Most of them scored it as either 8 or 10 (figure 10.2).

Figure 10.2: Satisfaction of the clients regarding the services provided at the Vision Centres



Referral to the Shroff's Charity Eye Hospital, Daryaganj

Out of 60 clients interviewed, 20 (33.3%) were ever referred to SCEH, Daryaganj for further management. Of them 13 were ear patients. Referral of ear patients is more compared to eye patients as there is limited scope of intervention for ear care at the vision centre level. Nine of the referred ear patients underwent surgery (tympanoplasty or tympanotomy) at the base hospital (SCEH, Daryaganj).

Others

The IEC materials displayed at the VC was the area of concern. Half of the respondent could not make out the message displayed in the posters. The causes were illiteracy and majority of IEC not being in local language. All of the respondents were positive about recommending the centre to others. Barring two, rest suggested that the ear and eye care should be provided under one roof only. 93.3% of respondents did not find any problem with the centre. Those who faced problem, mentioned that that they have to travel far to access the centre and repeated visits were required to get the work done.

Recording patient feedback

Chapter 11

Knowledge, attitude and practices of community about ear care

Till few years back infectious diseases were the number one killer of our fellow countrymen. Thus the focus of health care delivery system was concentrated on these potentially preventable diseases. In the reproductive and child health era the policy makers shifted their attention to providing quality perinatal services to expecting mothers and children. Now since India is on its way to become a developed nation, non-infectious chronic diseases are rising. The Government is hard pressed with resources to look after all these categories of diseases. Ear care and diseases arising due to poor maintenance of ear hygiene was never on priority list of public health emergencies. Thus awareness about the ear care is lacking in the Indian population. This leads to harmful practices. A cross sectional survey of the population around the vision centres to assess the knowledge, attitude and practices of lay people about ear care was done. Adults and children of both sexes residing around the two vision centres were interviewed. The sampling was a convenient one and we interviewed 30 respondents each in both rural and urban set up. A pre-tested semi structured interview schedule was used for the survey (Annexure-9).

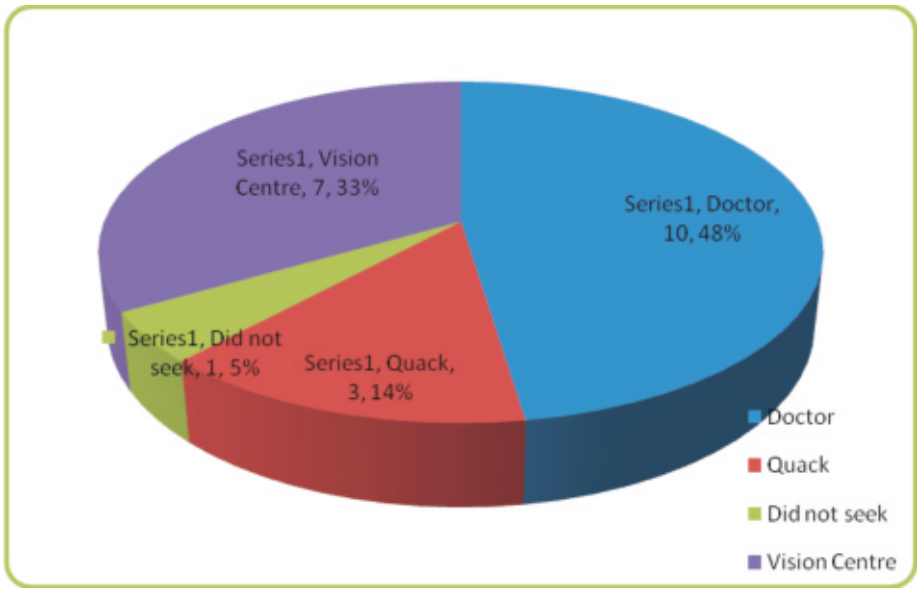
Observation of KAP survey

Out of 60 respondents 32 (53.3%) were males. Around 44% of the respondents were having any ear problem according to their own admission. Barring 5 persons with any ear problem all of them were suffering from some form of hearing impairment (table 1). Out of 21 respondents who were suffering from hearing loss majority (81%) consulted either a doctor or vision technician (figure 1).

Table 11.1: Perceived ear morbidity amongst respondents (n=60)

Ear problem	Frequency	Percentage
Hearing loss, discharging ear	9	15.0
Only Hearing loss	7	11.7
Only Discharging ear	3	5.0
Ear pain, hearing loss, discharging ear	3	5.0
Only Ear pain	2	3.3
Ear pain, hearing loss	1	1.7
Ear pain, hearing loss, vertigo	1	1.7
None	34	56.7

Figure 11.1: Treatment seeking behaviour of hearing impaired respondents (n=21)



Around one-fourth (23%) of the respondents had at least one member of the family who was suffering from hearing loss. Only 15% could tell the common causes of hearing loss. Half of the respondents did not know whether hearing loss was reversible (table 2). Those who knew it is reversible felt that timely medical intervention can reverse the process.

Table 11.2: Knowledge and attitude about ear care

Item	Yes	NoDon't know
Is hearing loss reversible?	26 (43.3%)	4 (6.7%)30 (50%)
Knowledge of maintaining ear hygiene	51 (85.0%)	9 (15%)
Is hearing loss a serious problem?	48 (80%)	3 (5%)9 (15%)
Is regular screening of ear beneficial	34 (56.7%)	26 (43.3%)
Is protective equipment necessary if one is exposed to loud noise?	13 (21.7%)	47 (78.3%)
Is listening to loud music bad for hearing?	44 (68.3%)	7 (11.7%)12 (20.0%)

Majority (56.7%) felt that regular screening for hearing loss is beneficial but less than half of them actually visit a doctor for getting their ear checked. 68.3% of the respondents had ever removed wax from their ears. Most of the times they have used a cotton ear bud. Other practices common for removing ear wax were putting mustard oil in ear and using finger. Only 10% of the respondents have ever visited an ENT specialist for removing the ear wax. The main reason given by them for not visiting the ENT doctor for ear wax removal was they never felt it so important to visit an ENT doctor for it.

In-depth perceptions of the Community

In order to capture the views of the community, four Focussed Group Discussions were carried out; two in Mustafad (Delhi) and two in Rajgarh (Alwar). At each of the locations, one FGD was carried out among the male group members and one among female group members. At Mustafad both the groups predominantly had members from the Muslim Community while in Rajgarh the FGD had members from the Hindu Community which provided a broader prospective. The salient points of the discussions are summarized as under:-

FOCUSED GROUP DISCUSSION WITH FEMALES IN MUSTAFABAD, DELHI

A focused group discussion was carried out in a group comprising eight women in Mustafabad in north east Delhi. The group was homogenous in nature with all the women being married and belonging to the age group of 30-50 years. Only two members were beneficiaries, most of the others had come to the centre for eye problems; and one was a non-beneficiary accompanying her daughter to the centre. All the women were Muslims and belonged to the same socio-economic status. They were all housewives with their husbands engaged either as daily wage labourers or as local shopkeepers. As far as the education levels were concerned, all of the women were illiterate. During the discussion, it emerged that all the women resided within a distance of 10kms from the centre.

The discussion started with probing the group about the importance of ear and hearing. All the members agreed that ears are extremely important for hearing. One member reported, *"Sahi na sunai de to pareshani hoti hain"* (Without proper hearing, it would be difficult)

It was found that the women were aware about common ear problems like ear discharge, ear pain, perforation of ear, pustules in the ear and hearing loss (referred to by one member as *"sabse badi bimari"* or most serious illness). When asked about the common causes of hearing loss, the members reported perforated eardrum, weakness of the eardrum, old age and numbness in the ear.

The group was enquired about the correct way of taking care of one's ears. Majority of the women expressed that the correct way of taking care of their ears was to use matchsticks to clean them. The frequency varied with some women following this activity daily or on alternate days while others did it weekly. It was observed that the women did not have any awareness about visiting trained personnel for wax removal as well as the availability of services of wax removal at the vision centre.

For hearing loss, some members said that they took medication. They either went to a private ENT doctor or directly to the chemist who lived close to their residence.

A lot of myths and beliefs regarding ear care and hearing were found to be prevalent among the group members. Most of the members reported to be using *lukewarm mustard oil along with*

garlic juice for regular cleaning and common ear ailments, as advised by the local vendor. One woman said that she used to boil onion peels and apply on the ears. For ear pain, some members said that they used clove oil or garlic oil. Two members reported that they have been advised not to use pour oil into the ear by the technician at the centre while one woman said that she had been prescribed ear drops for cleaning the ear by a private doctor.

