SIGHTREACH:
AN EYE CARE PROGRAM
FOR THE UNDERSERVED AND CHILDREN

MATCHING GRANT
SECOND ANNUAL PROGRESS REPORT
SEPTEMBER 1, 1994-DECEMBER 31, 1995

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ACRONYMS

AAO	American Academy of Ophthalmology
CBM	Christoffel Blindenmission
DIP	Detailed implementation plan
EPI	Expanded program on immunization
FHF	Fred Hollows Foundation
FUDEM	Fundación para el Desarollo de la Mujer Salvadoreña
HH	Health for Humanity
HSA	Health Surveillance Assistant
IAPB	International Agency for the Prevention of Blindness
ICEH	International Centre for Eye Health
ICO	International Congress on Ophthalmology
IEF	International Eye Foundation
IOL	Intraocular lens
ITP	Itinerate Teachers Program
MG	Matching Grant
MOH	Ministry of Health
MOE	Ministry of Education
NCBD	National Committee for the Blind and Deaf
NCPB	National Committee for the Prevention of Blindness
NGO	Non-governmental organization
OMA	Ophthalmic Medical Assistant
PAHO	Pan American Health Organization
PAOS	Pan-American Ophthalmology Society (SOP)
PEC	Primary Eye Care
PVC	Private Voluntary Cooperation (USAID Office of)
ROP	Retinopathy of prematurity
SOMA	Senior Ophthalmic Medical Assistant
TEM	Traditional eye medicines
TH	Traditional healers
TOT	Training of Trainers
USAID	United States Agency for International Development
VAD	Vitamin A deficiency
VAO	Vision Aid Overseas
WHO\PBL	World Health Organization\Prevention of Blindness

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I. BACKGROUND

The following is the second annual progress report for the IEF Matching Grant program, "SIGHTREACH: An Eye Care Program for the Underserved and Children," covering a sixteen month period from September 1, 1994 to December 31, 1995. The **SightReach** program is composed of two separate but related components (ResPack and ChildSight). IEF has chosen the option of reporting the activities of all four quarters in the Annual Report, an option stated in the Cooperative Agreement contract (# FAO-0158-A-00-3053-00), thus fulfilling the reporting requirements for the year. The report discusses achievements and problems by objective, supported by additional documentation as attachments.

A. Program Description

Component One: ResPack

This component seeks to redress an acute imbalance of eye care services in Latin America; it is currently being implemented in Guatemala, Honduras, El Salvador, and Ecuador. The objective of this program is to provide young, Latin American ophthalmologists with an appropriate incentive to work in rural areas, or smaller cities and peri-urban communities, where no eye care services are currently available. Rural populations and residents of smaller cities in much of Latin America have little or no access to eye care services in spite of having a significant number of ophthalmologists. The reason for this lies in the fact that 95% of the ophthalmologists in Latin America live and work in major urban centers. Younger doctors and recently graduated residents rarely have enough money to buy a complete set of equipment to open a private practice, nor can they compete with the large number of older ophthalmologists who have well-established practices in the cities. Thus, we find many younger ophthalmologists working part-time for urban hospitals and/or other doctors at low wages.

The IEF has put together a comprehensive package of ophthalmic equipment that enables these young doctors to go into private practice in under-served areas. The IEF makes this package available for purchase for selected ophthalmologists who are willing to work in rural areas, smaller cities, or poor peri-urban areas, where there are no eye care services. The basic optional items has been available for approximately $10,000. The IEF provides support in terms of donations of medical and surgical supplies to those doctors who provide free care to the most needy segment of the local population. To assist these physicians in developing successful private enterprises, the IEF provides training in ophthalmology clinic management and equipment maintenance and repair.

In summary, the IEF feels that this project offers a viable solution to the imbalance of eye care in Latin America in a long-term, sustainable fashion, because it provides a practical incentive to provide services in under-served areas and promotes private enterprise. It also encourages these young doctors to devote a small part of their time to provide free services to community projects and to those individuals who cannot afford eye care.

Component Two: ChildSight

This component is a Congressionally earmarked initiative which seeks to enhance the technical and service abilities of Ministries of Health and non-governmental organizations in six countries to provide sight restoring operations and general eye care services for visually impaired children. The WHO estimates that 1.5 million children are blind in the world due to a variety of etiologies. Many of these children are housed in blind schools or shelters. However, the vast majority of these children are cared for by family members at home, never having the chance to be seen by a general health worker. Most of those who are seen by a general health worker are not referred due to a lack of understanding of what could be done or where children should be sent.

Through the use of existing IEF field infrastructure and staff, and partner NGOs, this project seeks out visually impaired children; provides sight restoring operations where appropriate; and provides primary, secondary, and tertiary training in pediatric ophthalmology. The objectives of the project include 1) determining the leading causes of childhood blindness in blind schools using a standardized survey method, 2) conducting workshops for general medical and health personnel and NGOs in the recognition and referral of blind and visually impaired children, and 3) strengthening the capacity of tertiary ophthalmic centers to perform pediatric surgery in infants and children through technical training and improvement of surgical instrumentation and equipment.

IEF is administering the SightReach program in six countries where IEF currently has infrastructure in place and where eye care is needed. Two countries in each of three geographic regions of the world were chosen to be included. In Latin America, IEF has strong field offices in both Guatemala and Honduras operating in vitamin A, onchocerciasis and eye care projects. In Africa, IEF has a long history of support for eye care projects in Malawi and has also begun new activities in the recently independent country of Eritrea. In eastern Europe, IEF has concluded three successful years of an eye care program in Bulgaria, and formalized its contacts in Albania with the start of the current program.

B. Program Objectives

The program objectives are as follows:

Component One: ResPack (Guatemala, Honduras, El Salvador, Ecuador)

1. Provide ophthalmologists with access to equipment, enabling them to establish practices in under-served areas (3-5 per year in each country)

2. Provide training to participants in ophthalmology clinic management, and equipment maintenance and repair (3-5 participants per year in each country)

3. Increase outreach of eye care services to Underserved areas through community eye care services

Component Two: ChildSight (Guatemala, Honduras, Albania, Malawi, Eritrea)

1. Complete one survey of the children in the schools for the blind in each country; analyze and disseminate the results

2. Conduct four workshops in each country for nurses, physicians, and community health workers on identification of ocular conditions in children, treatment, and referral

3. Strengthen the capacity to perform pediatric ophthalmology and surgery at tertiary centers through the provision of training, equipment, and supplies.

II. OVERVIEW OF YEAR TWO

A. Comparison of actual accomplishments with objectives

Component One: ResPack:

There were fewer obstacles to overcome in the implementation of the ResPack program this year than the first year. Most of the groundwork such as the writing of the DIP, mission and country clearance, and negotiations with equipment manufacturers and distributors took place in the first year. This allowed us to concentrate in large part on meeting the objectives.

El Salvador and Ecuador were added to the SightReach program in February of 1995. The program was embraced quite readily in Ecuador with eight young ophthalmologists applying as ResPack candidates immediately. In El Salvador, however, the process has been slower. We replaced our original representative in San Salvador with another more active in the ophthalmic community, but the relatively slow start may also be indicative of the difficult economic situation in El Salvador. Trips have been made by IEF HQ and field staff to spread interest amongst other NGOs and recruit ophthalmology residents. Please see Appendix I, Trip Reports, El Salvador, January 9-11, 1995, April 24-25, 1995, and December 11-12, 1995.

Objective 1: Provide ophthalmologists with access to equipment, enabling them to establish practices in under-served areas (3-5 per year in each country).

During this reporting period, two more ophthalmologists in Guatemala have purchased their equipment making a total of four to date. Five more Honduran doctors have paid for and received their equipment, for a total of six in that country. In addition, two more doctors from Guatemala and five more from Honduras have committed to participate in the ResPack program and are in the process of procuring their loans. In Ecuador there has been a quick response from ophthalmologists, and seven are accepted into the ResPack program. Five of these doctors have already purchased their equipment, while two more are still seeking funding to finance the purchase of their equipment. Please see Attachment A for maps of clinic sites.

El Salvador has had a slower response, in part due to the lack of a true functioning representative, but perhaps indicative as well of the current difficult economic situation. Right now there is one El Salvadoran, Dr. Alfredo Levisohn, finishing his residency in January 1996 at the Rodolfo Robles Hospital in Guatemala. He plans to return to El Salvador immediately upon graduating and wishes to open a clinic in a secondary city. Another doctor, Dr. Perez, has already finished his residency and is currently working in the FUDEM Ophthalmology Clinic and also expressed a high degree of interest in participating. We have also met with four other residents from the Rosales Hospital in San Salvador, who all expressed a high degree of interest in the program. Three of these four doctors are from and have their families in rural areas of El Salvador and wish to return and set up a clinic. Two of these candidates are in their second year, and two are in their first year of residency. The following table is a summary.

Country	No.	Participant Name	Accepted	Basic	Micro	Cost	Pract.	Pop. Served	Clients Seen
GUATEMALA	1	Orlando Oliva	x	x	x	$13,000	9/94	200,000	1200
	2	Sidney Morales	x	x	x	$5,600	1/95	350,000	2700
	3	Gonzalo Cruz	x	x	x	$9,800	4/95	500,000	700
	4	Paul Cifuentes	x	x		$5,700			
	4	Antonio Hernandez	x	x	x	$5,700	8/95	200,000	610
HONDURAS	5	Sergio Zuñiga	x	x		$4,700	2/95	50,000	400
	6	Jorge Cisneros	x	x		$4,300	1/95	50,000	1430+
	7	Denis Espinal	x	x		$4,700	12/94	50,000	576
	8	Ricardo Rivera	x	x		$4,100	8/95	50,000	320
	9	Doris Alvarado	x	x		$4,300			
	10	Daniela Salinas							
	11	Luisa Rojas							
	12	Xiomara Garay							
	13	Daphne López							
ECUADOR	14	Rosemary Guamán	x	x		$4,500		120,000	
	15	José Viteri	x	x		$4,500		?	
	16	Victor Carrión	x	x		$4,500		50,000	
	17	Jorge Rivera	x	x		$4,300		150,000	
	18	Graciela Ruiz						27,000	
	19	Manuel Alvarez	x	x	x	$9,425		?	
	20	Pablo Zeas							
TOTALS						$89,125		1,797,000	

Objective 2: Provide training in ophthalmology clinic management and equipment maintenance and repair.

The first of these training was conducted in Guatemala in November 1994. Participants from Honduras joined the Guatemalan participants in Guatemala City where they received both training over the course of a weekend. Javier Prada López of the Disturbuidora Optica of San Jose Costa Rica and Al Levenson of Orbis International gave the equipment maintenance and repair training, and both David Green, consultant, and Dr. Juan Battle, consultant gave the clinic management training. Please see Trip Report to Guatemala-Diana Schwartz, November 1994.

The second edition of equipment maintenance and repair was held for the Honduran and Guatemalan participants separately on consecutive Saturdays, October 9 and October 16, 1995. Please see Trip Report Guatemala-Ellen Parietti, October 1995. Al Levenson and Javier Prada again were the instructors. The workshops were held separately this year for a few reasons. First, due to the higher volume of participants and the desire to facilitate a "hands-on" learning environment, separate workshops were held for the Guatemalan and Honduran participants. Secondly, various scheduling conflicts arouse when we tried to schedule the two consultants for the clinic management training. Thirdly, a needs assessment conducted by the new program officer in HQ reflected a need to re-orientate the workshop content to fit more to the participants current realities. The second clinic management training will be held for Guatemala and Honduras together so the participants can share with each other their experiences and learn from each other. Another goal of this meeting is to formalize a support strategy for the ResPack participants.

Objective 3: Increase Outreach of Eye Care Services

There are four ResPack participants who have had the opportunity to participate in community project through the Lion's Club SightFirst program. This is a program which provides $100 reimbursement to the ophthalmologist per cataract surgery performed. Dr. Gonzalo Cruz, Dr. Antonio Hernandez, and Dr. Sidney Morales have all worked with the Lion's program. They have performed surgeries using their ResPack equipment at no charge to the patients. Dr. Antonio Hernandez provided this service in Jutiapa where he then set up his ResPack clinic. Dr. Gonzalo Cruz was unable to participate in the SightFirst program in Huehuetenango, where he has his clinic because they do not have a Lions club, but did it in Quiché. Dr. Sidney Morales participates in a way unlike the other doctors. He takes referrals from the SightFirst screening and operates on them at his own permanent clinic. This is because, as mentioned in the last annual report, Dr. Sidney Morales has a very successful and high volume clinic in the town of Morales where he, along with another ophthalmologist, Dr. John Cheatham, attend to many people including a large percentage of charity cases. People who are unable to pay are not charged. As was Dr. Morales' experience with community outreach work, the doctors that have worked with the SightFirst program have seen that this work benefits their businesses, giving them higher visibility in the community.

Dr. Jorge Cisneros of Honduras is another outstanding example of community outreach of eye services. Located in Choluteca near the Nicaraguan border, Jorge is the only ophthalmologist serving a population roughly half the size of Tegucigalpa. His practice is part of the Clinica San Francisco de Asisi. Run by the Catholic church, this establishment strives to meet the medical needs of the people. This church is involved in community outreach, having several projects ranging from housing to job training. While Dr. Cisneros has not been able to perform surgeries as part of his ResPack clinic services due to the lack of an operating microscope, he has been promoting the importance of eye screening throughout his community of Choluteca. He has held community educational talks, trained teachers to conduct visual acuity tests for their children, and hosted both radio and television programs on eye care. Please see Attachment B, Jorge Cisneros's activities, Trip Report, Honduras October 1995, Ellen Parietti.

IEF HQ has been able support community outreach with donations of pharmaceutical and surgical supplies sought from US corporations. These donations are given to program participants as all receive patients of very low resources. The volume of donations of surgical product have decreased over the past two years. These donations are also come short dated and fewer useful pharmaceutical are provided (eye wash vs antibiotics). Being that all of the consumables needed for a cataract surgery are costly as is the rental of an operating room, there is a limit to the number of cataract surgeries that have been performed as a part of outreach services.

COMPONENT #1: ResPack
Second Annual Report Period -- Sep. 1st, 1994 - Dec. 31st, 1995 -- Cumulative Progress

Project Goals: 1. **To expand the availability of and access to eye care services by facilitating young ophthalmologists to establish practices in under-served areas.**

Objectives	Progress	Constraints	Third year
1. Provide access to equipment packages Guatemala Honduras Ecuador El Salvador	 6 participants; 4 estab. practices 11 participants; 6 estab. practices 6 participants; 5 estab. practices 0 participants; 0 estab. practices Value of equipment: $89,125	 difficulty raising funding, commercial credit not possible, customs charges high, fierce competition among ophthalmologists	 continue enrolling; 2 ophthalmologists continue enrolling; 2 ophthalmologists continue enrolling; 3 ophthalmologists continue enrolling; 3 ophthalmologists Total participant 30
2. Provide training: practice mgt. (PM) & equipment maintenance (EM). Guatemala Honduras Ecuador El Salvador	 comp. PM x 1; EM x 2 comp. PM x 1; EM x 2 none none	 -PM tr. needed revisions to meet information needs of participants. -Late Mission approval, budget restrictions	 continue PM & EM course development; institutionalize PM, EM courses. conduct courses conduct courses
3. Increase outreach of eye care services Guatemala Honduras Ecuador El Salvador	 outreach conducted; cataract campaigns some outreach conducted; educational start-up phases; equipment received start-up phases;	 unfamiliar with outreach activities; community ability to pay for services; need for microscopes and other equipment for surgery	 continued one-on-one support; investigate market survey; develop IEC materials for promotion; support NPBCs and other support structures. aggressively seek donations of surgical equipment support follow-up of ChildSight screening with secondary screening/referrals develop "cataract kit"

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Component Two: ChildSight:

Objective 1: Conduct surveys of the children in blind schools.

Surveys of the blind schools were completed in, Guatemala, and Honduras during the first year of the project. In this reporting period, the results for Honduras were entered into the WHO/PBL Eye Examination Record for Children with Blindness and Low Vision database, and a report produced. Please see Attachment C, Childhood Blindness and Eye Disease in Honduras.

Guatemala encountered some problems in processing the data collected by Dr. Federico Hermes. Staff in Guatemala first encountered problems entering data due to the software entry requirements. Later, headquarters noted numerous discrepancies on the data forms that required clarification and returned for correction. To assist in data entry and reporting, the data was sent to England to be processed by Dr. Clare Gilbert, ICEH. A full report is forthcoming.

In Bulgaria, Dr. Susan Lewallen conducted surveys of the blind schools in Sofia and in Varna with the assistance of local ophthalmologists Drs. Lolova, Boneva, and Kusnetsov. The most common cause of visual loss was found to be Retinopathy of Prematurity (ROP), a condition that results when newborns, usually premature births, are placed in incubators with overly high levels of oxygen. Workshops were given on the prevention of ROP in December 1995. Retinal dystrophies and maternal rubella were the other leading causes of blindness. Sixty five percent of the children could be helped, the majority by low vision aids, others by, spectacles, glaucoma follow-up, or surgery. Please see Attachment D, Report of Assessment of Blind Schools in Bulgaria.

In Eritrea, Dr. Michael Eckstein from the International Centre for Eye Health (ICEH) assisted Dr. Desbele Gebregrioris with the survey of the Abraha Bahta School for the Blind. Corneal scarring due to Vitamin A deficiency was the primary cause for visual loss, with traumatic injury accidental land mine and grenade explosions being the second most common cause. Congenital cataract is the most common treatable cause. Please see Attachment E, A Survey of Children Attending the Abraha Bahta School for the Blind.

In Malawi the blind school surveys were completed during the first reporting period. During the second reporting period screening in the remaining schools was completed in the central and northern regions. A total of 171 children were screened by OMAs with the following results: The top three causes of visual loss were due to measles, traditional eye medicines, and cataract; many of the children in the schools had useful residual vision who might have sufficient vision to be taught to read ink print, and; the majority of all children screened (82%) could be assisted in some useful manner. Of these children, 72% could be assisted by educational placement and or rehabilitation; and 28% could be assisted by medical/surgical interventions and specialized refraction.

During the reporting period, Dr. Clare Gilbert was the author an article comparing data from blind school surveys in three African countries (Kenya, Malawi, Uganda). The data from the Malawi blind schools accounts for half of the data set. General conclusions are that more than 20% of the children had sufficient vision to enable them to attend normal schools; vitamin A deficiency and measles were the major causes of blindness; and cataract, responsible for 10-25% of all cases, were the major surgically correctable causes of severe visual impairment (SVI) and blindness (BL); and 25% of all children are SKI or blind due to avoidable conditions (measles, VAD, cataract). The ability to compare data from different countries points to the usefulness of a standardized system for data collection. See attachment F, Gilbert C, et al. "Causes of childhood blindness in East Africa: Results in 491 pupils attending 17 schools for the blind in Malawi, Kenya and Uganda." Ophthalmic Epidemiology.

Objective 2: Conduct workshops on identification of ocular conditions in children, treatment, and referral.

Workshops on the screening and detection of ocular conditions for health personnel and school teachers in Guatemala and Honduras were held in October 1994.

In Guatemala, two workshops were conducted. One was for Ministry of Health (MOH) personnel including physicians, professional nurses, health technicians, and auxiliary nurses. The second workshop was held for rural health workers with a joint session with MOH personnel to stress the importance on the referrals. These courses were implemented by IEF in conjunction with the National Committee for the Blind and the Deaf. Please see Attachment G, *Seminar-Taller, Atención Primaria de la Salud Ocular.*

In Honduras, two sets of workshops were held with teachers. The first were held by Lumen XXI, a local organization dedicated to epidemiological investigation and training about ocular health. The communities were selected from those in which IEF is currently involved in child survival activities and are located in peri-urban Tegucigalpa and involved the capacitation of 60 participants. See Attachment H, *Capacitación en detección oportuna de trastonrnos visuales en niños* and *informe sobre la capacitación*, a report on the activities.

The second set involved the training of special education teachers from all departments of Honduras except the Bay Islands and Gracias A Dios. Four separate workshops were held, one each in Tegucigalpa, San Pedro Sula, Comaguela, and Choluteca, with teachers attending the local workshops. Each special education teacher in turn trained the first grade teachers from their schools in the administration of visual acuity tests. The results from these screening have been collected and have been entered into a data base with the collaboration of the MOE. A total of 242 elementary school teachers, 10 auxiliary nurses, and 250 general physicians have been trained as a result of these capacitations. Please see Attachment I, *Taller Sobre Deteccion Temprana de Problemas Oculares Dirigido a Maestros de Educacion Especial* and J, *Memoria: Capacitacion a Maestros de Educacion Especial,*the report on these activities.

In Albania, development of the workshops has been delayed due to several reasons. Due the rapid changes Albania is undergoing since its democratic elections, a great deal of the government is in a state of flux, including the economy, the health system and within ophthalmology. Health care reforms since 1991 are grappling with development of policies and standards let alone rebuilding basic infrastructure. Against this background IEF's attempts to initiate focused workshops addressing childhood blindness with clinical and public health strategies have been difficult to envision within a system that is just re-building.

To accelerate activities in Albania, IEF contracted Ms. Eun-Joo Chang as a consultant to visit Tirana July 29 - August 4, 1995. The primary purpose of the visit was to make recommendations for the design and implementation for the ChildSight workshops and to consider ways to institutionalize primary eye care within the emerging national plans. Recommendations included conducting a national conference on the prevention of blindness, a training of nurse trainers, a training of chief pediatricians, and training for piloting a district-level screening program. See Attachment K, Trip Report: Albania, Eun-Joo Chang.

The national conference for ophthalmologists is key to a sustainable program. The success of a community-based approach depends on the support of all ophthalmologists who will support those persons screening children and who will also receive the referrals. The national conference will also provide the necessary general understanding of national eye care needs including childhood blindness as well as the necessary public health orientation required. The training for nurse trainers will help ensure that the greatest number of children will be screened and will be the front line MOH staff in contact with the greatest number of children. Training for pediatricians to establish the roles and responsibilities between then the ophthalmologists and nurses. Finally, the fourth workshop would concentrate on developing a team approach at the district-level for screening and referral.

The timetable was to hold the national workshop in November 1995, but was postponed until February 1996. The second and third workshops will be held back-to-back in April 1996 and the district workshop held in June 1996.

As a secondary support activity, IEF is coordinating activities with Health for Humanity (HH), a PVO based in Chicago. HH and IEF co-wrote a proposal for funding from the Soros Foundations' Open Society for Albania to implement a project to improve eye services. The first year of the project was to strengthen the Tirana hospital and two other regional hospitals with equipment and training to enable them to serve efficiently as referral sites. The areas of direct collaboration between HH and IEF have been in several areas. IEF assisted HH in the identification and purchase of the equipment for the three referral sites and in shipping the equipment to Tirana. Secondly, HH and IEF have co-hosted a pediatric ophthalmologist to visit Tirana (see below). This particular project, which seeks funding for an additional four years from the Soros foundation to expand these activities, and the ChildSight project are envisioned to be part of one national plan. Please see Attachment L, Health for Humanity Report of Activities for 1995.

In Bulgaria, The first of four workshops for non-ophthalmologists was held in Bulgaria from 13-15 December 1995. This three-day workshop for micro-pediatricians (neo-natalogist) was held at the Stara Zagora Medical University in Stara Zagora covering the south-east part of Bulgaria. Approximately 40 participants included micro-pediatricians representing neo-natal pediatric departments in the region, chiefs of pediatric departments, and the Chair of the Pediatric Department at the Stara Zagora Medical University. The workshop was organized by IEF/Sofia and Dr. Emil Filipov, Chair of the Department of Ophthalmology of Stara Zagora Medical University and Advisor to the IEF ChildSight project. Prof. Thuthkov, Dean of the Stara Zagora Medical University opening the workshop and Prof. Petja I. Vassileva, MD, PhD, MSc, MPH, IEF's Country Director and Chief Ophthalmologist with the MOH, participated along with IEF/Project Manager Yordanka Koleva. There was a great deal of active participation which included presentation of the data from the survey of the Blind Schools in Sofia and Varna conducted by Susan Lewallen, MD as part of the IEF's ChildSight Project. The survey data indicated the "Retinopathy of Prematurity (ROP)", a condition which results in blindness in babies who were exposed to high levels of oxygen in incubators, a common practice for premature infants. ROP is becoming more of a problem as health care services and technology (more incubators) improves for premature babies in developing countries. It is the responsibility of the ophthalmologist to educate neo-natologists and pediatricians about the danger of high oxygen levels and proper management of premature infants in incubators. The remaining three workshops will be organized in Sofia for the south-west region, Pleven for the north-west region, and Varna for the north-east region.

In Eritrea, little progress has been made due to several reasons. First, the MOH is debating the manpower policies that govern what categories of health worker, their training, credentials, and compensation will serve the country. Secondly, IEF started a process for negotiating a country agreement before the government of Eritrea (GOE) had finalized the laws governing registration of PVOs in the country.

During the first reporting period Mr. John Barrows visited Eritrea September 1994 **(check this)** to start the process of the implementation plan where it became clear that these issues were unresolved. Since that time, the GOE and the MOH have resolved some of these issues. Decisions are made regarding a new category of health worker or Senior Ophthalmic Medical Assistants (SOMA) who are capable of conducting cataract surgery on adults. It remains unclear whether a separate single purpose Junior OMA who would perform basic PEC activities will be accepted or that a general PHC health worker will be trained in PEC. It was also resolved that any training that encompasses credentials, ie, basic science training for SOMAs, is the responsibility of the University system while any short-term workshop training, ie, ChildSight training in PEC and vision screening, is the responsibility of the MOH.

The second area unresolved is the lack of a country agreement. A draft agreement written by IEF was left with the MOH in 1993 but no actions were taken by the MOH. During a site visit by Ms. Victoria Sheffield in December 1994, this issue was again brought to the attention of the MOH. During this period one of the uncertainties was passage of a national law governing

PVOs/NGOs. It was hoped that once IEF was able to place a full-time employee in Eritrea as the manager for a child survival program, the signing of a country agreement could be finalized. IEF does not anticipate having an agreement until early 1996.

Ms. Victoria Sheffield visited Eritrea December 1994 to discuss ChildSight training workshops for non-ophthalmologists, attended a seminar presently the Eritrean Eye Care Program, and attended a meeting to discuss use of PC/IOL surgery.

In a meeting with the MOH concerning the ChildSight workshop training, discussion on how and when workshops could begin was discussed. Although IEF offered to provide a consultant to assist in developing a training curriculum, the MOH insisted that they would plan and teach the workshops themselves. Copies of relevant primary eye care training materials developed for other countries were left for adaptation.

Ms. Sheffield also attended a two-day program on the Eritrean Eye Care Program and Presentation of a National Eye Care Plan. The plan concentrates on infrastructure development, emphasizes the needs in rural areas, highlights the need for major financing, and identified the clinical and public health strategies for cataract, trachoma, and xerophthalmia. Other NGOs present were Lalamba Eritrea, INC. (US), Norwegian Church Aid (Norway), Al Noor Eye Foundation (Saudi Arabia) Sight Savers International (UK), Operation Eye Sight Universal (Canada), Fred Hollows Foundation (Australia), and HelpAge (UK). Ms. Sheffield attended a second meeting hosted by the Fred Hollows Foundation to discuss ways to promote Intraocular lenses (IOL) in Africa. The pros and cons of Extra-Capsular Cataract Surgery with Posterior Chamber IOL (ECCE PC/IOL) vs. Intra-Capsular cataract Surgery with no IOL or Anterior Chamber IOL (ICCE AC/IOL) were discussed. The debate is whether the "gold standard" of ECCE with PC/IOL which has better visual function results, but requires an ophthalmologist and specialized equipment should be promoted; or whether ICCE with or without AC/IOL which does not have the same visual function results, but is easier to perform and requires no specialized equipment should remain standard practice. See Trip Report, Victoria Sheffield, December 1994 and Attachment M, Seminar on Eritrean Eye Care Program.

In Malawi, a variety of eye care activities are underway in conjunction with the child survival and vitamin A project (CS/VA) in Chikwawa district, and with other collaborators. During May meetings were held between IEF and Ms. Karin van Dijk, Advisor for Low Vision, Christoffel Blindenmission (CBM), Mrs. Rosemary Lowdon, Optometrist and consultant to Vision Aid Overseas (VAO), and IEF regarding collaboration plans. Plans were made in June 23-25 to develop a curricula on primary eye care (PEC) and vision screening for training IEF and other PVO staff for a district-wide screening program. The intention of the screening program is to work with the CBM low vision program whereby "Itinerate" teachers are trained in low vision techniques by CBM at Montfort Teachers College. The Itinerate teachers move from school to school where LV students are located ensuring that these children receive the benefits of the mainstream school system. Please see Attachment N, Low Vision Program for Malawi 1995-1996.

In May 1995, Vision Aid Overseas (VAO) in conjunction with World Vision/Malawi organized visiting opticians to examine patients and dispense glasses. IEF collaborated with this visit through Ms. Rosemary Lowdon to arrange visits to the areas where children had been previously screened and identified for refractive services. Please see Attachment O, Letter from Vision Aid Overseas.

Three training were held. A training of trainers (TOT) was conducted by Ms. van Dijk and Mr. Steven Kanjaloti, Ophthalmic Medical Assistant (OMA) July 24-25 for key IEF supervisory staff using this curriculum. As a follow-up to this training a vision screening practice session was held at Ndakwera Health Center in August and October. A second level TOT for the IEF HSA supervisors in PEC/ Vision Screening was held on October 19-20. The first training of the MOH HSAs in selected LV school catchment areas were held October 30 and November 15. Please see Attachment P, Malawi Screening Results.

Related to the PEC and vision screening training, IEF assisted in the retraining of seven Ophthalmic Medical Assistants (OMA) in objective refraction, facilitated by Rosemary Lowdon and Karin van Dijk, October 5-9. These senior OMAs are dispersed throughout the country representing the five regions where mobile eye care units are maintained. The purpose of the training was to provide additional skills in objective and subjective refraction that OMAs lacked in order to better serve as the intermediate referral between the districts and the central level ophthalmologist. IEF provided some additional refraction sets and frames, and ophthalmoscopes for these mobile units.

Other eye care activities related indirectly to the ChildSight project are the ongoing training of traditional healers (TH) in PEC. One hundred sixty three traditional healers were trained in late 1994 in primary eye care. In July 1995, 298 additional traditional healers were trained for two days, one day each in AIDS control and primary eye care. It has been noted from other IEF research projects, traditional healers are often the first line health care in the community and are actually the cause of destructive corneal ulceration and other eye problems due to administration of harmful traditional medicines. As part of ongoing eye care activities of the CS project all HSAs in the district have received six hours of PEC training. Additionally, village health volunteers and village health committees (VHV, VHC) received some PEC training in the Chapananga area. IEF also distributes tetracycline eye ointment to other PVOs in the area. Please see Attachment Q, Report on the Training of Traditional Healers.

One of the major constraints encountered in Malawi is the lack of an ophthalmologist in the southern region. An ophthalmologist has been identified, currently resident in Zimbabwe who is scheduled to work in Blantyre in 1996.

Objective 3: Strengthen tertiary centers capability in pediatric ophthalmology.

In February 1995 IEF sent a Guatemalan ophthalmologist, Maria Eugenia Sanchez, to the Aravind Eye Hospital in India to receive a modified training program in pediatric ophthalmology for six months. While training at Aravind, Dra. Sanchez was exposed to an enormous volume of surgery, far surpassing that which she would have received in training practically anywhere else in the world, performing a total of 326 operations. She enjoyed the frequent presentations given by specialists and the many technical resources available. This high level practical training was obtained at a low cost and has proved to be a very preferable alternative to the visiting pediatric ophthalmologist. Dra. Sanchez has returned to the Robles Hospital in Guatemala City to assist in the establishment of a pediatric ophthalmology center. Please see Attachment R, Report of the Pediatric Ophthalmology Training at Aravind Eye Hospital.

We are currently reviewing Honduran candidates for the pediatric ophthalmology training program at Aravind. Since all the training is conducted in English, language has proved to be an obstacle in identifying an appropriate candidate. We have also received an offer from the Elias Santana Hospital in Santo Domingo, the Dominican Republic to train one of these candidates as an alternate to Aravind Hospital.

In Albania IEF co-hosted the visit of Dr. Kim Curnyn a pediatric ophthalmologist from the University of Illinois April 30 through May 12, 1995. During the visit instruction was provided in retinoscopy, sensory vision testing, evaluation of amblyopia, measurement of eye muscle misalignment, pediatric anterior segment and fundus examination, and spectacle correction in children. All of the training was provided in Tirana concluding with examinations of all concepts learned. Review of basic concepts and examination skills was found to be necessary in Albania before more advanced training could be offered. IEF will continue to co-host a second and third visit of Dr. Curnyn in 1996 building on this initial visit.

Renowned pediatric ophthalmologists Marilyn Miller and Susan Day visited Bulgaria in July of 1995 where they presented lectures, performed operations and examined patients along with local staff. First they conducted a conference on pediatric ophthalmology in the city of Plavdiv, organized by professor Blaga Chilova, head of Plovdiv's Medical University Department of Ophthalmology. Drs. Miller and Day then conducted an ocular pediatric/genetics conference in Stara Zagora organized by Dr. Emil Filipov, head of Stara Zagora's Medical University's Department of Ophthalmology. Finally, Drs. Miller and Day presented lectures at the Higher Medical Institute in Varna on Retinopathy of Prematurity and concomitant Strabismus. The doctors examined patients in Plovdiv, Sofia, Varna, and Stara Zagora, gaining insight into some clinical problem areas. Susan Day performed surgeries in Plovdiv and Varna. Please see Attachment S, The Visit of Susan Day and Marilyn Miller to Bulgaria.

In Eritrea it was proposed to Dr. Desbele Gebreghiorgis that Dr. Steinkuller visit in May 1995. However, this visit was postponed for scheduling reasons of Dr. Desbele. As an alternative, Dr. John O'Neal is scheduled to visit Eritrea in January 1996.