The group members were individually asked about their experiences regarding ear problems and actions initiated. One woman said that she had ear discharge during her childhood, and that it had subsided after she took medication, but now it has recurred after her marriage. She had consulted a private doctor in Meerut and was told that her eardrum was weak.

Another woman reported that her daughter had been operated in the main hospital in Daryaganj last year for hearing loss due to a perforated eardrum after being referred from a camp conducted here, but she hasn't become well even now. She had been advised to chew gums and blow balloons. Hence, they have now come to this centre for check-up. One member reported numbness in the ear.

For ear complaints, majority of the members said that they would come to the centre for treatment. Some said that they would go wherever their family members took them; a woman said that she would go to a private hospital while another woman said she would prefer a government hospital. Three of the members were unaware that the centre also catered to patients with hearing problems.

The group members were not aware about the camp being organized in the area for ear care. Since the women were illiterate, they were not able to appreciate the messages of the posters in the centre. One member noted that she had seen pamphlets in the centre with pictures about ear problems, highlighting the need of user friendly dedicated ear awareness sessions.

Overall, the entire group was satisfied with the services provided by the technicians at the Mustafabad centre. The centre was easily accessible to most of the members who were residing within a radius of 10kms from the centre. However, they did not know if the technicians went on house visits. The average waiting time as expressed by the members varied from about half an hour to an hour depending upon the number of patients in the centre, which the members found acceptable. The members found the counselling by the technician to be adequate. They were also satisfied with the timings of the centre. The members also recommended the centre to other members in the community for availing services from the centre.

FOCUSED GROUP DISCUSSION WITH FEMALES IN RAJGARH, ALWAR

A focused group discussion was carried out in a group comprising seven women in Rajgarh block, Alwar. The group was homogenous in nature with all the women being married and belonging to the age group of 25-40 years. The group consisted of both beneficiaries and non-beneficiaries who were accompanying the clients to the centre. All the women were Hindus and belonged to the same socio-economic status. Most women were housewives with their husbands engaged as daily wage earners in agriculture, construction and textile industry. As far as the education levels were concerned, most of the women were illiterate except one who had acquired primary education. During the discussion, it emerged that all the women resided within a distance of 4-5 kms from the centre, except one participant who had come from a distance of around 20 kms.

The discussion started with probing the group about the importance of ear and hearing. All the members agreed that ear is an integral part of the human body and is essential for hearing. **If an individual cannot hear properly, it would affect the communication process with others.**

The members were also of the opinion that an individual has to face problems in absence of proper hearing. One member reported differences with her husband and frequent arguments due to her inability to hear properly.

It was found that the women were aware about common ear problems like perforation in the ear, ear discharge, ear pain and swelling in the ear. They also said that factors like soapy or dirty water entering the ear, trauma to the ear and persistent common cold could induce hearing problems/impairment. A member also vaguely knew that if the baby is not placed properly during breastfeeding, the milk may enter the Eustachian tube of the ear through the throat causing infection to the baby's ear.

The group was enquired about the correct way of taking care of one's ears. Majority of the women expressed that the correct way of taking care of their ears was to use matchsticks to clean them. The frequency varied with some women following this activity daily while others did it once in a week or once in two weeks. Two women reported that they purchased ear buds from the market to clean their ears. It was observed that the women did not have any awareness about visiting trained personnel for wax removal as well as the availability of services of wax removal at the vision centre, thereby highlighting the need for creating awareness.

A lot of myths and beliefs regarding ear care and hearing were found to be prevalent among the group members. The most common practice being followed in the community was using *lukewarm mustard oil* for regular cleaning and common ear ailments. A member reported that she used garlic juice, while another member added that she had used black pepper powder and ghee as a treatment for ear problems. Leaf of the *Sardoshan* tree (commonly growing in that region) is also used as a treatment for swelling in the ear. One of the members expressed *"Gaon mein kuch log kaan ki safai ke liye gaaye ka peshab bhi daalthe hain "*(using cow urine for various ear ailments in the village).

Even for foreign body removal, no qualified ear personnel were visited as reported by the group. One member had had an ant inside her ear once, which she removed by putting water in her ear.

She said, "Mere kaan mein cheeti ghus gayi thi. Paani daalke nikaal diya tha"(an ant entered my ear, i got it removed by putting water in my ear)

The group members were individually asked about their experiences regarding ear problems and actions initiated. One woman reported that she had been slapped by her mother some months back which resulted in perforation of her left ear and subsequent hearing loss. She had consulted private and government hospitals in Alwar but there was no improvement. Then she came to Rajgarh centre and was referred to the main hospital in Daryaganj where tympanoplasty was done (the team verified the records). She was taken from Alwar centre to Daryaganj by a vehicle arranged by Dr Shroff's Charity Eye Hospital and the surgery was carried out free of cost. She expressed an improvement in hearing after the surgery. Two women had been operated in the main hospital at Daryaganj for ear discharge after being referred from Rajgarh centre. They were also satisfied with the services provided at both the Rajgarh centre and the hospital. One lady said that this was her first visit to the centre and she had come with her five year old daughter who had been complaining of bilateral ear discharge since childhood. Most of the members had earlier gone to the government and private hospitals in Alwar in the past but they did not receive satisfactory treatment.

One member said, "Humne Alwar mein private mein bhi dikhaya aur sarkari mein bhi, bahut paisa kharcha kiya, par faida nahin hua."(we spent a huge money on private and government doctors in Alwar, but got no relief)

Most of the group members were affiliated to the local Self-Help Group (SHG) and their NGO was located in the close vicinity of the centre, so they were aware of the services being offered at the centre. The field worker (from MSGD NGO) enjoyed a good rapport with the community and motivated them to visit the clinic for their eye and ear problems. The members were well informed about the health camps which were organized by the centre at a frequency of once in two months. However, only one woman expressed that she had attended a camp. **A significant point which emerged during the discussion was that the camp was primarily a screening camp with limited focus on information dissemination. This issue needs immediate attention and adequate awareness has to be generated regarding ear care by way of these camps.**

Overall, the entire group was satisfied with the services provided at the Rajgarh centre. The centre was easily accessible to most of the members who were residing within a radius of 4-5 kms. The average waiting time as expressed by the members was about half an hour to an hour, which the members found acceptable. The members found the counselling by the technician to be adequate.

FOCUSED GROUP DISCUSSION WITH MALES IN MUSTAFABAD, DELHI

A focused group discussion was carried out in a group comprising six men in Mustafabad, Delhi. The group was homogenous in nature with all the men being married and belonging to the age group of 45-60 years. These men were both beneficiaries and non-beneficiaries who were accompanying the clients to the centre. All the men were Muslims and belonged to the same socio-economic status. Most of the men were engaged as local shopkeepers and daily wage earners in the construction industry. As far as the education levels were concerned, half of the men had acquired taaleem from the madrasa while the remaining half had acquired only primary education. During the discussion, it emerged that all the men resided within a distance of 4-5 kms from the centre. The FGD was carried out on the same day on which the camp was organized in the centre. As a result majority of patients were visiting the centre for the first time.

The discussion started with probing the group about the importance of ear and hearing. All the members agreed that ear is an integral part of the human body and is essential for hearing. If an individual cannot hear properly, he would not be able to understand what others tell him thereby hampering communication with others. The members also expressed at times the family members of patients with hearing impairment tend to get irritated and lose temper.

It was found that the men were aware about common ear problems like perforation of ear, ear discharge, itching in the ear, wax in the ear, pus, foreign body and hearing loss. As per the members, the common factors inducing hearing problems/impairment were trauma of the ear and exposure to loud noise. The group was also aware that hearing loss was associated with age loss. The members also expressed that if a sharp object enters the ear, it may cause ear impairment.

The group was enquired about the correct way of taking care of one's ears. Majority of the men expressed that the correct way of taking care of their ears was to use matchsticks to clean them. Most of the group members cleaned their ears 2-3 times daily using matchsticks. When the group was enquired about how they take care of their ears a lot of myths and beliefs emerged. One member stated that he used lukewarm mustard oil mixed with garlic juice for cleaning his ears. Another member reported that he poured onion juice regularly in his ear for ear cleaning. Some members said "Hum gulab ke patte ka bhi istemaal karte hai kaan ki safai karne ke liye" (use of rose petals for cleaning the ear). Use of camel urine for cleaning the ear was also one of the common practices being followed in the community for ear ailments. It was observed that the group did not have any awareness about visiting trained personnel for wax removal as well as the availability of services of wax removal at the vision centre.