Paul Steinkuller, MD travelled to Malawi February 11-22, 1995. The purpose of the visit was to determine the best use of a visiting pediatric ophthalmologist, evaluate integration of low vision into the program, review activities with traditional healers in the program, conduct training in pediatric surgery, determine what equipment, surgical instruments, and pharmaceutical are needed to strengthen the eye care provided to children. The general recommendations were to 1) continue preventative measures like VAD control, supporting EPI and measles activities, and continue working with traditional healers to discourage harmful traditional eye medicines (TEM), 2) investigate the prevalence of ophthalmia neonatorum and preventative treatments, 3) early identification, referral and surgery for congenital cataract, 4) early recognition and referral for congenital glaucoma, 5) follow-up on those children identified in the blind schools in need of surgery and or refraction services, and 6) upgrade the OMA's skills in refraction. Please see Attachment T, SightReach Project, Malawi visit by Paul Steinkuller, February 1995.

COMPONENT #2: ChildSight – Second Annual Report Period – Sep. 1st, 1994 - Dec. 31st, 1995 – Cumulative Progress

Project Goals: 1. Enhance the system for identification, treatment and referral of children who can be helped by ocular surgery.
2. Upgrade the abilities of the tertiary centers to conduct pediatric ophthalmology.

Objectives	Progress	Constraints	Third year
1. Complete surveys		completed by:	
Albania	completed (3/94)	C. Gilbert	examine new students
Bulgaria	completed (9/95)	S. Lewallen	examine new students
Eritrea	completed (1/95)	Eckstein	examine new students
Malawi	completed (3/94)	Lewallen/Courtright	F.U. on id. students
Guatemala	completed (5/94)	F. Hermes	none
Honduras	completed (2/95)	F. Hermes/Benavides	examine new students
			all: write article/presentation
2. Conduct 4 workshops			
Albania	none	organizational	#1-4 (2/95)
Bulgaria	comp. #1(12/95)	political	#2-4) (4-6/95)
Eritrea	none	country agreement	#1-4 pending country agreement
Malawi	comp. #1(6/95)#2(7/96)#3(10/95)#4(11/95)	none	additional follow-up
Guatemala	comp. #1-4 (2/95)	none	F.U. secondary screening of identified
Honduras	comp. #1-4 (10/94) #5-8(3-4/95)	none	children\campaigns\with ResPack Drs.
3. Strengthen tertiary centers/			
Albania	Beci/Kearnan/Levinson	coordination HH	Kearnan (2)
Bulgaria	Miller/Day		Miller/Day
Eritrea	O'Neal		O'Neill (1)
Malawi	Steinkuller		to be determined
Guatemala	Maria Eugenia Sanchez (India)		create a self-sustaining eye glass workshop
Honduras	candidates under consideration		ophthalmologist to India

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B. Technical support

The following technical support was received during this reporting year:

- Dr. Clare Gilbert has continued to provide support in the analysis of the WHO/PBL blind school surveys.

- Dr. Michael Eckstein provided support in conducting the blind school survey in Asmara, Eritrea.

- Dr. Susan Lewallen provided support in conducting the blind school surveys in Sofia and Varna, Bulgaria.

- Dr. Juan Carlos Silva, Regional Advisor for the PAHO's Prevention of Blindness efforts in Columbia collaborated with IEF for the formation of a National Committee for the Prevention of Blindness in Honduras.

- David Green, MPH, was hired to serve as an instructor for the ophthalmology clinic management workshop in November 1994.

- Juan Batlle, M.D., was hired as an instructor for the workshop on ophthalmology clinic management in November 1994.

- Alan Levenson of Orbis International has provided on going technical assistance to evaluate equipment for the ResPack component. Mr. Levenson served as an instructor for the the workshop on equipment maintenance and repair on November 19, 1994 in Guatemala, and both training in October 1995 in Guatemala and Honduras.

- The National Committee for the Blind and Deaf (NCBD) collaborated in the implementation of the workshop, "Primary Care for Ocular Health," in Guatemala in October 1994.

- Dr. Alberto Ehrler, Dras. Marylena Arita, and Betulia Carcamo served as instructors for the workshops in which special education teachers were trained in the administration of visual acuity.

- Karin van Dijk, Advisor on Low Vision, CBM, for unpaid assistance in developing training curriculum and training in PEC and vision screening in Malawi.

- Rosemary E. Lowdon, is contracted as a consultant to train the mobile unit OMAs in subjective and objective refraction techniques.

- Dr. Vijayalakshmi, Dr. Venkataswami, and staff of the Aravind Eye Hospital for the training of Dra. Maria Eugenia Sanchez.

-The following pediatric ophthalmologists visited IEF program countries: Paul Steinkuller, Marilyn Miller and Susan Day.

C. Linkages Made Between the Program, Members of the Ophthalmic Community, the Ministry of Health and Other Institutions

Component One

Component one has inherently involved collaboration between the program and the ophthalmic community from its inception. Meetings have been held with IEF staff and the directors of the ophthalmology residency programs in Guatemala, Honduras, Ecuador, and El Salvador along with residents and individual ophthalmologists to encourage participation in the program.

Collaborating organizations for participation in the ResPack Program are Hospital Roosevelt (Guatemala), Hospital Rodolfo Robles V. (Guatemala), Hospital San Felipe (Honduras), Hospital Voz Andes (Ecuador), FUDEM-Fundación para el Desarrollo de la Mujer Salvadoreña (El Salvador), Hospital Rosales (El Salvador), and individual ophthalmologists from both Guatemala and Honduras.

Collaborating individuals and organizations for training are Alan Levenson, Orbis International (New York, New York); and consultants David Green, MPH; Dr. Juan Batlle; Dr. Federico Hermes; and Dr. Javier Prada (Costa Rica).

Companies with which we have a relationship for the procurement of equipment are Khosla Medical and Surgical, Inc; KOWA Optimed, Inc.; Keeler Instruments, Inc.; Welch Allyn, Inc.; Volk Optical; Ocular Instruments; ScanOptics; Echo Medical Instruments; Fritz Shipping; and InterMed Sales Corp. Companies with which we have a relationship for receipt of in-kind donations include Alcon Laboratories, Inc.; Allergan Pharmaceutical; IOLAB Corporation; KABI-Pharmacia; Ethicon; Rafi Systems Inc; and individual donors.

Component Two

In Guatemala, the National Committee for the Blind and Deaf collaborated with the workshops on ocular health. The target audience for the workshops was health personnel of the MOH from Cobán, San Juan Chamelco, and San Pedro Carchá, Alta Verapáz. Attendees included physicians, nurses, auxiliary nurses, health technicians, and rural health promoters in two separate training sessions. Ophthalmologists from the Hospital Rodolfo Robles and staff from the blind school participated in the survey of the children from the school for the blind. Dr. Maria Eugenia Sanchez of the Hospital Rodolfo Robles received training from the Aravind Eye Hospital, India in pediatric ophthalmology.

In Honduras, the ophthalmology community had seen the need for improved coordination of prevention and treatment of blindness activities following the distribution of results of the blind school survey. IEF sponsored a meeting to organize a National Committee for the Prevention of Blindness. Juan Carlos Silva, the regional advisor for the Pan American Health Organization's Prevention of Blindness activities, moderated and provided technical assistance. The committee has representatives from the Rotary Club, the MOH Honduras, MOE Honduras, private business, private ophthalmologists, IEF/H staff, and includes two ResPack ophthalmologists, one being the president of the Committee, and the other being the representative for the southern part of the country. Members are working closely with members of the Optica Luz y Amor, a group of volunteers that have started the operation of an optical shop to provide Honduras's poor with eyeglasses they otherwise would not be able to afford. Please see Attachment U, *Fundacion Internacional de Ojos Memoria del Taller sobre Salud Ocular*, a report on the activities realized in this workshop, and Attachment V, Plan of Action for the National Committee for the Prevention of Blindness.

In Albania, IEF has also collaborated closely with Health for Humanity (HH) and the Soros Foundation (NY and Albania) to strengthen eye care services in tertiary care centers.

In Eritrea, Dr. Desbele Gebregiorgis, ophthalmologist and representative of the MOH worked with Dr. Michael Eckstein, ICEH, on the survey of the Abraha Bahta School for the Blind. IEF continues to collaborate with the Fred Hollows Foundation (FHF), an Australian eye care NGO, through their intraocular lens factory in Asmara.

In Malawi, members of the ophthalmology community and staff of the schools for the blind collaborated with Dr. Clare Gilbert, ICEH, Dr. Susan Lewallen and Dr. Paul Courtright in undertaking the surveys of the children in the blind schools. During his visit to Malawi, Dr. Paul Steinkuller worked with Dr. Moses Chirambo, Chief Ophthalmologist, MOH and Sight Savers representative to help strengthen pediatric ophthalmology services. IEF is collaborating with the Montfort Teachers Training College to train Itinerate teachers through the CBM low vision program, and with Rosemary Lowdon and Vision Aid Overseas.

D. New Professional Staff

Ellen Parietti, MPH, replaced Diana Schwartz, MS as Program Officer/Matching Grant Coordinator in IEF Bethesda.

Ms. Martha Burdick de Piedrasanta replaced Dr. Edmundo Alvarez as the IEF Country Director in Guatemala beginning October 1995.

Mrs. Rosemary Lowdon, BSc, MBCO, was contracted to provide part-time technical assistance in Malawi.

Mr. Garth Pollock, was contracted to provide part-time management assistance in Albania.

Please see Attachment T, resumes of the above individuals.

E. Evaluation

Dr. Donald McCorquodale was hired to perform Mid-term evaluations for the SightReach program in four countries: Guatemala, Honduras, Malawi, and Bulgaria.

In Guatemala and Honduras, Dr. McCorquodale had the opportunity to observe first hand the activities of the ResPack component. He was impressed with the program as a whole as it had succeeded in providing rural areas with ophthalmologists, a difficult task in any part of the world. For both Honduras and Guatemala, Dr. McCorquodale suggested an easier way for the ResPack doctors to report on the work they were performing and the establishment of a data base to track their impact. At the time of his visit to Honduras, there were no ophthalmologists with access to operating microscopes, so no cataract surgery was being performed as part of their outreach work. IEF/HQ is presently arranging for the allocation of one such microscope to benefit Jorge Cisneros, the ophthalmologist working in Choluteca. In addition, following the evaluator's suggestion, IEF/HQ has implemented a change in the lensometer formerly being used in the package with a new Pentax model of superior quality.

The ChildSight component elicited similar recommendations in both Guatemala and Honduras. Dr. McCorquodale was concerned with the referral mechanism for children identified as having low vision as the accessibility to services is generally poor. IEF/Honduras is currently working through the National Committee for the Prevention of Blindness to establish an spectacle factory to increase access of low-cost glasses to children identified as needing them.

III. CHANGES MADE IN PROGRAM DESIGN

A. Component One

Component one expanded to include Ecuador and El Salvador.

B. Component Two

No changes have been made in the program design of component two.

IV. CONSTRAINTS, UNEXPECTED BENEFITS, AND LESSONS LEARNED

A. Component One

Constraints:

Securing loans: Our participants continue to face difficulty securing financing for the equipment packages. Eight candidates which have been accepted into our program have yet to find financing for their equipment. ophthalmologists who have been able to secure loans through banks pay very high interest rates, along the lines of 25%.

Divisions among ophthalmologists: As mentioned in last year's annual report, there are marked divisions among ophthalmologists in the Latin American countries. In Guatemala, there is a long-standing rivalry between the Rodolfo Robles Hospital and the Roosevelt Hospital. Although we have participants from the Robles hospital in the program, most continue to be from Roosevelt hospital. The Robles group may have identified the ResPack program as a threat to their services.

Mistrust of cataract surgery: The problem with community outreach cataract services has been essentially two-fold. In some areas, there is a basic fear of eye surgery, which causes some individuals, even those in desperate need of cataract surgery, not to seek care. Secondly, those who do want cataract surgery cannot afford even a relatively low charge. By all accounts, an inexpensive charge, such as $90 or $100, would be unaffordable by many patients in need of surgery. This low cost would not cover the consumables necessary for a cataract surgery, without the cost of surgery room rental, or doctors fee.

Lack of management skills: Ophthalmologists seem reluctant to implement administrative skills imparted at clinic management workshops. There seems to be a feeling that "that's not my area" even though they recognize the importance of these skills. At the current level that their clinics are at, they cannot afford an office manager. The result is a continued degree of disorganization in the management of their practices. The ophthalmologists are not sufficiently aware of the costs in running their businesses.

Benefits:

Donations: Some of our participants have been fortunate to have benefited from the contributions of individual donors who have facilitated their equipment purchases. One donor helped eight different participants with a contribution of $500 each, and another donor gave $3000 to three other participants.

Technical assistance: Al Levenson and Javier Prada, through the equipment maintenance and repair workshops have been able to train technicians from local institutions on the upkeep of equipment in their institutions. In addition, Javier Prada, who has also worked with us on our

equipment maintenance and repair workshops has provided assistance in helping us in our goal to institutionalize the workshops with the Pan American Academy of Ophthalmology.

Lessons Learned:

Resistance to Relocation: Most ophthalmologists don't wish to leave behind their lives in the capitals. Many times they continue to be affiliated with the hospitals, a source of prestige, and their families go to school and work in the cities. For women we are finding that this is an especially difficult issue. Participants with family ties to a rural area seem to have a greater commitment to their rural clinics than those with their families in the capital. Nevertheless, we ave seen many participants build successful clinics in rural areas without ties to the area.

Market analysis: It has become increasingly clear that additional information is needed on a person's ability to pay for eye care services. It is unclear whether the prices charged for services by ophthalmologists are consistent with a person's ability to pay. Additionally, information of other socio-economic and cultural beliefs and preferences would be useful in developing marketing strategies for the ophthalmologists.

B. Component Two

Constraints:

Lack of ophthalmologists: The lack of ophthalmologists and infrastructure, especially in the African countries, is a major constraint to implementing a program promoting sub-specialty surgery. Even in the better developed Latin American and Eastern-European countries, the basic skills of ophthalmologists is in need of improvement.

Software: We continue to encounter minor difficulty with the WHO Childhood Blindness Database. Although in Honduras the field staff were able to process the data easily and obtain results, in Guatemala they encountered problems. We finally sent the completed surveys to Clare Gilbert with the ICEH to be entered and analyzed.

Benefits:

Technical assistance: Al Levenson, a consultant IEF had contracted to formulate our equipment maintenance and repair workshops for component one, has provided technical assistance in Albania where, as a part of component two, equipment donations were made to strengthen tertiary care.

Publication: Dr. Clare Gilbert, was the principal author for a published article comparing data from Blind schools from three African countries, providing increased visibility to the problems of childhood blindness worldwide.

Low vision services: IEF has been able to successfully coordinate the objectives of the project with the needs for low vision services. This has enabled IEF to become more knowledgeable and participate with low vision programs.

Lessons Learned:

Causes of blindness: There are clear differences in the causes of childhood blindness and measures to address prevention between the African, Latin American, and Eastern European countries. In Malawi and Eritrea, the major cause of avoidable blindness remains vitamin A deficiency, which cannot be corrected by surgery. In Guatemala and Honduras, there is an apparent transition from preventable causes like VAD to other causes, and in Bulgaria there is evidence that the introduction of technology, ie, infant incubators, is the cause of retinopathy of prematurity (ROP) due to poor supervision of oxygen levels. Despite the surgical intervention focus of the program, each of the regions have demonstrated that there are avoidable causes of blindness amenable to public health measures.

Low vision services: As a result of the community screening and outreach activities, it has been demonstrated that large numbers of children can be screened and identified requiring follow-up services. Many of these children screened will need refraction services and low vision aids, a public health service that is not part of the project. However, the project has had successful coordination between the ChildSight project and other low vision projects.

Ability to absorb services: In has been noted in Albania and elsewhere that each country has different abilities to absorb externally funded project activities. In Albania, both the IEF ChildSight activities and the Health for Humanity project activities placed demands on the MOH that were not there before. There is the need to consider individual projects within and as part of a national framework so as not to place unrealistic demands on MOH systems.

Follow-up to workshops: Although the Detailed Implementation Plan did not outline the follow-up necessary for the ChildSight workshops, we have found the initial training to be a starting point in dealing with the problem of low vision in children. Establishment of a database with the information on the results of the surveys, referrals made, or action taken is clearly needed. In the case of Honduras, the results from these workshops have inspired the ophthalmic community to join together to look for ways to deal with these children in need of services. They have formed a National Committee and are now working to establish a self-sufficient eye glass factory.

V. OTHER ACTIVITIES

A. AAO: The IEF supported the attendance of four doctors to annual meetings of the American Academy of Ophthalmology. In 1994, Dr. Zhugli of Albania and Dr. Orlando Oliva of Guatemala travelled to San Francisco and participated in the "Host Ophthalmologist Program" of the AAO, receiving free registration and course fees. In 1995, Dr. Maria Eugenia Sanchez

of Guatemala and Dr. Emil Filipov of Bulgaria attended the AAO conference in Atlanta, also participating in the "Host Ophthalmologist Program."

B. IAPB: The IEF headquarters and the IEF Guatemala and Honduras offices attended Latin American International Agency for the Prevention of Blindness (IAPB), Second Congress in Guayaquil June 22-23, 1995. Dr. Raul Gomez from Honduras and Dr. Edmundo Alvarez from Guatemala gave presentations on IEF activities (ResPack and ChildSight). John Barrows gave a presentation on IEF activities.

C HH: The IEF is working closely with Health for Humanity on a project to strengthen eye care services in Albania. This project provides needed support for infrastructure and basic training necessary to begin addressing sub-specialty training.

D FHF: The IEF coordinates with the FHF IOL factory in the promotion their high quality IOLs manufactured in Asmara, Eritrea.

E OPTICA LUZ Y AMOR: The National Committee for the Prevention of Blindness, Honduras has been working diligently with Juan Carlos Silva, the Regional Advisor to the Pan American Health Organization to establish a self-sufficient primary eye care project. The committee has been working with an organization currently distributing eye glasses on a very small scale at the Hospital San Felipe in Tegucigalpa. The demand for this service, however, far exceeds the supply of low-cost eyeglasses available. The goal is to expand the services offered, and the Optica's area of influence. This project could be a solution for the children identified as needing glasses through ChildSight screening.

VI. BUDGET REVIEW

The changes made in the budget during this reporting period include the addition of El Salvador and Ecuador into Component One, ResPack, of the SightReach program. These changes were communicated and agreed to by USAID. There have been no other major deviations from the original budget.

Expenditure of the Headquarters (regional) budget is on track with approximately 66% of the USAID budget spent through December 31, 1995. The remaining portion of the USAID budget is sufficient for the remaining eight months of the project. The percentage of funds matched by IEF is approximately 38% (cumulative) which is greater than the amount budgeted (22%) in the DIP. The match is made primarily through the salary and fringe benefit line items.

Expenditure of the field budget is underspent with approximately 24% of the budget spent through December 31, 1995. There has been minimal expenses from Albania, Bulgaria, Ecuador, El Salvador, and Eritrea in particular. In Albania workshops were late in starting (December 1996); In Bulgaria, there was more than a full year before IEF could resume the

project due to political factors; In El Salvador and Ecuador, both countries were only added last year and; in Eritrea, the absence of a country agreement continues to hamper full implementation. In each of the remaining countries workshops have been less expensive than budgeted and the need for an expatriate regional staff person was found not to be necessary. Additionally, the IEF negotiated indirect cost rate agreement (NICRA) was reduced from 24% to approximately 18% during the past two years.

The percentage of funds matched by IEF is approximately 57% (cumulative) which is less than the amount budgeted (81%) in the DIP. The match is composed of cash and in-kind equivalents. The in-kind amounts are made out of ResPack doctors equipment purchases, donated equipment and supplies from pharmaceutical companies and manufacturers, and other donor sources including associated secondary projects.

Expenditure of combined headquarters and field budgets is underspent with approximately 36% (cumulative) of the budget spent through December 31, 1995. At the present monthly average burn rate, there are 23 months of funding available. However, the burn rate is expected to increase through redesign of the activities and increased activity rates reducing the months available to approximately 18 months. A no-cost extension is requested to continue the project from August 31st 1996 through mid-1998. At this date IEF has meet the matching requirement of 50%.

Please see Attachment X, pipeline analysis for this reporting period.

VII. THIRD YEAR WORKPLAN

The workplan for the third year will, firstly, emphasis completion of the objectives stated in the DIP document to fulfill the basic requirements of the cooperative agreement, and secondly, in the countries that have completed their objectives, implement new activities that either continue existing activities, or complement and strengthen objective outcomes. The purpose of developing complementary activities is to develop wider more comprehensive and sustainable programs.

A. ResPack

1. Objective 1: Equipment.
   a. Enroll ten new participants.
   b. Purchase and ship ten equipment sets.
   c. Establish ten new clinics.

2. Objective 2: Training.
   a. Conduct workshops (PM and EM) follow-up sessions in Guatemala and Honduras.
   b. Conduct workshops (PM and EM) in Ecuador and El Salvador.

3. Objective 3: Outreach.
   a. Assist participants in developing outreach activities to support their clinics.

   Activities:
   i. Develop strategies for outreach activities, including tieing to the ChildSight project and follow-up screening activities, and include in the PM training.
   ii. Develop and test use of a "cataract kit" for use by participants.
   iii. Conduct a market analysis and KAP study on a person/communities ability to pay for eye care services, and behaviors and constraints to access to services.
   iv. Develop an Information, Education and Communication (IEC) package for participants.

Other supporting activities will be identification of donations of microscopes for selected participants, continuing one-on-one support in practice management for participants, improvements in clinic reporting and data management, and institutionalize the PM and EM workshops.

B. ChildSight

1. Objective 1: Surveys.
   a. Continue to examine children entering blind schools.
   b. Develop a simplified information system/data base roster to track identified children in need of follow up services.
   c. Write article/presentation comparing blind school data findings.

2. Objective 2: Workshops.
   a. Complete workshops in Albania (3), Bulgaria (2), and Eritrea (4).
   b. Continue workshops in all countries where needed.

3. Objective 3: Tertiary centers.
   a. Complete pediatric ophthalmologist visits to Albania (3), Bulgaria (3), Eritrea (3), Malawi (3), Guatemala (1 outside), and Honduras (1 outside).
   b. Identify a second candidate in Guatemala and the first candidate in Honduras to train in pediatric ophthalmology at Aravind Hospital.
   c. Assist participating hospitals in establishing or upgrading pediatric services.
   d. Develop a simplified information system/data base roster to report surgeries performed.

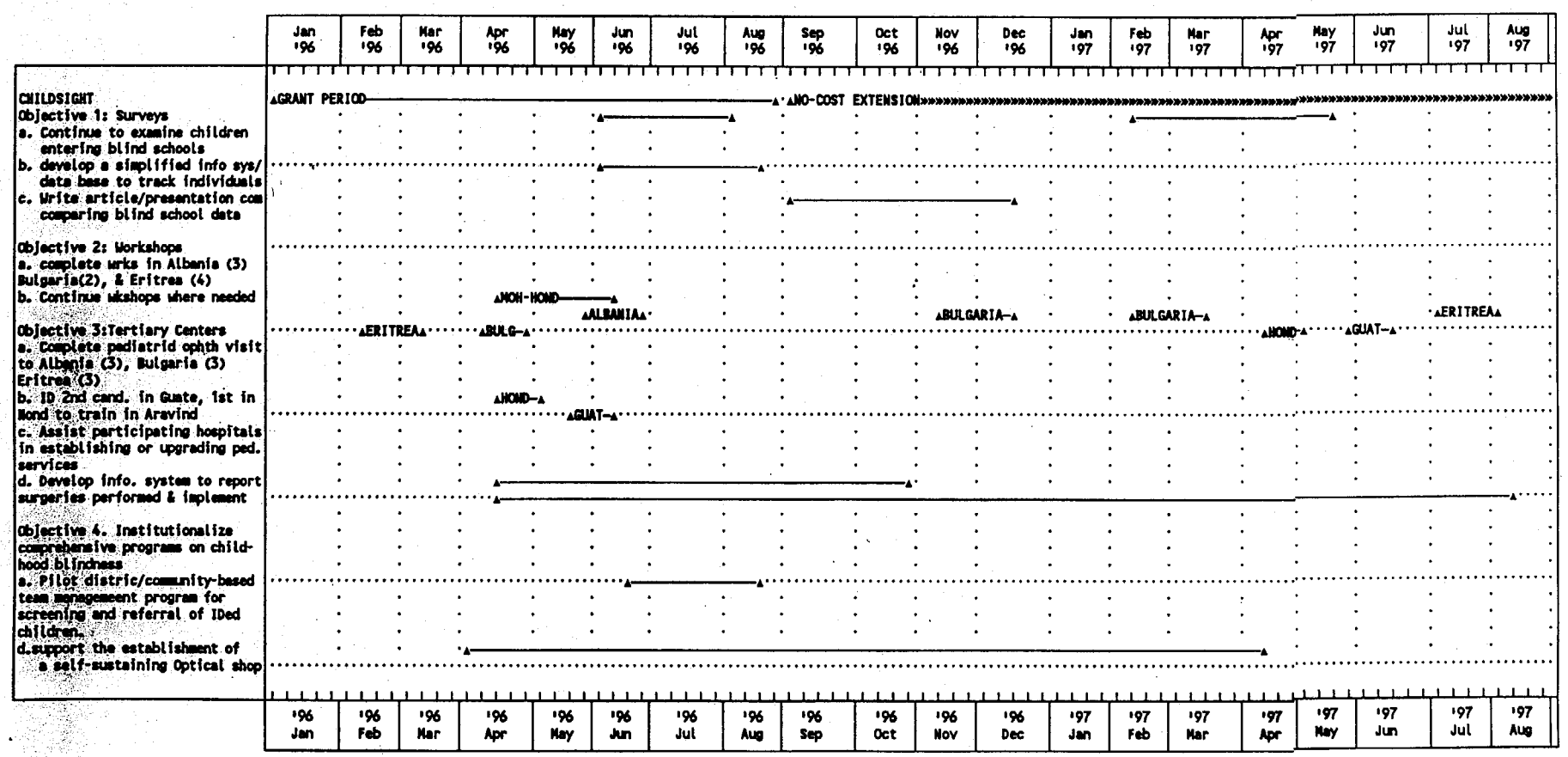
4. Objective 4: Institutionalize comprehensive programs on childhood blindness.
   a. Pilot district/community-based team management program for screening and referral of identified children.
   b. Develop an optical workshop project in Honduras.

Other supporting activities will be improvements in the reporting systems, continued support for the National Prevention of Blindness Committees, and investigating the support of local NGOs or creation of local NGOs to be involved in eye care services.

The activities to complete the basic objectives will take place during the third year. The new or complementary activities proposed will also begin during the third year, but will require additional time to complete requiring a no-cost extension period be granted. See the Gantt chart on the following page.

VIII. ATTACHMENTS

A. Maps indicating locations of clinics of ResPack participants
B. Jorge Cisneros's Activities
C. Childhood Blindness and Eye Disease in Honduras
D. Report of Assessment of Blind Schools in Bulgaria
E. A Survey of Children Attending the Abraha Bahta School for the Blind
F. Gilbert, C. *"Cause s of childhood blindness in East Africa: Results in 491 pupils attending 17 schools for the blind in Malawi, Kenya and Uganda"* Ophthalmic Epidemiology.
G. *Seminar-Taller, Atención Primaria de la Salud Ocular*
H. *Capacitación en detección oportuna de trastornos visuales en niños* and report upon the workshop
I. *Taller Sobre Deteccion Temprana de Problemas Oculares Dirigido a Maestros de Educacion Especial*
J. *Memoria: Capacitacion a Maestros de Educacion Especial*
K. Trip Report: Albania July 29-August 4, 1995, Eun-Joo Chang
L. Health for Humanity Annual Report of Activities for 1995
M. Seminar on Eritrean Eye Care Programme
N. Low Vision Programme Malawi
O. Vision Aid Overseas
P. Malawi Screening Results
Q. Report on the Training of Traditional Healers on Primary Eye Care
R. Inform of the Pediatric Ophthalmology Training at Aravind Eye Hospital, (February-July 1995), Maria Eugenia Sánchez
S. The visit of Drs. Susan Day and Marilyn Miller to Bulgaria, July 27, 1995 to August 8, 1995.
T. SightReach Project: Malawi visit of pediatric ophthalmologist Paul Steinkuller
U. Memoria del Taller Sobre Salud Ocular
V. Plan of Action of the National Committee for the Prevention of Blindness
W. Resumes of new professional staff
X. Budget Pipeline
Y. Midterm Evaluations: Guatemala, Honduras, Malawi, Bulgaria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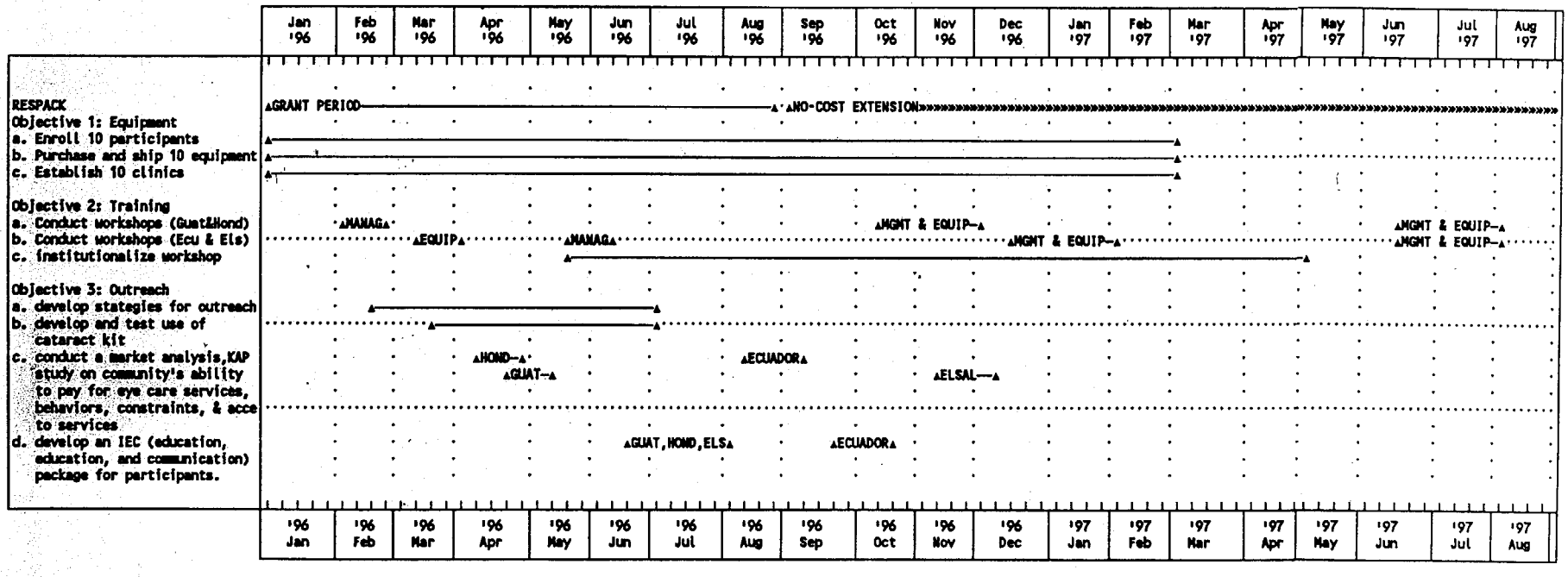
CHILDSIGHT
Objective 1: Surveys
a. Continue to examine children entering blind schools
b. develop a simplified info sys/ data base to track individuals
c. Write article/presentation com comparing blind school data
Objective 2: Workshops
a. complete wrks in Albania (3) Bulgaria(2), & Eritrea (4)
b. Continue wkshops where needed
Objective 3:Tertiary Centers
a. Complete pediatrid ophth visit to Albania (3), Bulgaria (3) Eritrea (3)
b. ID 2nd cand. in Guate, 1st in Hond to train in Aravind
c. Assist participating hospitals in establishing or upgrading ped. services
d. Develop info. system to report surgeries performed & implement
Objective 4. Institutionalize comprehensive programs on childhood blindness
a. Pilot distric/community-based team management program for screening and referral of IDed children.
d.support the establishment of a self-sustaining Optical shop
GRANT PERIOD
NO-COST EXTENSION
MOH-HOND
ALBANIA
BULGARIA
BULGARIA
ERITREA
ERITREA
BULG
HOND
GUAT
HOND
GUAT
'96 Jan
'96 Feb
'96 Mar
'96 Apr
'96 May
'96 Jun
'96 Jul
'96 Aug
'96 Sep
'96 Oct
'96 Nov
'96 Dec
'97 Jan
'97 Feb
'97 Mar
'97 Apr
'97 May
'97 Jun
'97 Jul
'97 Aug