Even for foreign body removal, no qualified ear personnel were visited as reported by the group. If an individual has an insect or a foreign body in the ear, mustard oil is poured in the ear to remove it.

The group members were individually asked about their experiences regarding ear problems and actions initiated. One member had got his ear cleaned from a local vendor in the village some months back. Since then he had been facing severe itching in the ear. The problem had got aggravated due to the regular use of mustard oil for cleaning. He had visited several government hospitals in Delhi including Safdarjung Hospital and Guru Tegh Bahadur Hospital but there was no improvement. He heard about the eye camp from his neighbours and visited the Shroff Centre at Mustafabad. This was his first visit to the centre.

He expressed "Maine gaon mein ek kanmelia se kaan saaf karvaye, tab se kaan mein khujli shuru ho gayi" (I got my ear cleaned by an ear cleaner in my village, since then my ear itches).

Two members were suffering from ear discharge for the last one year and were visiting the centre for the first time. They had consulted a number of private doctors but there was no improvement. They came to know about the camp through the relatives and decided to visit the vision centre.

When the members were inquired about the source of awareness about the centre and the services being offered, it emerged that the local population was playing an important role in disseminating information about the camps and services provided at the centre. The Gender Resource Centre functioning in the vicinity of the centre was also playing an important role in distributing pamphlets in the community and generating awareness about the camps. People who visited the centre for eye related ailments were also made aware of the camps being organized in the community. The local leaders such as the maulvis and private doctors were also facilitating in awareness generation when the camps were organized.

Overall, the entire group was satisfied with the services provided at the Mustafabad centre. The centre was easily accessible to most of the members who were residing within a radius of 4-5 kms. Even though the average waiting time as expressed by the members was more than one hour, the members found it to be acceptable. The members found the counselling by the technician to be adequate.

FOCUSED GROUP DISCUSSION WITH MALES IN RAJGARH, ALWAR

A focused group discussion was carried out in a group comprising six men in Rajgarh, Alwar. The group was homogenous in nature with all the men being married and belonging to the age group of 60-80 years. These men were both beneficiaries and non-beneficiaries who were accompanying the clients to the centre. All the men were Hindus and belonged to the same socio-economic status. Most of the men were not working due to old age. As far as the education levels were concerned, all of the men were illiterate. During the discussion, it emerged that all the men resided within a distance of 4-5 kms from the centre.

The discussion started with probing the group about the importance of ear and hearing. All the men agreed that ear is necessary for hearing. One member out of the three who were using hearing aids said that he can't hear anything without his hearing aid, and that it is very difficult for them to interact with others.

He said, "Bahut pareshani hai kaan ki machine ke bina. Log gaali deke chale jate hain, aur pataa bhi nahin chalta" (it is very difficult without hearing aid, people uses rude language which I cannot listen)

It was found that the men were aware about common ear problems like ear discharge, ear pain and hearing loss. However they did not have any awareness about the common factors inducing hearing problems/impairment. When compared to the women from the same block, it was observed that the awareness levels of the males were relatively low. This is attributed to the fact that the group belonged to a higher age group resulting in lower awareness levels.

The group was enquired about how they take care of their ears. Two people felt that there was no need to clean their ears. A man reported that he puts water in his ears once every three or four days to clean them. Most of the men said that they used matchsticks with cotton to clean their ears. They followed this procedure about once in two weeks. Another man said "Hum to apni dhoti se hi kaan ki safai kar le te hain." (he used a wet cloth (his dhoti) to clean his ears).

However, myths and beliefs regarding ear care and hearing were found to be less prevalent. The members reported that they were not adopting any practices such as using lukewarm mustard oil for regular cleaning and common ear ailments. Other common practices such as using garlic juice, black pepper powder and ghee as a treatment for ear problems were not found. The members were also aware that it was unsafe to get the ears cleaned from local vendors and did not indulge in these practices. However usage of matchstick, wet cotton and wet cloth for cleaning the ear was reported as a common practice.

One member expressed, "Hum kaan mein sarso ka tel nahi girate" (I do not put mustard oil in ears)

The group members were individually asked about their experiences regarding ear problems and actions initiated. Three men who belonged to the age group of above 70 years were using hearing aids. They visited the Rajgarh centre with the complaint of hearing loss from where they were referred to the Malakhera centre. At the Malakhera centre, Pure Tone Audiometry (PTA) was carried out and the men were provided hearing aids. One member had been using hearing aids for the last one and half years while the other two had been using them for last one year.

When the members were inquired about the source of awareness about the centre and the services being offered, it emerged that Anganwadi workers were playing an important role in guiding the community about the eye and ear care services being offered at the centre. This highlights if there is capacity building of the field level staff, that they could play and important role in awareness generation about eye and ear care services as well.

Overall, the entire group was satisfied with the services provided at the Rajgarh centre. The centre was easily accessible to most of the members who were residing within a radius of 4-5 kms. The average waiting time as expressed by the members was about half an hour to an hour, which the members found acceptable. The members found the counselling by the technician to be adequate.

Chapter 12

Case studies

A few case studies were recorded from the camp conducted at Mustafabad and Walk in clients at Rajgarh to assess the experience of clients while availing the services at the VCs.

Case study 1:

Name: Mohammad Arif (Name Changed)
Sex/Age: Male/18 yrs.
Address: F-27, Gali no. 24, Purana Mustafabad
Occupation: Book Binder

The person developed itching of ear around 4-5 years back. This was soon followed by ear discharge and eventually progressive hearing loss of right ear developed which progressed over a period of 2-3 years. He attended the VC of SCEH at Mustafabad for the first time around 2 years ago. He was referred to SCEH, Daryaganj at the first visit itself. He went to the base hospital on a pre-defined date in the bus provided by the hospital. He was immediately registered there and was advised surgery of the diseased ear. He underwent surgery of right ear (Tympanotomy) on 6th of May 2011, 3-4 days after the first visit to SCEH. After the surgery, case was regularly followed up and had regularly visited the SCEH, Daryaganj at an interval of 15-30 days. But the problem of hearing loss persisted and even the discharge continued.

The patient reported his problem every time he visited SCEH; the doctor advised him for continuing the medication in the form of ear drops and called him regularly. Till now the follow up is going on.
He visited the Musataffabad VC again on an ear camp day when he heard that a doctor is coming to the clinic. The doctor at the camp advised him the medicines and to undergo PTA (Pure tone audiometry) again at Shroffs main centre at Daryaganj.

Currently the case is happy with the services provided at VC under PEHC but unsatisfied with the outcome of operation and want his hearing problem to be rectified at the earliest.

Case Study 2:

Name: Nasreen (Name Changed)
Sex/Age: Female/55yrs.
Address: House no. 166, Gali no. 8, New Mustafabad
Occupation: Home maker

The respondent complained of ear discharge from both ear around 8 years back. She did not find it to be serious thus did not seek health care. Slowly but steadily her hearing ability started declining. She neglected it for 7 years and ultimately came to VC, Mustafabad around one year back when she heard that technician there also sees the ear patient. The VT did check her hearing referred her to SCEH, Daryaganj within a week. She got registered there without any hassle and was treated for discharge and was advised a hearing aid after undergoing PTA at subsidised rate. She was given a hearing aid 1 day after the first visit to Shroff's main center at Daryaganj.

After that, her hearing improved a lot and presently she is happy with the treatment provided to her both at Shroff's vision centre at Musataffabad and Shroff's main centre at Daryaganj. The cost incurred by patient was Rs. 100 for the hearing aid and Rs. 30 for registration at Shroff's vision centre at Musataffabad.