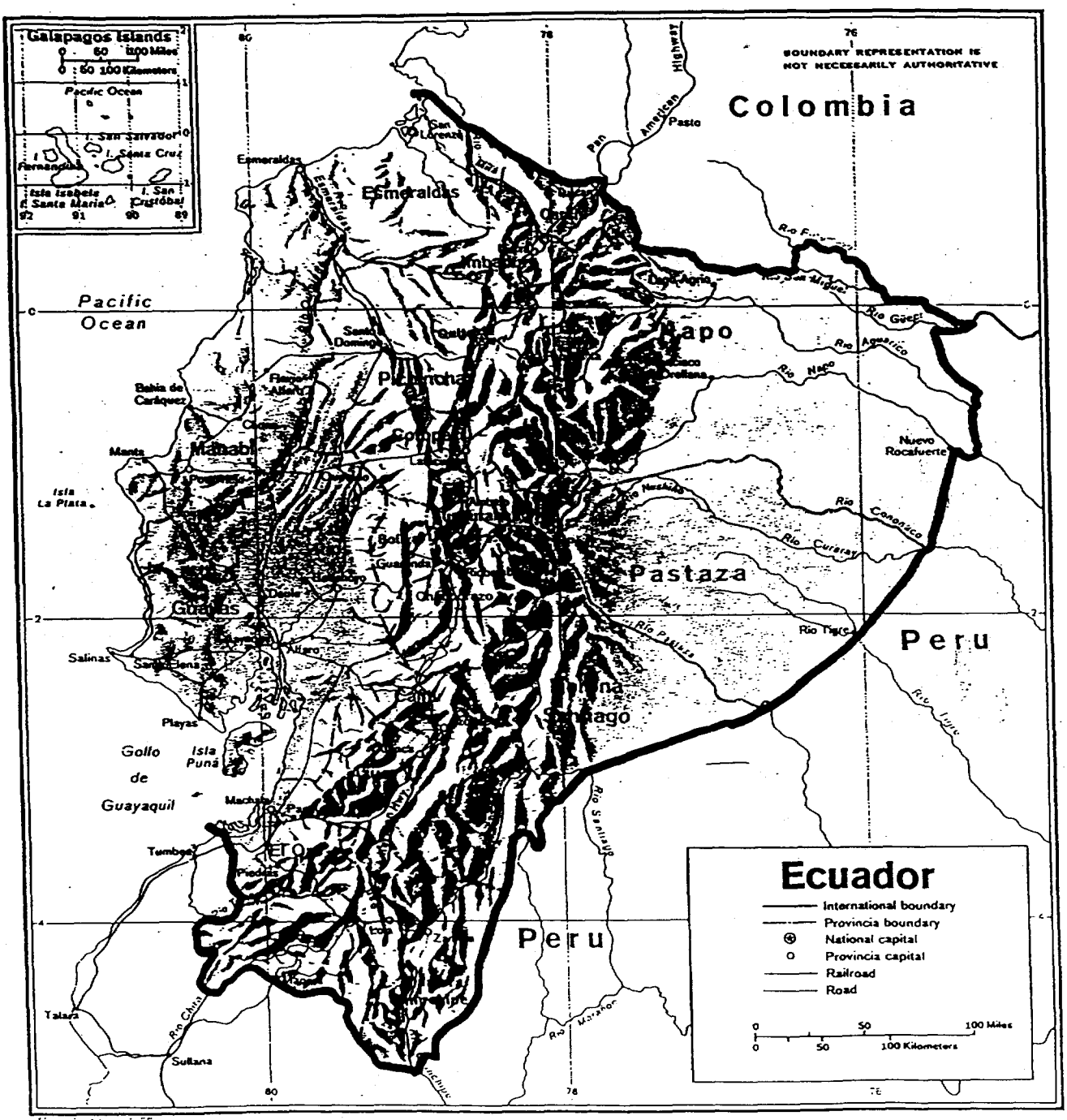

Jan '96
Feb '96
Mar '96
Apr '96
May '96
Jun '96
Jul '96
Aug '96
Sep '96
Oct '96
Nov '96
Dec '96
Jan '97
Feb '97
Mar '97
Apr '97
May '97
Jun '97
Jul '97
Aug '97
RESPACK
Objective 1: Equipment
a. Enroll 10 participants
b. Purchase and ship 10 equipment
c. Establish 10 clinics
Objective 2: Training
a. Conduct workshops (Guat&Hond)
b. Conduct workshops (Ecu & Els)
c. Institutionalize workshop
Objective 3: Outreach
a. develop stategies for outreach
b. develop and test use of cataract kit
c. conduct a market analysis,KAP study on community's ability to pay for eye care services, behaviors, constraints, & acce to services
d. develop an IEC (education, education, and communication) package for participants.
GRANT PERIOD
NO-COST EXTENSION
MANAG
EQUIP
MANAG
MGMT & EQUIP
MGMT & EQUIP
MGMT & EQUIP
MGMT & EQUIP
HOND
GUAT
ECUADOR
ELSAL
GUAT,HOND,ELS
ECUADOR
'96 Jan
'96 Feb
'96 Mar
'96 Apr
'96 May
'96 Jun
'96 Jul
'96 Aug
'96 Sep
'96 Oct
'96 Nov
'96 Dec
'97 Jan
'97 Feb
'97 Mar
'97 Apr
'97 May
'97 Jun
'97 Jul
'97 Aug

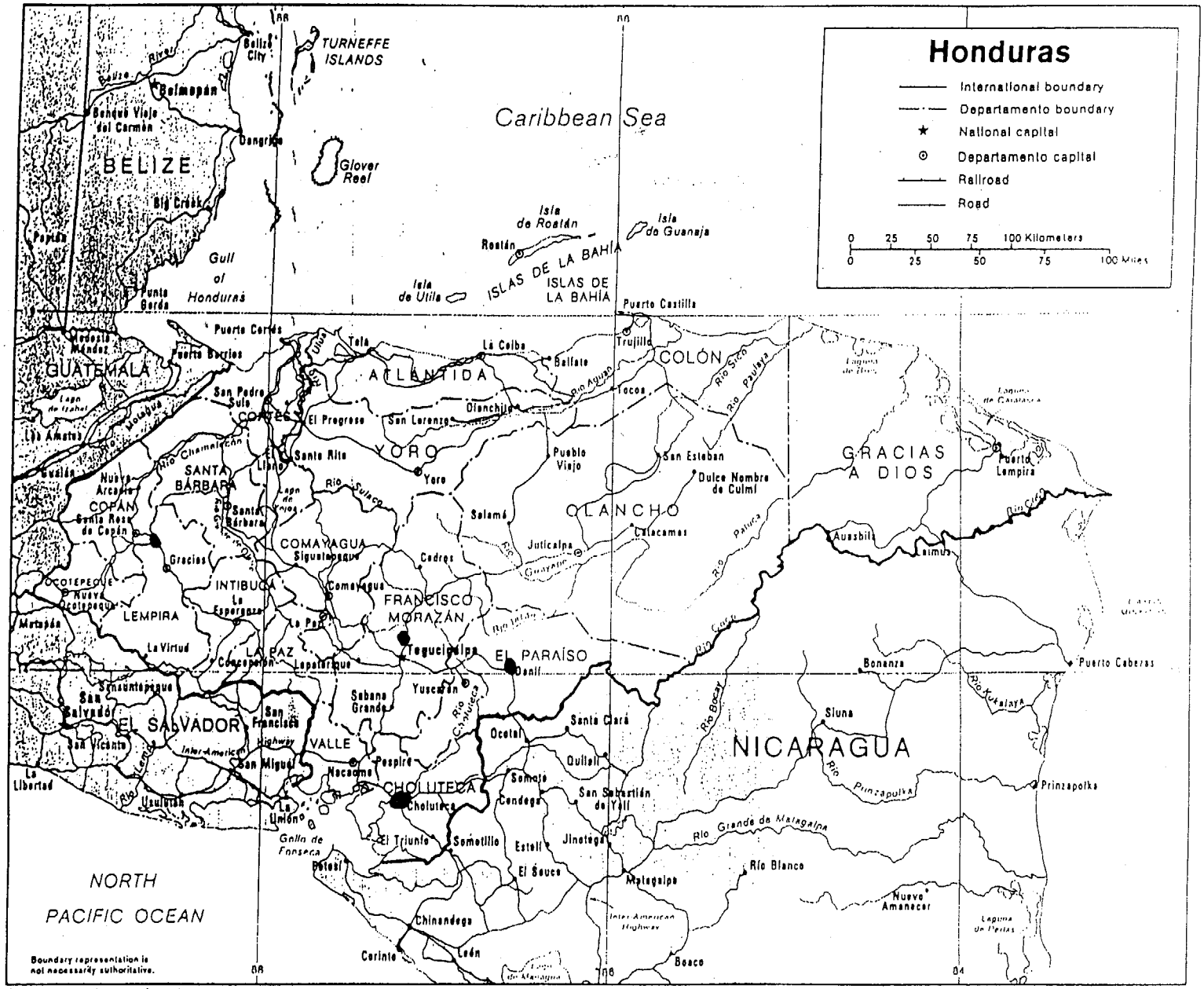
Trip Reports IEF staff, September 1994-December 1996

1. Malawi-John Barrows September 8-17, 1994
2. Eritrea, Johhn Barrows, September 18-23, 1994
3. Guatemala, Diana Schwartz, November 15-20, 1994
4. Eritrea, Victoria Sheffield, December 11-21, 1994
5. Albania, John Barrows, December 4-11, 1994
6. Bulgaria, John Barrows, December 11-17, 1994
7. El Salvador, Orlando Oliva, January 8-9, 1995
8. El Salvador, Edmundo Alvarez, January 9-11, 1995
9. Guatemala, John Barrows, February 2-9,1995
10. Honduras, Jack Blanks and John Barrows, February 22-25, 1995
11. Honduras, Diana Schwartz March 17-21, 1995
12. Guatemala, Diana Schwartz April 3-7, 1995
13. El Salvador, Orlando Oliva, April 24-25, 1995
14. Malawi, John Barrows, April 21-May 6, 1995
15. Ecuador, Barrows/Schwartz, June 18-24, 1995
16. Guatemala, Schwartz, July 25-August 1, 1995
17. Honduras, Schwartz, July 17-25, 1995
18. El Salvador, PiedraSanta & Gomez, September 23-27, 1995
19. Honduras, Ellen Parietti, October 6-11, 1995
20. Guatemala, Ellen Parietti, October 11-14, 1995
21. Honduras, Ellen Parietti, December 8-11,1995
22. El Salvador, Ellen Parietti, December 11-12, 1995
23. Eritrea, John Barrows, December 9-18, 1995
24. Guatemala, Ellen Parietti, December 12-19, 1995

ATTACHMENT A

MAPS


Galapagos Islands
0 50 100 Miles
0 50 100 Kilometers
Pacific Ocean
I. San Salvador
I. Santa Cruz
I. Fernandina
Isla Isabela
I. Santa Maria
I. San Cristóbal
92 91 90 89
BOUNDARY REPRESENTATION IS NOT NECESSARILY AUTHORITATIVE
Colombia
Pacific Ocean
Esmeraldas
Pichincha
Napo
Pastaza
Morona Santiago
Manabi
Guayas
Peru
Pan American Highway
Pasto
San Lorenzo
Rio Mira
Rio Esmeraldas
Rio Aguarico
Rio Napo
Rio Curaray
Rio Tigre
Rio Pastaza
Rio Santiago
Rio Chira
Rio Marañon
Rio Yaupi
Nuevo Rocafuerte
Bahia de Caráquez
Manta
Isla La Plata
Salinas
Playas
Isla Puna
Gollo de Guayaquil
Machala
Tumbes
Talara
Sullana
Ecuador
International boundary
Provincia boundary
National capital
Provincia capital
Railroad
Road
0 50 100 Miles
0 50 100 Kilometers


Honduras
International boundary
Departamento boundary
National capital
Departamento capital
Railroad
Road
0 25 50 75 100 Kilometers
0 25 50 75 100 Miles
Caribbean Sea
BELIZE
Belize City
Belmopán
TURNEFFE ISLANDS
Glover Reef
Gulf of Honduras
Isla de Roatán
Roatán
Isla de Guanaja
ISLAS DE LA BAHÍA
Isla de Utila
Puerto Castilla
Trujillo
COLÓN
ATLÁNTIDA
La Ceiba
Tela
Belfate
Tocoa
GUATEMALA
Puerto Barrios
Puerto Cortés
San Pedro Sula
CORTÉS
El Progreso
San Lorenzo
Choloma
YORO
Yoro
Pueblo Viejo
San Esteban
Dulce Nombre de Culmí
GRACIAS A DIOS
Puerto Lempira
SANTA BÁRBARA
Santa Bárbara
COPÁN
Santa Rosa de Copán
Gracias
COMAYAGUA
Comayagua
Siguatepeque
Cedros
Juticalpa
OLANCHO
Catacamas
Ausbila
Iriamus
INTIBUCÁ
La Esperanza
LEMPIRA
La Virtud
LA PAZ
La Paz
Concepción
Tegucigalpa
FRANCISCO MORAZÁN
EL PARAÍSO
Danlí
Bonanza
Puerto Cabezas
Siuna
EL SALVADOR
San Salvador
San Vicente
La Libertad
San Miguel
VALLE
Nacaome
Pespire
CHOLUTECA
Choluteca
Yuscarán
Ocotal
Santa Clara
Quilalí
Somoto
Condega
San Sebastián de Yalí
Prinzapolka
Río Grande de Matagalpa
Jinotega
Matagalpa
Río Blanco
Nueva Amanecer
El Triunfo
Somotillo
Estelí
El Sauce
Golfo de Fonseca
Potosí
Chinandega
León
Corinto
Boaco
NORTH PACIFIC OCEAN
Boundary representation is not necessarily authoritative.
Base 800321 (A00162) 3-85


Guatemala
International boundary
Departmento boundary
National capital
Departmento capital
Railroad
Road
0 50 Kilometers
0 50 Miles
MEXICO
BELIZE
PETEN
HONDURAS
EL SALVADOR
NORTH PACIFIC OCEAN
Caribbean Sea
Gulf of Honduras
Belmopan
Belize City
Flores
Tikal
Chetumal
Corozal
Orange Walk
Progresso
Benque Viejo del Carmen
Dangriga
Hill Bank
Big Creek
Punta Gorda
Poptún
San Luis
Sayaxché
Parbán
Tenosique
Balancán
Palizada
Bachajón
Comitán
Chicomuceltc
Huehuetenango
Barillas
Kaibil Balam
Rubelsanto
Francisco Vela
Modesto Méndez
Livingston
Puerto Barrios
Puerto Cortés
Santo Tomás de Castilla
Morales
San Pedro Sula
El Estor
Cahabón
Cobán
Tactic
Chajul
Sacapulas
Ixchiguan
Tacaná
San Marcos
Quezaltenango
Totonicapan
Santa Cruz del Quiché
Rabinal
Salamá
Gualán
Los Amates
Zacapa
Chiquimula
Santa Rosa de Copán
Santa Bárbara
Jalapa
Jutiapa
Metapán
Nuevo Ocotepeque
La Esperanza
Concepción las Minas
Retalhuleu
Mazatenango
Escuintla
Siquinalá
Las Delores
Cuilapa
Chiquimulilla
Chalchuapa
Santa Ana
Sonsonate
Acajutla
El Semillero
Barra Nahualate
San José
Las Lisas
Champerico
Ocós
Tutate
Inter-American Highway
Río Usumacinta
Río Salinas
Río de la Pasión
Río Chixoy
Río Negro
Río Motagua
Río Ulúa
Río Grande
Río Cahabón
Río Sarstún
Río Azul
Río Hondo
Río Belize
Río Jataté
Río Lacantún
Río Candelaria
Río Coyolate
Río Naranjo
Río Icbalá
Río Cancuén
Río Mopán
Río Sibún
Río Moho
Río Temash
Río Dulce
Lago de Izabal
Lago de Atitlán
Presa de la Angostura
Boundary representation is not necessarily authoritative.
Base 504916 (547180) 2-82


El Salvador
International boundary
Department boundary
National capital
Department capital
Railroad
Road
0 10 20 30 Kilometers
0 10 20 30 Miles
GUATEMALA
HONDURAS
NICARAGUA
El Progreso
Chiquimula
Jalapa
Ipala
Esquipulas
Metapán
Asunción Mita
Jutiapa
Lago de Güija
Río Lempa
Río Ostúa
Nueva Ocotepeque
Santa Rosa de Copán
Gracias
San Sebastián
San Juan
Tejutla
CHALATENANGO
Yoxiatenique
SANTA ANA
Chalatenango
Santa Cruz
Chalchuapa
Santa Ana
Agua Caliente
Suchitoto
Lago de Coatepeque
Ahuachapán
AHUACHAPÁN
La Hachadura
Quezaltepeque
CABAÑAS
Victoria
Sensuntepeque
Ilobasco
Río Lempa
Río Sucio
Río Grande de San Miguel
Lislique
Arcatao
MORAZÁN
San Francisco
Sosori
Santa Rosa de Lima
Apopa
SAN SALVADOR
Cuscatlán
SAN VICENTE
Sonsonate
SONSONATE
Armenia
Nueva San Salvador
San Salvador
Cojutepeque
San Vicente
SAN MIGUEL
Lago de Ilopango
Río Jiboa
Río Lempa
Acajutla
LA LIBERTAD
El Triunfo
LA UNIÓN
Zacatecoluca
Comalapa
La Libertad
LA PAZ
USULUTÁN
San Miguel
El Carmen
La Unión
La Herradura
Usulután
Laguna de Olomega
La Canoa
Puerto El Triunfo
Intipucá
El Cuco
Golfo de Fonseca
Pacific Ocean
Boundary representation is not necessarily authoritative.
Base 504510 8-80 (545437)

ATTACHMENT B

JORGE CISNEROS'S ACTIVITIES

Para
Ellen Parietti

INFORME ANUAL DEL PROGRAMA RESPACK

DR. JORGE CISNEROS

- Hemos asistido a todas las reuniones del Programa SIGHTREACH, 1994-1996.

- Iniciamos nuestra Clinica del Programa Respack en una comunidad de mas de 500 mil habitantes donde no hay oftalmolo o a partir de marzo de 1995 dan lo consulta a bajo costo.

- Hemos realizado cirugia menor y mayor de emergencias sin costo alguno para pacientes que no pueden pagar y referidos a centros oftalmologicos del gobierno para terminar su rehabilitacion (Ver Foto).