Case Study 3:

Name: Rahul (Name Changed)
Sex/Age: Male/14 yrs.
Address: Ballupura village, Alwar
Occupation: Student

The student had history of ear discharge 5-6 years back. This was eventually followed by progressive hearing loss of both ears. He consulted some doctor in Alwar after 2 months of his developing the symptom, but that visit to doctor didn't help. He came first time to Shroff's vision centre at Rajgarh, Alwar 1 year ago. He was referred from here to Malakhera health post at the first visit only (Malakhera Centre is another facility of Shroff in Alwar which is at a distance of 40km from Rajgarh and where an audiologist and service of PTA is available). In Malakhera health post an ENT consultant from SCEH visits every first and third Thursday of each month. There, he was advised for the surgery of the diseased ear and was referred to Delhi. He was taken to Shroff's main centre at Daryaganj after 6-7 days of coming to Malakhera in hospital's vehicle. He got registered there and was operated upon the next day of his admission. He underwent surgery of right ear on 24th May 2012. After the surgery, the patient came back to his place. His right operated ear is normal now and hearing has been restored in the ear. The cost incurred by patient was Rs. 20 only for registration at Shroff's vision centre at Alwar. On the day of the evaluation the case visited the VC, Alwar to get his left ear checked.

Case Study 4:

Name: Mohini (Name Changed)
Sex/Age: Male/10 yrs.
Address: Rajgarh, Alwar
Occupation: Student

The Case had complaint of discharging ear and pain (both ears) followed by progressive hearing loss since birth. Her mother consulted some Government doctor in Jaipur, but that visit to doctor didn't help. She was brought to the Shroff's vision centre at Alwar 18 months back. She was referred to Malakhera health post after 15-20 days. The ENT consultant examined her at Malakhera health post and advised her some medication. She was regularly visiting the Malakhera health post. She was subsequently referred to SCEH, Daryaganj. She got registered at the hospital and underwent surgery of right ear, 2 days after the first visit to Shroff's main centre at Daryaganj. She came back home and was regularly followed up at Malkhera health post. After 5 months of initial surgery, she was again referred to SCEH, Daryaganj from Malakhera for surgery of the other ear. She stayed there for 3 days and came back after successful surgery. She is now normal and hearing has been restored in both the ears. The cost incurred by patient was Rs. 20 only for registration at Shroffs vision center at Alwar. Currently the case is well and is happy with the services provided.

Case study 5:

Name: Md. Suhail (Name Changed)
Sex/Age: Male/12 yrs.
Address: Mustafabad, Delhi
Occupation: Student

The respondent was Md. Suhail's mother. The patient was identified during the school health check-up. The community outreach worker at VC, Mustafabad was conducting a school health check-up in March 2011. The patient had active ear discharge and ear pain. He was told to visit VC for a thorough ear check-up. The mother brought the child the very next day to the vision centre. Vision technician examined his ear. He was referred to SCEH for further treatment. Within a week the patient was taken to the base hospital in hospital's vehicle. He was prescribed medicines for his ear disorder. The patient was on regular follow-up in the SCEH. When the ear became dry after 3 months of medications, he was operated upon his left ear on 27th May 2011. The surgery was uneventful and he was on regular follow-up at the SCEH, Daryaganj. His last visit to the base hospital was in the month of August 2012. His ear discharge is still persisting.
The mother is happy that ear check-up is being done near her house but is unsatisfied with the outcome of the surgery.

Case study 6:

Name: Rehnuma (Name Changed)
Sex/Age: Female/15 yrs.
Address: Mustafabad, Delhi
Occupation: Student

The patient presented with complaints of discharge from both ears and diminished hearing in the month of March 2011 at VC, Mustafabad. Vision Technician examined her ears and a diagnosis of bilateral Chronic Suppurative Otitis Media (CSOM) was made. She was referred to the SCEH, Daryaganj for medical evaluation and possible surgery. The patient was taken to the base hospital in hospital's vehicle and was registered immediately. After a course of antibiotic she was operated in the month of March 2011. She was told to get operated upon the better ear first. She was on regular follow-up at SCEH, Daryaganj. She was symptom free for a few months after surgery. Later her operated ear started discharging again. She has been consulting SCEH regularly. She is afraid of another surgery now and is on medicines as and when required.

Case study 7:

Name: Sunita (Name Changed)
Sex/Age: Female/22 yrs.
Address: Rajgarh, Alwar
Occupation: Home maker

She came to know of the ear care services being provided at the VC, Rajgarh through a local public health functionary. She was having complaint of discharging ear. She came to the VC for ear check-up. After the ear examination, the VT referred her to Malakhera Health Post for evaluation by an ENT surgeon. She arrived at the health post on designated date, consulted the ENT surgeon and underwent PTA test. She was told to come to SCEH for surgery. She went to the base hospital in base hospital's bus on the pre-defined day. Finally she was operated on 10th May 2012. She is on regular follow-up at the VC, Rajgarh. Besides spending Rs. 20 for registration at the VC she did not have to spend anything for her surgery. The whole treatment cost was borne by the NGO which runs the VC along with SCEH. She is extremely happy with the services provided at the VC as well as treatment meted out to her at SCEH.

Case Study 8:

Name: Meera (Name Changed)
Sex/Age: Female/40 yrs.
Address: Rajgarh, Alwar
Occupation: Home maker

Meera is a traditional home maker involved in daily household chores. She was suffering from bilateral ear discharge since a long time. This intermittent discharge took its toll on her hearing capacity as well. She could not take out time from her busy schedule to consult a doctor for her ear ailment. She was aware of the vision centre of SCEH located near her home. During a casual contact with the community outreach worker posted at VC, Rajgarh for spreading the awareness about ear diseases she came to know of the ear care services provided at the centre. She went there to get hear ears checked. After examining her ears, the VT sent the patient to Malakhera for PTA test. She underwent PTA and consulted ENT surgeon in Malakhera. She was referred to SCEH for surgery which she underwent on 21st July 2011. Her ears are fine now and she is happy with the services provided at VC, Rajgarh and SCEH.

Case Study 9:

Name: Sheela (Name Changed)
Sex/Age: Female/35 yrs.
Address: Rajgarh, Alwar
Occupation: Home maker

Sheela was complaining of discharge through both ears since 6 months in April 2011 when she visited VC, Rajgarh. The vision technician diagnosed perforation of her ear drum. She was immediately referred to Malakhera Health Post for further check-up by ENT specialist. When she visited the Malakhera health post she was prescribed medicines for three months and told to come to SCEH once her ear becomes dry. She was in regular touch with vision centre. Once her ear was dry, she was given a date to come to SCEH for surgery. She went to Alwar town and from there took the hospital's bus to SCEH. She got admitted on 2nd August 2011, the day she arrived in SCEH. Next day Right sided Tympanoplasty was conducted on her. She was discharged the following day. She visited Malakhera again after a few days to get her stitches removed. She is extremely satisfied with the referral linkages established by the SCEH.

Chapter 13

Achievements of the PEHC project of SCEH

The evaluation team studied in detail the records of the Vision Centres at Mustafabad and Rajgarh which highlighted the encouraging performance of the pilot project.

As reported, during the period of February 2011 to October 2012, a total of 1675 patients attended the OPD in Vision Centre at Mustafabad while 885 patients attended OPD in the Vision centres at Rajgarh. The total number of patients attending OPD at Rajgarh was found to be less as compared to Mustafabad. The break-up of the New and repeat patients is as under:-

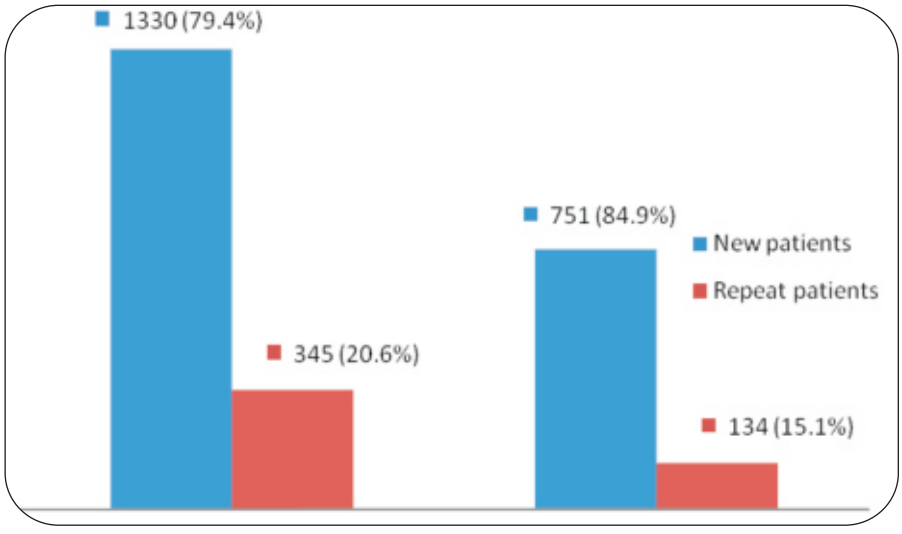


Figure 13.1: Number of patients attending OPD during the period of Feb 2011 to Oct 2012

In both Mustafabad and Rajgarh Vision Centres the male patients attending OPD outnumbered the female patients.

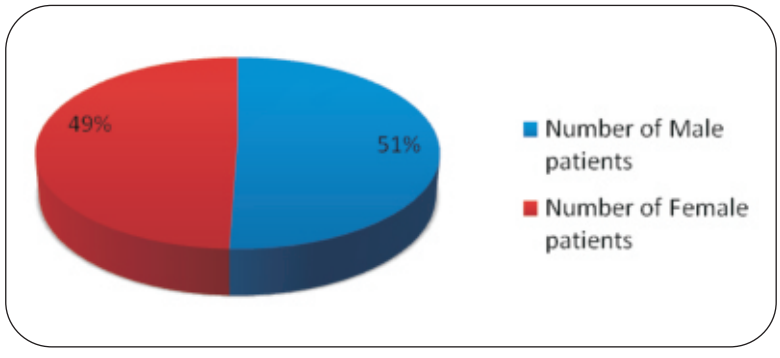


Figure 13.2: Distribution of patients attending OPD by sex (Mustafabad)

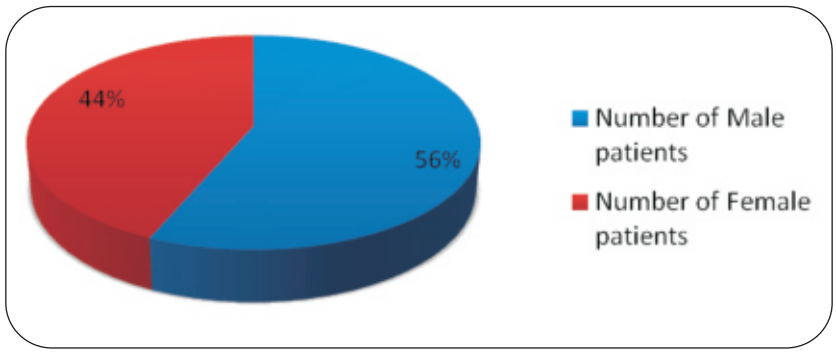


Figure 13.3: Distribution of patients attending OPD by sex (Rajgarh)

Majority of the patients in both Mustafabad and Rajgarh Centres belonged to the age group of 17-50 years of age. However, more than 30% of the patients were aged 0-16 years of age.

Table 13.1: Distribution of patients attending OPD by age

Age	Number of patients (Mustafabad Centre)	Number of patients (Rajgarh Centre)
0-16 years	585 (34.9%)	270 (30.5%)
17-50 years	819 (48.8%)	378 (42.7%)
>51 years	271 (16.2%)	237 (26.8%)
Total	1675	885

Camps

During the period of February 2011 to October 2012, 53 Community camps were organized in different parts of catchment area of Mustafabad and 38 Community camps were organized in Rajgarh. On an average 2-3 camps were organized every month across both the centres. A total of 2306 and 3809 patients were screened at Mustafabad and Rajgarh respectively during these camps. During this period, in Mustafabad 1846 (80.1%) persons were referred to PEHC out of which 786 (42.5%) persons reported to PEHC while in Rajgarh 1845 (48.4%) persons were referred to PEHC out of which 489 (26.5%) persons reported to PEHC.

Majority of the patients across both Mustafabad (40.6%) and Rajgarh (40.9%) Centres were diagnosed with CSOM followed by impacted wax. In Rajgarh Centre, 313 patients were referred for PTA which was carried out at Malakhera centre where the audiologist is available (Table 13.2).

Table 13.2: Distribution of patients according to diagnosis

Diagnosis	Number of patients (Mustafabad Centre)	Number of patients (Rajgarh Centre)
CSOM (Running Ear)	283 (40.6%)	391 (40.9%)
OME (Glue Ear)	24 (3.4%)	43 (4.5%)
ASOM (Acute painful ear)	85 (12.2%)	53 (5.5%)
Suspicion for hearing loss	74 (10.6%)	8 (0.8%)
Wax impaction	161 (23.1%)	141 (14.8%)
PTA	49 (7.0%)	313 (32.8%)
Foreign body ear	22 (3.2%)	29 (3.0%)
Total	697	955

Evaluation team examining the records maintained at vision centre

Chapter 14

Summary of the evaluation

- Hearing impairment affects 5.3% of the global population. No particular focus has been given to ear care by any national government. CBM and Society for Sound Hearing are helping nations to build capacity for the integration of ear care services in their national health programmes. Dr. Shroff's Charity Eye Hospital has started a project where they see the feasibility of integrating ear and eye care services at the primary level.

- In the project, the vision technicians posted at two of the 15 vision centres were trained in primary ear care using the WHO 'Intermediate module for PEHC workers' for three months. Basic equipment to provide primary ear care at primary level were provided at two vision centres, one located in urban slum of Delhi and the other in a rural area of Rajasthan. The evaluation of the PEHC of SCEH was planned to find out the way of sustainability of such project and the feasibility of provision of such services through already existing public health infrastructure of the country. Terms of references and evaluation matrix including the time schedule of evaluation were finalised. The comprehensive evaluation of the project was carried out using both qualitative and quantitative approach. The main tools used in the evaluation were FGD, in-depth interviews of various personnel, check-list etc.

- The stakeholders were strongly in favour of integrating the ear care services to the already existing eye care services established under National Programme for Control of Blindness. Trainers feel that the 'Intermediate module for PEHC worker' developed by World Health Organization is self-sufficient book and is a good resource material for any health worker educated till intermediate level and has science background. They though feel that the project is not financially viable in long term as the demand will increase many fold once the people know that such services are being provided at their door step.

- The trained vision technicians were highly motivated and were seeing patients with ear problems with great enthusiasm. The clinical aspect of service provision is up to the mark. The awareness generating activities amongst the population by them is lacking though.

- The vision centres of Dr. Shroff's Charity Eye Hospital are well equipped for primary ear and hearing care activities. The posters displayed there needs to be improved. Posters in local languages and more ear care related posters should be there.

- The target population of the vision centres were local people and belonged to low socio-economic strata of the society. They were very much satisfied about the services being provided at the vision centres. People's knowledge about the ear care leaves much to be desired. They are following many harmful practices regarding ear care. Many myths are prevailing amongst common people. It cannot be said how much knowledge or practice has improved following the project as no pre- survey assessment of knowledge and practices of local people was done.

- The case studies and FGD have shown that the ear morbidity is high in the locality and ear care services provided by qualified personnel are lacking or inaccessible to them. The vision centres have provided ear services to a number of individuals in its short existence of one and half year. The major cases seen by vision technicians are CSOM, ASOM and wax impaction.

- Based on the views provided by the Stakeholders, Vision technicians and Clients, the novel idea of leveraging existing Vision Centres (VC) to provide primary ear and hearing care services used in the pilot project has been found to deliver good results. It is an effective way of delivering ear care services to the beneficiaries in the resource poor setting by carrying out optimum utilization of the existing infrastructure and manpower.

Chapter 15

Pros and Cons of Integrating Eye and Ear Services

For many years, eye and ear services were together and a part of the same specialty. In 1960s the two departments were segregated on account of expansion in knowledge in both disciplines. Till the beginning of 1990s, Eye and ENT continued to be taught together, as a part of the undergraduate medical school curriculum.

In most parts of the world, eye care and prevention of visual disabilities, is a well-established aspect of disability prevention. Hearing disability causes same discomfort. Still the concept of prevention of visual deficits gained attention and recognition and hearing deficit was like the stepbrother that got left behind. The elder brother has been awarded its due in life and it is now time for him to hold the hand of his younger brother so that he too will get his due place in the world. Ear and Hearing care can be propagated though the channels that are already established in eye care.

In the context of the developing countries, combining eye and ear care services at primary level emerges as a significant strategy for delivering affordable ear care services to marginalized sections of the society. Both blindness and deafness need common strategies to address them as they are important public health issues which are common in "resource poor setting". Both adversely affect the attainment of maximum potential of the individual and there is relative lack of trained manpower for handling both (especially at primary level). Primary prevention is being done though awareness generation by displaying ear and hearing care material along with the eye care material at the various centers. The CBR worker or the members of the community who are already involved in delivering eye care services is being roped in for ear services as well. Combined eye and ear care awareness camps are being organized with little additional equipment and infrastructure (Only training of the CBR worker in detection of ear diseases and hearing loss and filling screening proformas is required). Combined eye and ear care screening camps are being organized by providing otoscope, tuning fork, audiometer, handheld tympanometer, ear drops and other medications in addition to equipment for eye care.