- Hemos capacitado maestro de Escuela Primaria para la toma de agudeza visual (Ver Lista).

- Hemos capacitado personal comunitario en cuidados primarios y emergencias oftalmologicas asi como la ensenanza en toma de agudeza visual (Lista de comunidades, fotos).

- Hemos donado cartillas de Snellen tanto a mestros de escuelas como a person al comunitario de aldeas (Solicitudes hecha a la FJO).

- Hemos participado en las reuniones del Comite de la Prevencion de la Ceguera a nivel nacional.

- Hemos realizado jornadas oftalmologicas para capacitar a medicos generales y especializtas en deteccion y tratamiento de Enfermedades oculares (Diploma de Conferencista).

- Estamos programando actividades de deteccion de problemas oculares en comunidades organizadas a traves de medicos general.

- A titulo personal obstentamos cargos a traves de los cuales podemos brindar una mayor proyeccion a la zona sur. Ejemplo:

1.- Presidente Asociacion Medica del Sur, 1995-1996
2.- Presidente Comite Prevencion de la Ceguera, Zona Sur programa Sight First Club de Leones.
3.- Miembro activo del Club de Leones.
4.- Delegado Colegio Medico Zona Sur, 1996-1998
5.- Tesorero XXXIX Congreso Nacional a llevarse a cabo en Choluteca los dias 11, 12, 13 de julio de 1996, donde habran temas de enfermedad ocular.
6.- Miembro Comite Nacional Prevencion de la Ceguera, representando la Zona sur.

- Hemos contribuido en conjunto con el Comite Nacional de Prevencion de la Ceguera a capacitar maestro de escuelas aulas recursos Zona Sur.

- Hemos iniciado gestiones dirigidas al Ministerio de Salud para comprometerlo en apoyar y respaldar una actividad del Club de Leones que seria la creacion de unasala de consulta y cirugia oftalmologica en el Hospital del Sur (Carta, Copia).

- Actualmente estamos ayudando a compatriotas con enfermedad ocular que ameritan ayuda externa en centros oftalmologicos fuera del Pais a lograr su objetivo a traves del Club de Leones. Ej. Ver Foto (Carta).

- Hemos hecho deteccion de catarata en pacientes, Zona Sur a traves de la consulta (Ver Lista).

- Iniciaremos labores para completar equipo de cirugia mayor y medicamentos oculares.

- Iniciaremos contactos con Hospital General San Felipe, Sala ojos para la obtencion de lente intraocular a bajo costo de la India.

- Inicaremos cirugias de catarata de forma rutinaria.

- Continuaremos con los programas de capacitacion a mestros y personal comunitario.

CARTILLAS SNELLEN DONADAS A ESCUELAS

1.- Escuela Fco. Morazan Los Mangles Marcovia, Profesora Maria Elsa Perdomo

2.- Escuela Ramon Padilla Coello, Pavana, Profesora Sara Emilia Mendoza.

3.- Escuela Ramon Carranza, Choluteca, Profesor Raul A. Alvarez.

4.- Escuela Pedro Nufio, Choluteca, Profesora Nubia Zelaya, 1er. grado.

5.- Escuela Tiomasa P. de Benedetto.

6.- Escuela Santa Maria Goretti

LIONS INTERNATIONAL
Club de Leones de Choluteca
FUNDADO EL 4 DE MAYO DE 1945
TELEFONO 82-0286 82-0872 IDENT. 3028, APDO. No. 43 CLUB 015742
CHOLUTECA, HONDURAS, C. A:

Choluteca, 16 de Enero de 1996.

Dr. Enrique Samayoa
Ministerio de Salud Publica
Tegucigalpa, M.D.C.

Distinguido Señor Ministro :

Que la presente sea portadora de un cordial saludo y deseándole éxitos en su gestión administrativa en pro de la salud de los compatriotas.
Nos dirigimos ante Usted muy respetuosamente, para en primer lugar informarle que el Club de Leones de Choluteca en sesión enero 12 del presente año, preocupados por la situación de la Salud Ocular de la zona Sur, ya que con mas de medio millón de habitantes no existe un servicio Oftalmológico de atención publica, por lo que algunos pacientes de escasos recursos económicos pueden viajar a Tegucigalpa, pero otros que no pueden se conforman con quedar ciegos. Las estadísticas nos demuestran que el 80% de los nuevos ciegos se les pudo prevenir o curar su afección y que la relación oftalmólogo/habitantes según OPS/OMS, en esta zona sobrepasa este parámetro en demasía.
Como es de su conocimiento nuestra organización a nivel Internacional cuenta con un programa de apoyo a la atención de las acciones preventivas y curativas contra la ceguera, que es el programa SIGHTFIRTS, este financia proyectos destinados a mejorar la salud ocular, y en este caso nuestro club solicitara un financiamiento para habilitar la primera sala de Oftalmología en el Hospital del Sur con servicio de consulta externa y cirugía; para que se apruebe este proyecto es necesario el compromiso del ministerio de salud en cuanto a respaldar y apoyar el proyecto: "Plan de prevención y rehabilitación del ceguera en la zona sur", a través de las autoridades regionales de salud. De esta manera el Club de Leones de la Zona Sur así como tanto como la del norte y centro estaremos contribuyendo a mejorar la salud.
Esperamos que tal como lo ha demostrado hasta ahora y tratándose de que nuestro proyecto traerá mucho beneficio social al que mas lo necesita, contamos desde ahora con una respuesta afirmativa.

CLUB DE LEONES DE CHOLUTECA LIONS PRESIDENTE HONDURAS C. A.

Reyna Margarita de Ramírez
Presidenta del Club de Leones

Dr. Jorge A. Cisneros
Coordinador del Comité Prevención de la Ceguera.

C.C. Comité Nacional de la Prevención de la Ceguera
C.C. Asesor del Ministerio de Salud, OPS/OMS
C.C. Director del Hospital del Sur
C.C. Alcaldesa Municipal
C.C. Comisión de Desarrollo Departamental de Choluteca y Valle.
C.C. Director de la Región Sanitaria No. 4

42

Febrero

CATARATAS
NO incluye Glaucoma y otros

Juan Bonez 78 namasigue. Remun H65T
José T cañada 67 clr.
Pastora Diaz 75 Coasc Valle " SL.
Evaristo nuñez 40 San Lorezo (patologica)
Juana Barahona 74 Nacaome
Lucia Cruz 83 San Fco

MAR 20
Julio A Rodriguez
Rosa E. Espinal 64 clr. H65T
Favor Vallejo 84 Triunfo
Sebastiana Benitez 85 clr.
Luisa Aguilera 74 clr.
José V. Oviedo 80 clr.
Fndalecio Flores 64 San Lorezo.
Albino Flores 91 clr.
Escolastico Zambrano 84 clr.
José Flores nuñez 76 concepc. 21 c
abril
Guillermina Fervellen 60 aliaza
José Sierra 82 clr.
Felix Espinal 94 Aliaza valle.

Agosto

Mc Hdz 52 marcovia A.O.
Sabas Velasquez 75 San Borgo
Felipe Molina 69 ch.
Ofelia Martinez 77 ch.
Guillermin Velasquez 82 Triunfo.
Pedro Maradiaga 72 ch
Valentin Garcia 47 Alianza Valle

Sep. Rogelio Mendoza 89 ch. morolica
Sieten Reyes 72 marcovia
Digna Velasquez 41 ch patologica
Mercedes Tercero 86 SMC.

Oct =

Nov - Cornelio Aguirre 70 ch
Escolastica Zambrano 85 ch.

Dic. Jose Santos Reyes 32 valle
Carlos molina 54 ch.
Elena Ramirez 66 ch.
José Molina 60 ch.

MARZO =

abril: Anastasio Zuniga 77 Triunfo.
mio: Reina montecino 27 ch. patologia
junio Pilar padilla 73 ch.
juana peralta 60 marcovia
Eremecio Rodriguez 65 catarata ch.
julio: Rodriges Belanco 63 ch.
maria catalina pineda 64 ch
Laureano Galeas 76 ch

Agosto Fausto Espinal 73 ch
Sept juan, Pio Zerion 64 ch
Maria Bernardino Suarez 90 ch
oct silvia Barahona ch.
nicolas Lopez 65
Cristino Rodas 80 pavana
Nov M.ª Fausta 85
josefina Villatoro 78

Enero jose Leonidas portillo 50 corpus
Gabriela Carolina 1½ ch congenita
Rufino Ordoñez 62 ch
Benigno Aries 72 monjas

ATTACHMENT C

CHILDHOOD BLINDNESS AND EYE DISEASE IN HONDURAS

CHILDHOOD BLINDNESS AND EYE DISEASE IN HONDURAS

Survey of the
"Pilar Salinas" School for the Blind
Tegucigalpa, Honduras

FEBRUARY 1995

Submitted to:

International Eye Foundation
7801 Norfolk Avenue, Suite 200
Bethesda, MD 20814

Submitted by:

Edwin Benavides
and
Dr. Raúl Gómez, International Eye Foundation, Honduras

With the collaboration of:

Dr. Federico Hermes, National Committee for the Blind and Deaf, Guatemala
Dr. Edgardo Navarrete, Hospital San Felipe, Honduras
Dr. Alberto Ehrler, International Eye Foundation and Hospital San Felipe, Honduras
Dr. Denis Espinal, Hospital San Felipe, Honduras
Dr. Jorge Cisneros, Hospital San Felipe, Honduras
Dr. Denia de Argueta, Social Security Hospital, San Pedro Sula, Honduras

In coordination with:

John Barrows, MPH
Diana Schwartz, M.A.
International Eye Foundation
Bethesda, Maryland, USA

the International Eye Foundation
7801 NORFOLK AVENUE ★ BETHESDA, MARYLAND 20814 ★ TEL (301) 986-1103

EXECUTIVE SUMMARY

The aim of this study was to determine the Major Causes of Blindness among the students attending the School of Blind "PILAR SALINAS" in Tegucigalpa, M.D.C. Honduras, Central America.

Data was obtained from examining the students by ophthalmologists, from the Eye Clinic of Hospital General San Felipe.
35 students were examine, 34 of them were blind and 1 has a Severe Visual impairment. The main cause of Blindness was of unknown aetiology followed by hereditary causes and intrauterine causes.

Atrophy of the right and left eye accounted for the 14.29% of the major abnormality description, Microphthalmos 11.43%, Cataract for 8.57%.

It is important to mention that one of the student was reported to have evidence of Vitamin A deficiency in infancy or childhood resulting in corneal scarring.

The coverage of Measles Immunization is reported by the Ministry of Health as 94% (MOH, Statistics 1994).

1. AIM OF THE STUDY

To identify the Major preventable and treatable causes of visual loss and eye disease among students of the School of Blind "PILAR SALINAS" in Tegucigalpa, Honduras, Central America in order to make recommendations for appropriate strategies to prevent blindness in children.

2. OBJECTIVES

- To determine the causes of Visual Loss among students attending the School for the blind "Pilar Salinas" and to identify the main preventable and treatable causes by december 1994.

- To assess resources available at the Primary, secondary and Tertiary levels of care, particularly health personnel by december 1994.

3. BACKGROUND

3.1 GENERAL

Honduras is located in central America, with an extension of 112,491 Square Kilometers.

The population of Honduras is 5,317,831 with a Annual population increase of 2.8% one of the highest in Latin America.

It is estimated that 30% of the population lives in the two main cities: Tegucigalpa and San Pedro Sula. In Tegucigalpa there are 310 periurban marginal districts. 53% of the population lives in towns less than 1000 inhabitants. The Population Density is of 47 inhabitants per square Kilometer.

The Population Pyramid has the following structure:
3.4% less than one year of age
12.9% from 1 to 4 years of age
27.9% from 5 to 14 years of age
42.2% less than 15 years of age
52.3% from 15 to 64 years of age
3.4% 65 or over.

Updated data shows that 78% of the population is living in poverty conditions which means that out of 10 hondurans 7.8 live in poor conditions.

32% of the total population is illiterate.
The Per capita of Real Gross National Product according to UNDP is of 1,470 in US $ (1993).

The expenses in education of the Gross National Product is

4.8% and for Health is 2.8%.

HEALTH STATISTICS:

- The Mortality Rate for 1994 was estimated in 6.4
- Life Expectancy is 67 years
- Infant Mortality Rate is 50 per thousand (under one year of age)
- Mortality Rate among 1-4 years of age is 6.4 per thousand.
- Maternal Mortality is estimated in 221 for 100,000. one of the highest is Latin America.
- Immunization Coverage:(under 1 year of age)

DPT	97.4
Polio	99.0
Sarampión	99.0
BCG	96.0

There are 2.2 Doctors per 10,000 inhabitants.

There are 1.2 Professional Nurses per 10,000 inhabitants.

There are 7.8 Auxiliary Nurses per 10,000 inhabitants.

There are only 1 ophthalmologist per 125,000 inhabitants . (WHO recommends that there should be 1 ophthalmologist per 20,000 inhabitants.)

3.2 EYE CARE SERVICES:

3.2.1 PERSONNEL

For a population of approx. 5 million there are only 40 ophthalmologists in the country, 36 of them reside in the two main cities of Tegucigalpa and San Pedro Sula; 3 in La Ceiba and 1 in Santa Rosa de Copán.

In the other hand only in the two Main cities (Tegucigalpa and San Pedro Sula) ophthalmological services are provided by the Health System of the Government.

There is no National Committee for the Prevention of Blindness.

The Ministry of Health does not have among its programs any policy regarding Prevention of Blindness.

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Most of the staff working in The Health Clinics and Health Posts have received little or no training in Primary Eye Care.

3.2.2 SPECIAL EDUCATION

There are five institutions responsible for the rehabilitation for persons with visual impairment:

The School for the Blind "Pilar Salinas" located in Tegucigalpa, that offers Primary education to persons from 6 to 18 years of age.

Handicraft and Industrial Center for Blind , located in Santa Lucía, Francisco Morazán, offers one year of functional rehabilitation and some development of specific labor tasks training for persons from 14-40 years of age.

The School for the Blind Louis Braille practices the integral model that supports children and young people blind or with visual impairment that attend regular schools or industries. It offers special training to regular teachers on aspects regarding rehabilitation of blind persons. It is the only School for Blind in San Pedro Sula.

Teletón that has in Tegucigalpa a service of outpatient care for the blind children which receive assistance in functional rehabilitation and school support during vacation period of the regular schools. It also offers advice to regular teachers of the schools to achieve an efficient education for the blind.

The Instituto Franciscano Para el No Vidente (INFRACNOVI), located in Tegucigalpa, who is an institution with an integral philosophy focus in Community based rehabilitation.

All of these centers are funded by the government, and other private organizations.

3.2.3 TRAINING OF MEDICAL AND OTHER EYE CARE PERSONNEL.

MEDICAL STUDENTS:

A Medical School is functioning at the Universidad Nacional Autónoma de Honduras which includes in its regular curricula a class of Ophthalmology, but that does not include the prevention of blindness or the Primary Eye Care.

OPHTHALMOLOGISTS:

There is a Residency Program functioning at the Hospital General San Felipe in Tegucigalpa, it is a three year program, during 1994 the first three doctors graduated from it. Actually there are four students enrolled.

PUBLIC HEALTH SERVICES

The Ministry of Health has divided the country into 8 Regions of Health.

Only 64% of the population has access to Health Services provided by the Government either through the Ministry of Health and the Instituto Hondureño de Seguro Social.

There are 524 Rural Health Centers attended by an auxiliary Nurse, 156 Health Centers Attended by a Physician, 10 Area Hospitals, 6 Regional Hospitals and 7 National Hospitals. Only 10.8% of the MOH personnel are doctors. (MOH, 1990)

The Ministry of Health has opened with the support of the International Eye Foundation (IEF) two Eye Clinics in Honduras: One in San Pedro Sula at the Regional Hospital Mario Catarino Rivas and one in Santa Bárbara at the Area Hospital of Santa Bárbara. Also The IEF is supporting a Clinic at the Health Center of Las Crucitas in a periurban area of Tegucigalpa and through the Child Survival Project Vitamin A is provided to children and mothers in 25 periurban communities in Tegucigalpa. Efforts are also being made in Coordination of the MOH with the support of IMPACT and USAID for a Programme of Sugar fortification with Vitamin A as well as Vitamin A supplementation at a national level.

In Tegucigalpa functions the Eye Clinic at the Hospital General San Felipe and another clinic at the Hospital Materno Infantil.

There are also services provided by the Instituto Hondureño de Seguro Social (IHSS) in Tegucigalpa and San Pedro Sula.

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4. RESULTS OF THE STUDY:

4.1 WHO. CATEGORIES OF VISUAL LOSS.(Table 1)

34 of the students evaluated are blind (97.14%) and one suffers from a Severe Visual Impairment (2.86%).

4.2 WHO. CATEGORIES OF VISUAL LOSS - LOW VISION (Table 2)

18 students (51.43%) were detected to have Low vision according to this category and 17 (48.57%) reported as No light Perception in both eyes .