Integrating eye and ear care services at primary level not only reduces the cost of intervention but also lets the ear care service leverage the existing infrastructure of the eye care set up.

It is true that primary screening of hearing impairment is not as well established as screening for visual impairment. It is the time to sit together and devise easy screening tools for the early detection of hearing disorders. There are some areas of concerns while propagating the integration of ear and eye care services. The integration is to be done carefully and at appropriate level. Voice of dissent is expected from the public health functionaries who are supposed to provide integrated services at the ground level. Their motivation needs to be increased. The fear of losing the importance of individual disability once integration is in place is ill founded.

Chapter 16

The way forward

- The pilot project run by Dr. Shroff's Charity Eye Hospital has shown a direction towards achieving the goal of integration of eye and ear care services at grassroots level. It has opened a window of opportunity to train the existing eye technician posted at most peripheral level in ear care and redesign their work profile and designation as eye and ear technician. The pilot project has also highlighted that further such initiatives should be taken up in different parts of the country in order to scale up the project. In developing countries, initiatives focused towards eye and ear care integration need to be taken up on a priority basis.

- The training programme for the vision technicians seems to be adequate. But to fill the gaps, these modifications are suggested so that the project could be scaled up effectively:
  - There is immediate need for standardization of the training material in terms of power point presentations being adopted for training. There is also a need for standardization of number of hours of training to be provided and the quantum of practical exposure.
  - There is also a need for refresher trainings to be provided to the Vision Technicians so that their existing knowledge could be cemented and they could keep abreast with the latest happenings in ear health. This could be in the form of a 6 days training every 6- months which could be a mini form of the primary three months training.

- For such a programme to be successful emphasis needs to be given on generating awareness about the ear care in community in a major way. IEC materials prepared by Society for Sound Hearing were designed keeping in mind the socio-demographic features of majority of common people. These materials should be used extensively for making people more conscious about the ear health. Additionally user friendly IEC material should be developed in the local language and should be used widely.

- The screening camps need to incorporate the awareness building component in a major way. For this purpose, on the days when camp is being organized, there could be use of audio-visual tools or a talk by field worker or Project Coordinator so that there is knowledge dissemination to a large number of people. This would help in reaching out to people across all age groups particularly those aged 0-15 years so that there is early detection of hearing impairment.

- As there has already been a creation of demand for ear care services in Alwar, it is suggested that opportunities could be looked at up-grading the existing eye facility of Alwar centre of Dr. Shroff's Charity Eye Hospital. The Operation theatre of the Alwar centre could be equipped so

that ENT surgeries could be provided at Alwar itself and the ENT specialists could be hired from Alwar and nearby areas. This would provide comprehensive ENT care to the community at Alwar at their door step and would also improve uptake of ear care services.

- The vision technician or similar cadre should be empowered to write prescription for common ear diseases strictly according to standard treatment guideline and only from a list of medicines (as being done by ASHA).

- Linkages of the vision centres need to be established with nearest medical facilities so that necessary medication and surgery could be provided to the patients.

- Since Vision 2020 and Society for Sound Hearing 2030 have almost similar mandate of reducing the avoidable and preventable causes of disability of either eye or ear, it would be better if as an extension of this pilot project, a study regarding eye and ear integration can be undertaken. In this study, one partner would be identified from across the areas where Vision 2020 is operational (vision 2020 would provide support in partner identification and the partner must either have an ENT department or have a tie up with another hospital which has an ENT department). A situational analysis would be carried out first to identify the needs. Thereafter common strategies would be developed which would vary according to the geographical area and manpower availability.

- For scalability, the project should subsequently be taken by the Government. They can replicate the project as they have already eye set up under NPCB. Indian Public Health Standards (IPHS) specifies that there should be one ophthalmic assistant at each community health centres (CHC). S/he can be trained in providing ear care to the masses.

Glimpses of the Evaluation

Waiting area at vision centre

IEC material displayed at vision centre

Ear camp organized at Mustafabad VC

A doctor examining a patient at VC camp

A focus group discussion with men at VC

Examining the VT at work


St. Sradha Charity Eye Hospital

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Annexure1: Patient Record Sheet

Dr Shroff's Charity Primary Vision & Ear Care centre

PATIENT RECORD SHEET

Reg No.		Date	
Name		Father's name	
Age	Yrs Sex M F	Occupation	

Presenting Complaints

	R	Duration	L
Ear Pain /Fullness			
Ear Discharge			
Itching			
Diminished Hearing			
Ringing Sensation			
Others			

Running nose	Y	N	
Blocked nose	Y	N	
Throat pain	Y	N	
Difficulty in swallowing	Y	N	
Headache	Y	N	
Fever	Y	N	

Previous History		
Previous Treatment	Y	N
Medical	Y	N
Surgery	Y	N
Hearing Aid	Y	N
Others		
Medicine Allergies		

Ear/ nose trauma	Y	N
HTN	Y	N
DM	Y	N
CAD	Y	N
Asthma	Y	N
TB	Y	N
Typhoid (recent)	Y	N
Malaria (recent)	Y	N

Examination

	Right			Left				R	L
Auricle	N	M	NE	N	M	NE	Ear Drum		
External Ear canal	N	A	NE	N	A	NE	Normal		
Inflammation	N	Y	NE	N	Y	NE	Perforation		
Wax	N	Y	NE	N	Y	NE	Dullness/ retraction		
Foreign Body	N	Y	NE	N	Y	NE	Red & bulging		
Discharge	N	Y	NE	N	Y	NE	Unsure		
Fungi	N	Y	NE	N	Y	NE	Not examined		
Middle Ear	N	A	NE	N	A	NE	TFT (512 Hz)	R	L
Others							Rinnes		
							Weber's		

Provisional diagnosis

	R	L	R	L	
ASOM					Wax impaction
CSOM					FB ear
OME (Serous OM)					Others
Presbycusis					

Action Needed

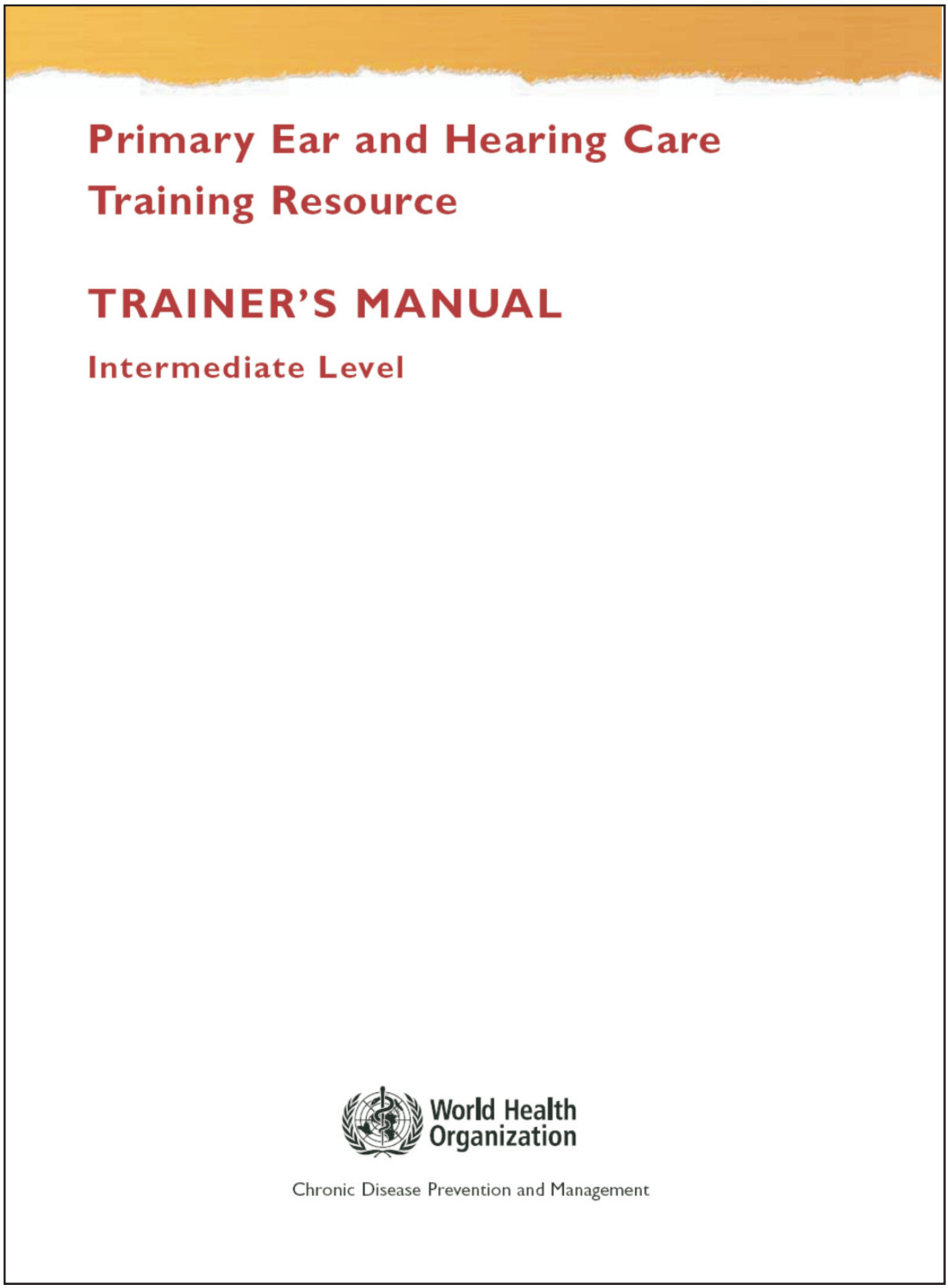
	R	L	R	L	
No Action					Procedure
Medical Rx					Wax / FB removal
PTA/ BERA					Surgery
Hearing Aid					Others