4.3 CAUSE OF VISUAL LOSS (AETIOLOGICAL CLASSIFICATION) (Table 3).

9 students (25.71%) were found to have as the aetiological cause of visual loss the Hereditary Factors, 3 students (8.57%) as Intrauterine Factors, 1 student (2.86%) as Postnatal/Infancy/Childhood Factor and 22 students (62.86%) as Unknown aetiology.

It is important to note that the student that loss his vision due to Postnatal/Infancy/ Childhood Factor, was reported as attributed to Vitamin A deficiency

4.4 SITES OF ABNORMALITY LEADING TO VISUAL LOSS. RIGHT EYE. (Tables 4 and 5)

Of the students, 10 (28.56%) showed a major site of abnormality in the right eye to be at the Whole Globe Category; 9 (25.72%) at the Optic Nerve; 6 (17.14%) at the Lens; 4 (11.43%) at the Retina; 5 (14.29%) at the Cornea and 1 (2.86) at the Uvea.

4.5 SITES OF ABNORMALITY LEADING TO VISUAL LOSS. LEFT EYE. (Tables 6 and 7)

Of the students, 10 (28.56%) showed a major site of abnormality in the left eye to be at the Whole Globe Category; 9 (25.72%) at the Optic Nerve; 6 (17.14%) at the Lens; 4 (11.43%) at the Retina; 5 (14.29%) at the Cornea and 1 (2.86) at the Uvea.

4.6 SEX AND AGE DISTRIBUTION AMONG THE STUDENTS . (Table 8)

18 students were females and 17 were males.
8 students were under 10 years of age, 21 students were between 10 and 15 years of age and 6 students were 15 years or older.

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5. RECOMMENDATIONS FOR THE PREVENTION OF CHILDHOOD BLINDNESS IN HONDURAS.

The majority of eye disease and blindness in children in Honduras occurred due to unknown causes but must of them have been diagnosed to have visual impairment since birth. Strategies for prevention of blindness should emphasize primary prevention at the community level. The Community Health Workers, the teachers, the health personnel at the Health Units, the Health Promoters (Aux. Nurses) who have close contacts with the community should be involved in a training process that will allow them to provide better services, education and orientation of the families.

Possible Strategies could include the following:

At the Primary Level:

- Development of a Training Programme for midwives and community Health workers as well as traditional healers giving emphasis to the avoidance of harmful practices and to encourage prompt referral of children with eye disease to the Health centers.

- Training of Primary Health Workers in the Health clinics and Health Posts on how to recognize, treat and refer eye problems in children, particularly VAD, ophthalmia neonatorum, cataract and glaucoma, and how to identify children at risk of keratomalacia i.e. those with malnutrition, diarrhoea and measles.

- Continued support of Child Survival Programmes, with distribution of Vitamin A.

At the Secondary level

- Train personnel to become Ophthalmological Medical Assistants.

- Provide the Health Centers with the appropriate equipment and medicines to be able to manage eye diseases.

- Continued Medical Education.

- To include in the curricula of the Medical School of the University the topics regarding Prevention of Blindness and Primary Eye Care.

- Motivate the Ministry of Health to create a National Program for the Prevention of Blindness.

• Motivate Governmental and non governmental Organizations to create a National Committee for the Prevention of Blindness.

• Training of the Kinder and Primary School Teachers in the diagnosis of visual impairment for the early detection of cases and referral to the special schools for blind and for the Health Centers.

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TABLE 1

Time: 9:48 am FREQUENCY DISTRIBUTION TABLE Date:14.02.95

TABLE NAME:CHILD TOTAL No OF RECORDS:35
FIELD NAME:V. WHO CATEGORY
NUMBER OF RECORDS INCLUDED IN ANALYSIS:35

PAGE: A-1

No.	FIELD VALUE	COUNT	% COUNT	CUM.C.	% CUM.C.
1	Blind	34	97.14 %	34	97.14 %
2	Severe Visual Impairment	1	2.86 %	35	100.00 %
T O T A L S:		35	100.00 %	35	100.00 %

categories of visual loss

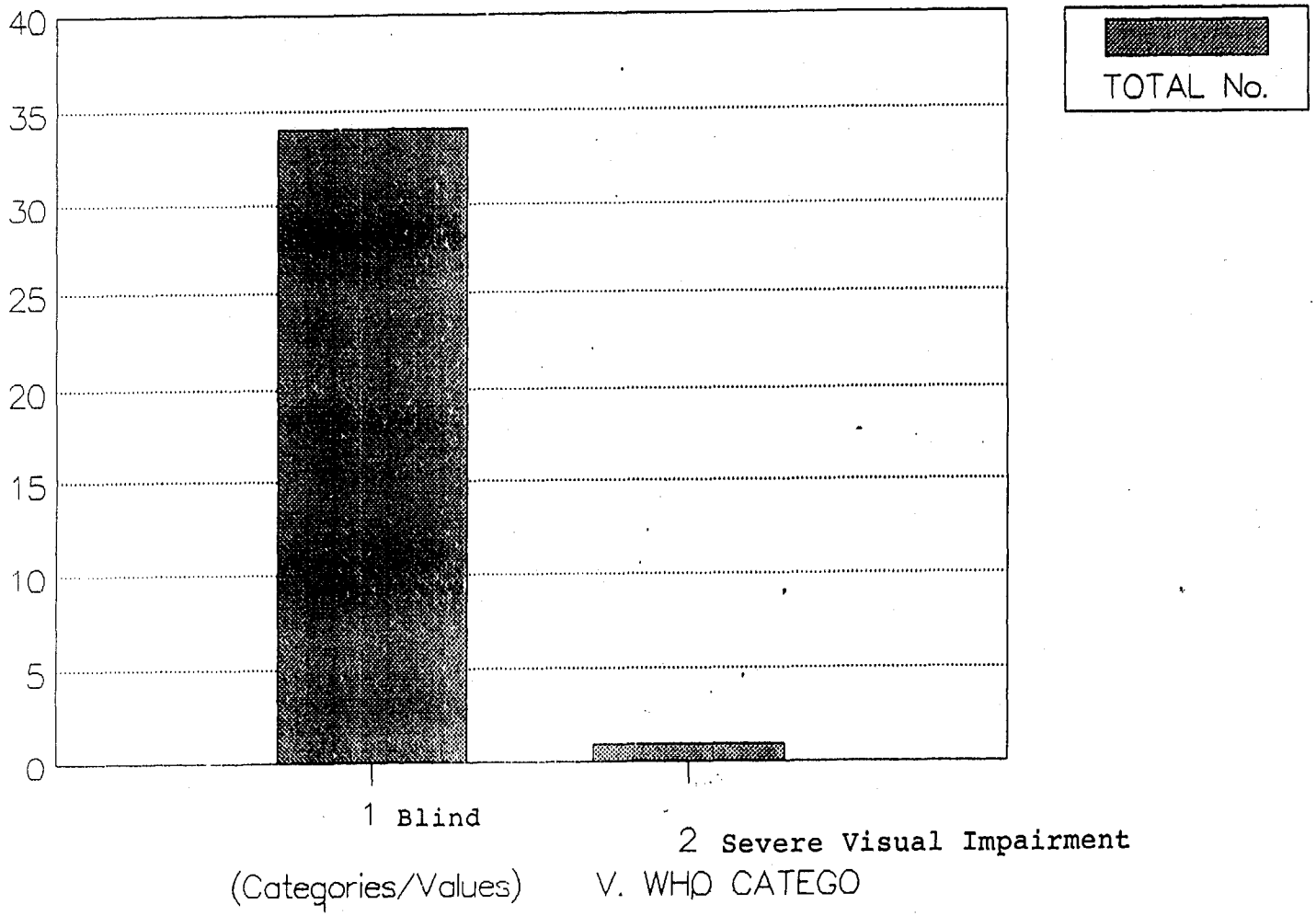

TABLE 2

Time: 9:56 am	FREQUENCY DISTRIBUTION TABLE	Date:14.02.95

TABLE NAME:CHILD
TOTAL No OF RECORDS:35
FIELD NAME:V. LOW VISION
NUMBER OF RECORDS INCLUDED IN ANALYSIS:35

PAGE: A-1

No.	FIELD VALUE	COUNT	% COUNT	CUM.C.	% CUM.C.
1	Low Vision	18	51.43 %	18	51.43 %
2	No Light Perception in Both Eyes	17	48.57 %	35	100.00 %
T O T A L S:		35	100.00 %	35	100.00 %

Low Vision Categories

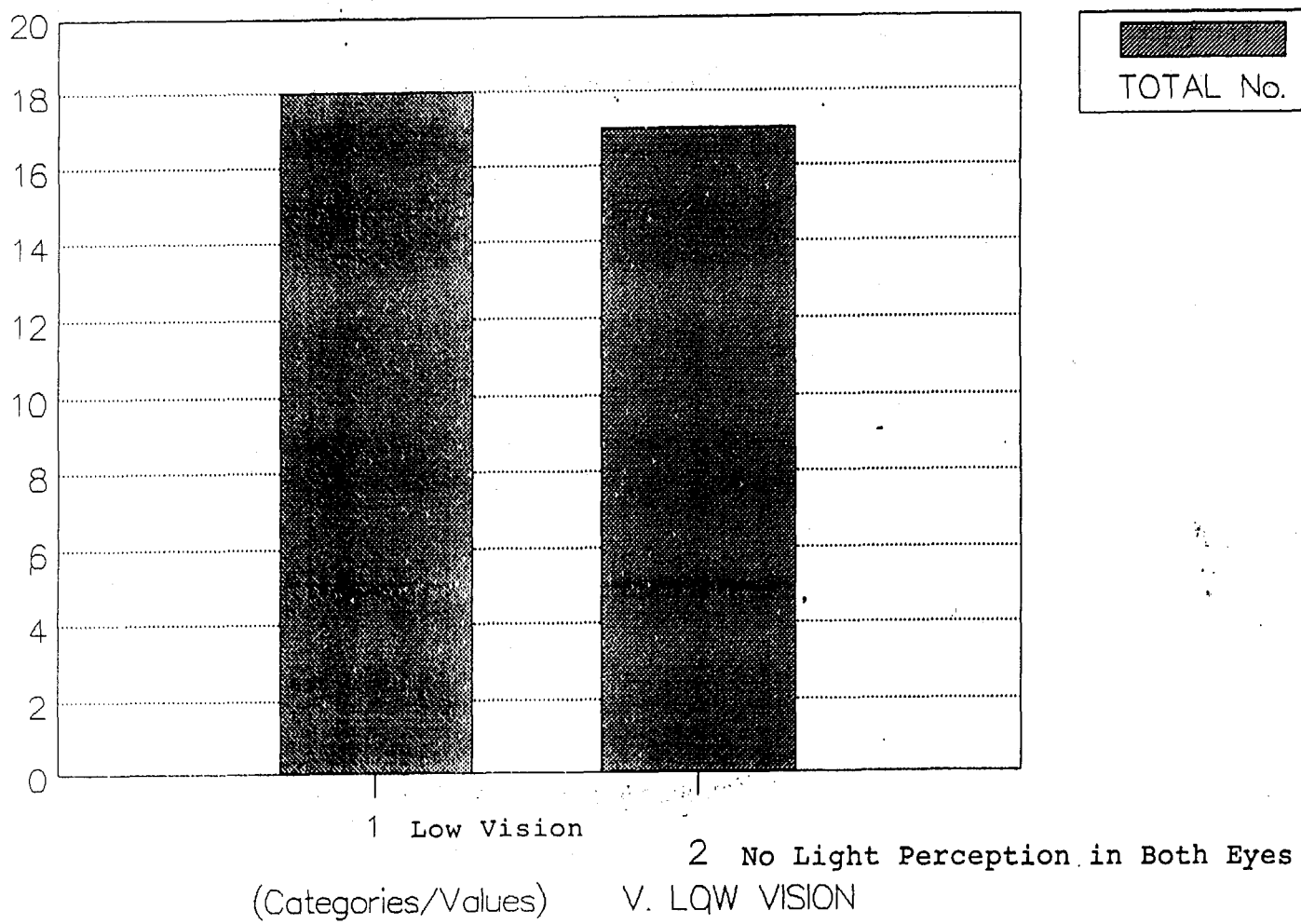

TABLE 3

Time:10:06 am	FREQUENCY DISTRIBUTION TABLE	Date:14.02.95

TABLE:CHILD FIELD:CAUSE MAIN AETIOLOGY
TOTAL RECORDS OF TABLE:35 NO OF RECORDS INCLUDED FOR ANALYSIS:35
MIN:138.00 MAX:182.00 MEAN:166.06 S.D.:17.33 VAR.:300.23

PAGE: A-1

No.	FIELD VALUE	COUNT	% COUNT	CUM. COUNT	% CUM. COUNT
1	138.00	5	14.29 %	5	14.29 %
2	144.00	4	11.43 %	9	25.71 %
3	148.00	2	5.71 %	11	31.43 %
4	152.00	1	2.86 %	12	34.29 %
5	163.00	1	2.86 %	13	37.14 %
6	174.00	3	8.57 %	16	45.71 %
7	175.00	1	2.86 %	17	48.57 %
8	176.00	2	5.71 %	19	54.29 %
9	177.00	1	2.86 %	20	57.14 %
10	180.00	8	22.86 %	28	80.00 %
11	181.00	5	14.29 %	33	94.29 %
12	182.00	2	5.71 %	35	100.00 %
T O T A L S:		35	100.00 %	35	100.00 %

138 Hereditary Disease: Autosomal Dominant, Right Eye
144 Hereditary Disease: Cannot Specify, Right Eye
148 Intrauterine factor: Toxoplasmosis, Right Eye
152 Intrauterine factor: Other, Right Eye
163 Postnatal/Infancy/Childhood factor: Vitamin A Deficiency, Left Eye
174 Unknown aetiology: Cataract, Right Eye
175 Unknown aetiology: Cataract, Left Eye
176 Unknown aetiology: Glaucoma/Buphthalmos, Right Eye
177 Unknown aetiology: Glaucoma/Buphthalmos, Left Eye
180 Unknown aetiology: Abnormality since birth, Right Eye
181 Unknown aetiology: Abnormality since birth, Left Eye
182 Unknown aetiology: Other, Right Eye

causes of visual loss

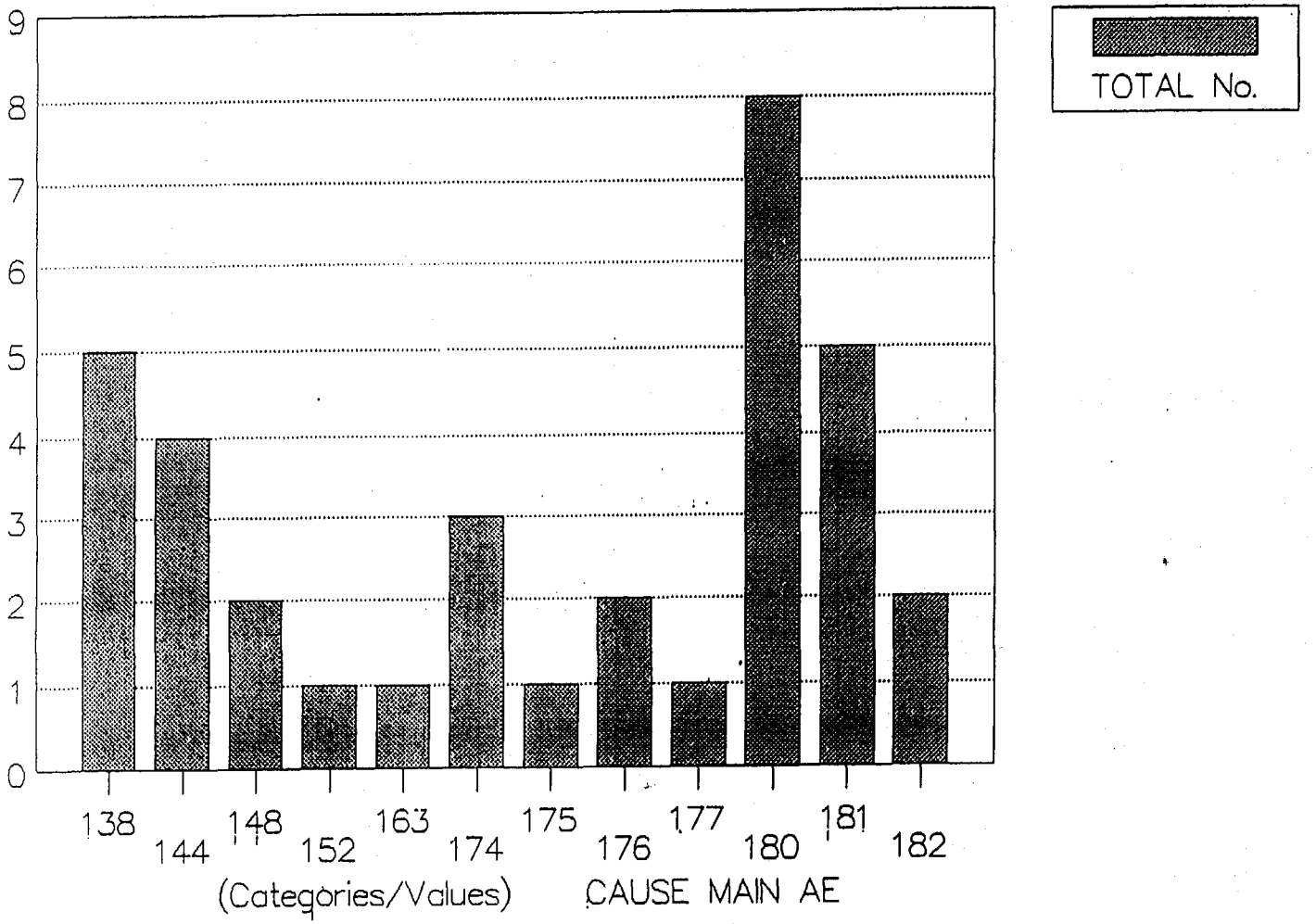

TABLE 4

Time:10:15 am	FREQUENCY DISTRIBUTION TABLE	Date:14.02.95

TABLE NAME:CHILD TOTAL No OF RECORDS:35
FIELD NAME:EXAM. MAJOR ABN. DESC. Right eye
NUMBER OF RECORDS INCLUDED IN ANALYSIS:35