Comments

Signature Date

N= normal, A= abnormal, NE= not examined

Annexure 2:
WHO Training Module used for Training of Vision Technicians



Primary Ear and Hearing Care Training Resource

TRAINER'S MANUAL

Intermediate Level

World Health Organization

Chronic Disease Prevention and Management

Annexure 3: Interview schedule for Stakeholders

Evaluation of Primary Ear and Hearing Care pilot project

Interview schedule for Stakeholders

Name of the Respondent _____

Designation _____

Name of the Organization _____

1. What is your understanding of Sound Hearing 2030?
2. What were the objectives with which the primary ear and hearing care pilot project was initiated?
3. What is your view on the background model (combining eye and ear care) being used for the project?
4. What type of input have you had in the development of this primary ear and hearing care pilot project with respect to the following:-
   a) Designing the project: Yes/No
   b) Identification of suitable centres for integration of eye ear services: Yes/No
   c) Designing the training pedagogy: Yes/No

   If yes, how?

   d) Training of Vision Technicians: Yes/No

   If yes, how?

   e) Development of formats for recording cases: Yes/No
   f) Awareness generation though community based camps: Yes/No
   g) Development of Community Linkages: Yes/No
5. How much time did it take to make the project operational?
6. Please tell us the frequency and procedure you adopt to assess the performance of the Vision technicians.
7. Please explain to us the reporting mechanism being adopted for the project?
8. Please let us know the details of your coordination with government/ non-government organizations for implementing the project?
9. What were the problems faced during the implementation of the project?
10. What is the fund flow mechanism being adopted for the project?
11. What in your opinion have been the achievements of this project?

12. Is the project cost effective? Can you share with us the details of expenditure incurred during the project?
13. What short and long-term opportunities do you see for this project?
14. How can we make this project more sustainable?
15. What hurdles do you think would be faced in sustaining the project including the cost implications? (Cash flow, manpower etc.)
16. Do you have suggestions for scaling up of program delivery?
17. There is no such thing called vision centres in public health system of our country. If the Government of India wants to replicate your project, how can they integrate it in their health care delivery system?
18. Do you feel that to scale up integration of eye and ear, is there a need of integrating Vision 2020 and Sound Hearing 2030?

Annexure 4: Interview schedule for Trainers

Evaluation of Primary Ear and Hearing Care pilot project
Interview schedule for Trainers

1. Name: _____
2. Age: _____
3. Sex: _____
4. Education: _____
5. Current job description: _____
6. Why is the need of integrating the ear care with already existing eye centres? (Record verbatim)
7. Do you know of any such related project anywhere in the world? Yes/No
8. If yes, where?
9. Were you aware of WHO training modules before the training? Yes/No
10. If yes, did you undergo training in context of WHO modules? (Record how)
11. Were any standardized training materials prepared by you for training? Yes/No
12. Were the training materials pretested? Yes/No
13. Do you feel that there is a need for pre-testing the material?
14. Please comment on the training methodology with respect to its:
    a. Content:
    b. Methodology:
    c. Duration:
       Theory
       Practical
       Duration of training in the community
    d. Resources used for training:
       Flip Charts
       Modules
       Charts
15. How was standardization of training done?
    By pre test & post test
    By consensus diagnosis
    Any other
16. Was any Pre or Post training evaluation carried out? Yes/No
17. Were the trainees trained in record maintenance? Yes/No
18. After the trainees were posted at their respective vision centre, how frequently their monitoring was done?

19. What type of monitoring was done?
    a) Supportive- on the job supervision
    b) Examination of records (audit)
    c) By calling the Technicians to Shroff's centre and then assisting in managing their problems
20. After Implementation of programme how feedback was obtained?
21. After Implementation of programme how frequently feedback was obtained?
22. What were common Problems encountered by the vision technicians?
23. What are your views on continuous education or refresher training of the vision technicians:
24. Are you satisfied with the selection and background of the trainees?
25. Comment on the IEC materials developed by SSH which you use in your vision centres. (Record in terms of clarity, comprehension by the technician and the clients)
26. What are the current limitations of the project? (Record verbatim)
27. Should the work profile of all vision technicians be widened to incorporate management of common ear problems so that they can diagnose more and more patients with ear diseases and treat them?
28. Should the vision technicians be re-designated as eye and ear technicians?
29. How do you plan to sustain the project?
30. How do you plan to scale up the project?
31. Can the project be taken by public health facilities already available in your city? If yes, how?
32. Do you feel that specialists should visit vision centre?
33. If yes, how often?
34. Do you visit vision centres?
35. If yes, how often?
36. What preferential treatment a patient who is transferred from the vision centre to SCEH gets?
37. Do you feel that to scale up integration of eye and ear, is there a need of integrating Vision 2020 and Sound Hearing 2030?
38. Do you feel the need for sensitizing policy makers so that in national context ophthalmic assistants can be upgraded to ophthalmic and ENT assistants?
39. If yes, what could be the strategies?
    a) By incorporating ENT component in training of OA/ vision technicians
    b) By giving them dual degree
    c) By having common camps

Annexure 5: Interview schedule for Vision Technicians

Evaluation of Primary Ear and Hearing Care pilot project
Interview schedule for Vision Technicians

1. Name: _____
2. Age: _____
3. Sex: _____
4. Residence: _____
5. Marital status: _____
6. Educational status: _____
7. Previous work experience: Yes/No _____
8. If yes, please describe:
9. Working as Vision technician since how long: _____
10. Job description as Vision Technician (Describe):
11. Mention the added responsibility under the Primary Ear and Hearing Care project (diagnosis of ear problems, wax removal (syringing), wax treatment, F.B. removal, creating awareness, and referral, follow up): Tick the appropriate activities.
12. What is your view on the background model of combining eye and ear care being used for the project (probe for additional responsibility, more job satisfaction, more monetary benefits etc.)- Record verbatim
13. Comment on training methodology imparted to you for Primary Ear and Hearing Care project:
    a. Contents of the training: Adequate/ Inadequate
    (i) Anatomy of Ear & Basic physiology of hearing: Adequate/ Inadequate
    (ii) Common ear diseases: Causes, Identification, treatment and prevention: Adequate/ Inadequate
    (iii) Hearing loss: types, common causes, identification, diagnosis, treatment, guidance: Adequate/ Inadequate
    (iv) Congenital hearing loss: Causes, identification, diagnosis, treatment, guidance: Adequate/ Inadequate
    (v) Community based approach including approach to parents of Deaf/ HI child: Adequate/ Inadequate
    b. Duration of the training: : Adequate/ Inadequate
    (i) Theory: Adequate/ Inadequate
    (ii) Practical/ Hands-on: Adequate/ Inadequate

a. Otoscopy: Adequate/ Inadequate
b. Hearing assessment using tuning forks, OAE machine: Adequate/ Inadequate
c. Tymapnometry: Adequate/ Inadequate
d. Behavioural assessment: Adequate/ Inadequate
e. Wax and foreign body removal by syringing and foreign body removal : Adequate/ Inadequate
c. Methodology used for the training: Describe methodology
d. Resources supplied to you for training (books, algorithms etc.): Record verbatim
e. Training regarding use of awareness material: Adequate/ Inadequate
f. How many cases did you observe during training? Record the number of cases
g. How many cases did you do under supervision?
a. Otoscopy: _____
b. Hearing assessment using tuning forks, OAE machine: _____
c. Tymapnometry: _____
d. Behavioural assessment: _____
e. Wax and foreign body removal by syringing and foreign body removal : _____

14. Do you feel the need for refresher training: If yes,
    a. How frequently:
    b. Methodology: (In field/ classroom/ mini form of primary training)Tick the appropriate information
    c. Duration of refresher training:
15. Proportion of time devoted to ear care for PEHC project: (No. of hours in a week, No. of days in a week, fixed days in a week)
16. Number of cases seen on a typical day: Record the number of cases
    a. For eye diseases:
    b. For ear diseases:
17. Number of camps organised by you since the inception of the project.
18. What is being done in the camps? (IEC, health talk, screening, referral)
19. How do you make people aware about the ear diseases?
20. Comment on the infrastructure available to you for seeing a person with ear disease:
21. Comment on the infrastructure available to you for referring a person with ear disease to a referral centre:
22. Collaboration with local health workers (AWW/ ANM/ ASHA etc.):

23. Collaboration with any local NGO:
24. Interaction with local leader:
25. Comment on the referral linkages:
26. Do you feel that specialist should be coming to the field to help you in treating different outdoor cases?
27. If yes, how frequently (once a month, once in three months, once in six months, you go along with the patient)
28. Comment on the IEC material available at the vision centres (Record for Eye and Ear Separately): Probe in terms of adequacy, clarity, comprehension)
29. Do you use any other material? (Record if any other material is being used)
30. Is there an integrated IEC material available for eye and ear care?
31. Do you require any more man-power for smooth functioning of the vision centre as it is also serving as a centre for ear diseases?
32. Comment on the clients' acceptability of the vision centre as also a centre for ear care:
33. Comment on clients' accessibility of the vision centre:
34. Do you go from house to house for spreading awareness about the ear diseases and making your centre more popular?
35. Do you feel any limitation in providing ear care services?
36. If yes, what are your limitations in providing the quality ear care to the community? (Record Verbatim)
37. Are the patients being charged for Eye Problems? Yes /No
38. If yes, please provide us the details.
39. Are the patients being charged for Ear Problems? Yes /No
40. If yes, please provide us the details.
41. How can we improve the programme?
42. Please mention on a scale of 1 to 10, where 1 is very dissatisfied and 10 is extremely satisfied, your satisfaction level for the PEHC project.
43. If scale is low, what should be done for improving your satisfaction level?
44. What are your suggestions for sustainability of the project?
45. Now since this centre provides both eye and ear care what should be the new name of this centre?

Annexure 6: Interview schedule for Clients

Evaluation of Primary Ear and Hearing Care pilot project
Interview schedule for Clients

1. Age:
2. Sex:
3. Marital status:
4. Residence:
5. Education:
6. Occupation:
7. Family income (per month):
8. Number of family members:
9. Why have you come here?

   For Ear Problem (Record type of problem)

   For Eye Problem (Record type of problem)
10. Is this your first visit to the centre? Yes/No
11. If no, what was the purpose of previous visit?
12. How much time did it take to reach the vision centre from your house?
13. How long did you have to wait to see the Health care Provider/ Vision Technician?
14. What are the services provided at this facility (Record Separately for Eye and Ear services)
    a. Examination for ear pain/ discharge
    b. Syringing
    c. Wax Removal
    d. Foreign body removal
    e. Pure Tone Audiometry(if being done at the centre)
    f. Any other (specify)
15. How did you come to know that ear car services are being provided?
    a. Through Vision Technicians
    b. Through camps
    c. Through awareness campaigns
16. Please provide us the details of the amount charged for each of the following services?
    a. Examination for ear pain/ discharge
    b. Syringing
    c. Wax Removal

d. Foreign body removal

e. Pure Tone Audiometry(if being done at the centre)

f. Any other (specify)

17. Is the cost prohibitive for you to attend the centre regularly?

18. Are you satisfied with the services provided at the vision centre? Please give score between 1 to 10 where one is very dissatisfied and ten very much satisfied.(Record Separately for Eye and ear services)

a. Eye care services

b. Ear care services

19. Were you ever referred to main centre in Delhi for your Eye/Ear Problem(Record)

20. If yes, what was the problem?

21. Did you undergo surgery at the main centre?

22. If yes, mention the surgery. (See the records)

23. Where do you go for follow up?

24. What more facilities you get at this centre?

25. How much are you willing to spend for a comprehensive ear care services at the centre?

26. Can you make out the messages displayed at the various posters displayed at centre? Record in terms of content/clarity

27. In your opinion is it better that this centre should provide both eye and ear services? If yes, why?

28. Has this centre made you more aware about the ear care and different diseases of ear after it has started to provide ear care services beside eye care?

29. What are the problems you face during the visit to the centre (irrespective of services you are seeking)?

30. How can we make the centre better so that more and more people come and visit it regularly?

31. Will you recommend the centre to your contacts or neighbours?

Annexure 7: Guidelines for Focus Group Discussion: Beneficiaries/ Non Beneficiaries

Evaluation of Primary Ear and Hearing Care pilot project
GUIDELINES FOR FOCUS GROUP DISCUSSION: BENEFICIARIES/ NON BENEFICIARIES

- The discussion with beneficiaries shall be held in the Centre premises. One of the rooms or a suitable area shall be used for this purpose.
- 10 beneficiaries from each block shall be chosen for the group discussion.
- The seats within the room shall be arranged in a circular manner to facilitate discussion.
- The Discussion shall be facilitated by a Facilitator and recorded by a recorder.
- The facilitator shall introduce the topic briefly in the first 10 minutes.
- The facilitator shall
  - Build a rapport with the participants and try to maintain an informal environment.
  - Encourage the participants to discuss the various aspects of the topic.
  - Ensure that all participants have an equal opportunity to express their views.
  - shall resolve any conflict of ideas/opinions amicably
- The discussion would be concluded in approx. 50 minutes
- The discussion points and views expressed shall be noted down by the recorder
- Before the initiation of the discussion, demographic details of the participants would be noted.
- The main topics of discussion shall include:
  - Importance of ear and hearing
  - Care of the ears in a normal person
  - Common problems of the ear
  - Factors inducing Hearing impairment
  - Common myths and beliefs regarding ear care and hearing
  - Prevention of ear diseases/Hearing impairment.
  - Experiences regarding ear problems and actions initiated, type and place of care sought.
  - Treatment of ear diseases/deafness
  - Perception regarding source of awareness about ear care in the area
  - Awareness regarding ear care services in their area (probe about Shroff's Charity Eye Hospital).
  - Perception about the ear care services being provided in the area (probe about access to the facility, average waiting time, counselling by technician etc.).
  - Suggestions for improving the ear care services in their area.

Annexure 8: Check-list for observation at vision centres

Evaluation of Primary Ear and Hearing Care pilot project
Check-list for observation at Vision Centres

Check-list of infrastructure at vision centre

Item	Not available	Inadequately available	Available	Remarks
IEC materials displayed within vision centres				
Updated records of activities at the vision centre				
Equipment				
Head mirror				
Bull's lamp				
Otoscope				
Tuning fork				
Syringe and suction cannula				
Kidney tray				
Boiler				
Waste Disposal				

Check-list for observation of vision technicians while at work

Item	Poor	Average	Good	Remarks
Interaction with patient				
Average time given for a patient				
OPD procedure				
Examination of the ear				
Syringing				
Foreign body removal				
Tuning fork tests				
Management of crowd				
Referral of patient				
Follow up of patients				
Sterilization of equipment				
Filling of Proforma				
Maintenance of records				