PAGE: A-1

No.	FIELD VALUE	COUNT	% COUNT	CUM.C.	% CUM.C.
1	Anophthalmos	3	8.57 %	3	8.57 %
2	Aphakia	3	8.57 %	6	17.14 %
3	Atrophy	5	14.29 %	11	31.43 %
4	Cataract	3	8.57 %	14	40.00 %
5	Glaucoma	3	8.57 %	17	48.57 %
6	Hypoplasia	4	11.43 %	21	60.00 %
7	Microphthalmos	3	8.57 %	24	68.57 %
8	Other Globe	2	5.71 %	26	74.29 %
9	Other Opacity	3	8.57 %	29	82.86 %
10	Other Retina	4	11.43 %	33	94.29 %
11	Other Uvea	1	2.86 %	34	97.14 %
12	Phthisis	1	2.86 %	35	100.00 %
	T O T A L S:	35	100.00 %	35	100.00 %

anatomical site of abnormality R

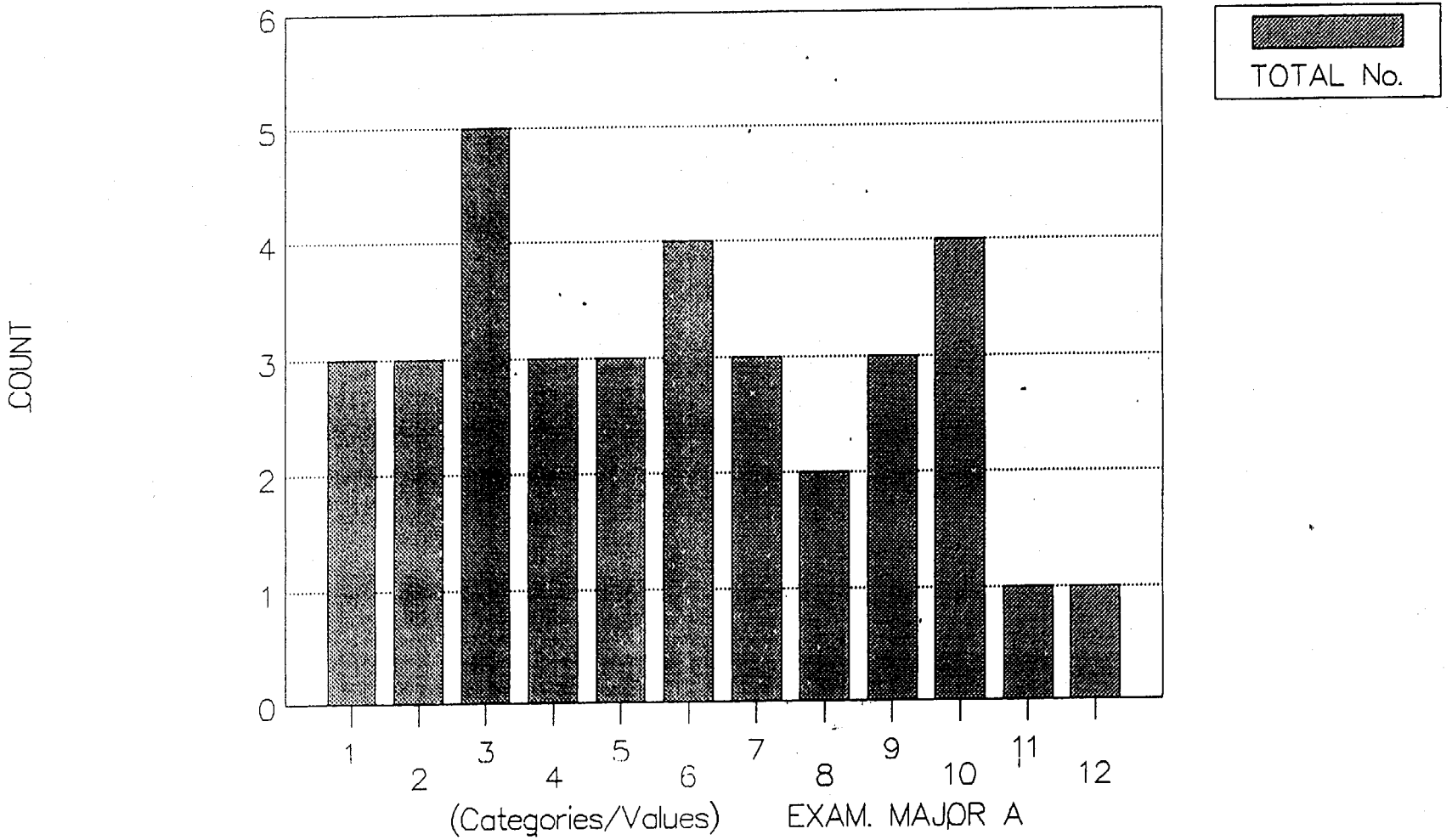

TABLE 5

ANATOMICAL SITE OF ABNORMALITY. RIGHT EYE

SITE OF ABNORMALITY		N	%
WHOLE GLOBE		10	28.56
Phthisis	1		
Anophthalmos	3		
Microphthalmos	3		
Glaucoma	3		
CORNEA		5	14.29
Scar	1		
Other Opacity	4		
LENS		6	17.14
Cataract	3		
Aphakia	3		
UVEA		1	2.86
Other Uvea	1		
RETINA		4	11.43
Other Retina	4		
OPTIC NERVE		9	25.72
Atrophy	5		
Hypoplasia	4		
T O T A L		35	100.00

TABLE 6

Time:10:24 am **FREQUENCY DISTRIBUTION TABLE** Date:14.02.95

TABLE NAME:CHILD TOTAL No OF RECORDS:35
FIELD NAME:EXAM. MAJOR ABN. DESC: Left eye
NUMBER OF RECORDS INCLUDED IN ANALYSIS:35

PAGE: A-1

No.	FIELD VALUE	COUNT	% COUNT	CUM.C.	% CUM.C.
1	Anophthalmos	2	5.71 %	2	5.71 %
2	Aphakia	3	8.57 %	5	14.29 %
3	Atrophy	5	14.29 %	10	28.57 %
4	Cataract	3	8.57 %	13	37.14 %
5	Glaucoma	3	8.57 %	16	45.71 %
6	Hypoplasia	4	11.43 %	20	57.14 %
7	Microphthalmos	4	11.43 %	24	68.57 %
8	Other Opacity	4	11.43 %	28	80.00 %
9	Other Retina	4	11.43 %	32	91.43 %
10	Other Uvea	1	2.86 %	33	94.29 %
11	Phthisis	1	2.86 %	34	97.14 %
12	Scar	1	2.86 %	35	100.00 %
	T O T A L S:	35	100.00 %	35	100.00 %

anatomical site of abnormality 1

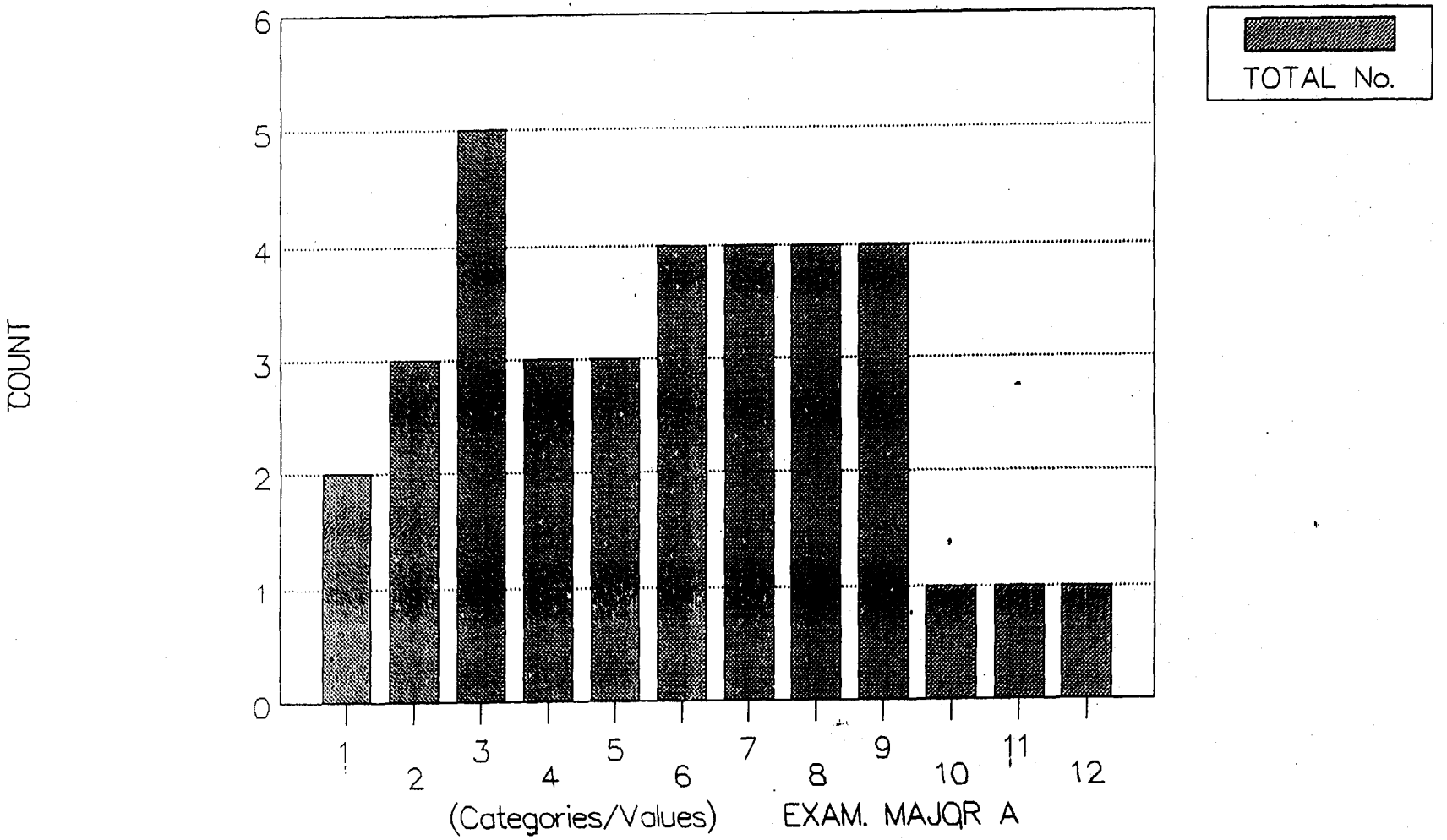

TABLE 7

ANATOMICAL SITE OF ABNORMALITY. LEFT EYE

SITE OF ABNORMALITY		N	%
WHOLE GLOBE		10	28.56
Phthisis	1		
Anophthalmos	2		
Microphthalmos	4		
Glaucoma	3		
CORNEA		5	14.29
Scar	1		
Other Opacity	4		
LENS		6	17.14
Cataract	3		
Aphakia	3		
UVEA		1	2.86
Other Uvea	1		
RETINA		4	11.43
Other Retina	4		
OPTIC NERVE		9	25.72
Atrophy	5		
Hypoplasia	4		
T O T A L		35	100.00

TABLE 8

SEX AND AGE DISTRIBUTION

AGE	MALE	FEMALE	TOTAL
Under 8 years	2	5	7
9 years	1	0	1
10 years	0	3	3
11 years	3	1	4
12 years	3	0	3
13 years	5	3	8
14 years	1	2	3
15 years	1	3	4
16-17 years	1	1	2
TOTAL	17	18	35

ATTACHMENT D

REPORT OF ASSESSMENT OF BLIND SCHOOLS IN BULGARIA

Folder: MFS Bulgaria

REPORT OF ASSESSMENT OF BLIND SCHOOLS IN BULGARIA

SUSAN LEWALLEN, M.D.

GENERAL CONSIDERATIONS

Bulgaria has a population of 8,989,165 (1990) comprised of 85% ethnic Bulgarian, 9% Turkish and the rest Gypsies, Greeks, Macedonian, Armenians and Russian. The largest (and capital) city of Sofia has approximately 1.1 million (1991) and Plovdiv and Varna have .38 and .31 million respectively. Administratively, Bulgaria is divided into 8 regions plus Sofia, which counts as a region.

A constitutional amendment in 1990 allowed a multiparty system of government for the first time since 1946 when the Communist Party one party government gained control. In the past few years, privatization of state owned industry, legalization of foreign investment and land reform have begun.

All Bulgarian children are required to attend school from age 7 through 14. The director of the school is responsible to ensure that all eligible children within his area attend and to report non-attenders to the Ministry of Education. As there is a social stigma associated with blindness and physical disability (particularly hereditary forms), Dr. Filipov reports that some parents may try to hide these children, paying administrators so that they do not report. (How much of this actually occurs is not certain.) Each school has a pediatrician and a nurse assigned to it. All children are to be examined by the pediatrician once or twice every year but there is no vision screening done.

HEALTH AND OPHTHALMIC SERVICES

Most health care is received free through government services but some private services are offered. There are approximately 27,000 physicians and 684 ophthalmologists but only about 20% of the ophthalmologists (usually those trained at University) perform surgery. Each of the 8 regions (plus Sofia) has a regional doctor (administrator) and a chief ophthalmologist who oversees ophthalmology within the region. The national consultant ophthalmologist (Dr. Petja Vassileva) is responsible for coordination among these regional ophthalmologists. An unfortunate legacy of the last regime is a complex bureaucracy in which various members vie for power and it is often not clear who has authority over various facilities (including the blind school in Sofia).

Medical training in Bulgaria consists of 6 years of medical school, after which an M.D. degree is awarded. All doctors then specialize in a "residency" of some sort. This may be University based or may occur in one of the numerous "polyclinics" throughout the country. Supervision and structure of these is variable with less in the polyclinics. There is no recognized

"family practice" or "general practice" residency at this time. Pediatric and internal medicine residencies are the closest to this, however, there is no component of eye care within these trainings.

THE BLIND SCHOOLS IN BULGARIA

The first Balkan school for the blind was founded in Sofia in 1905. In 1942 it was moved to Chumen so that the building could be used for the war effort. In about 1951 it was moved to Varna where it still exists. In 1963 a second school was opened in Sofia. Schools generally accept student starting at age 7, although those with no light perception may start at age 6. The oldest children are age 18 or 19. Only children considered educable are admitted, but some may have mild learning disabilities.

Until about 10 years ago Dr. Filipov examined all the children in the blind school in Sofia regularly and kept detailed information about their family history when appropriate. Since he discontinued work at the school there have been several ophthalmologists who have worked there. At present, Dr. Galya Dimitrova from the Eye Clinic at the Medical University is assigned to the school. She is responsible for the eye care of the children there and visits approximately once per week.

The blind school is supposed to be under the control of the Ministry of Education. Unfortunately, the lines of authority are poorly defined; the mayoral office of the city of Sofia claims to have authority over the school and has exercised this by firing the director several months ago. This is relevant because the mayor is the husband of an ophthalmologist in Sofia, Dr. Pravoslava Guguchkova, who is opposed to IEF activities in Bulgaria. Furthermore, Dr. Guguchkova is the head of the Eye Clinic at the Medical University and she assigns the ophthalmologist who treats the blind school children. This presents a severe problem in trying to work within the school at this time. (see Trip Report) Examinations at the Sofia school were done with the aid of Dr. Rossitza Lolova (a resident assigned by Dr. Vassileva) and Dr. Filipov. Dr. Galya Dimitrova, the ophthalmologist assigned to the school, did not participate in the examinations.

Presently the enrollment at the blind school in Sofia is approximately 180. 120 students were boarding at the school during our visit, 30 day students were living in Sofia, and 30 had not yet arrived at the school to begin the year. The eye examination room at the school (which we were not allowed to use) has at least one slit lamp, a keratometer, an adaptometer, an amblyoscope, a new Canon autorefracter, a pnuemotonometer, a slit lamp with anterior segment camera, a retinal camera, a (Kujel?) visual field analyzer, a direct ophthalmoscope and retinoscope, a Shiotz tonometer, and a Maklokov tonometer. There is no indirect ophthalmoscope. I had no opportunity to see the records of the children there. (see trip report) .

In Varna the blind school is in a large, light, new building

(10 years old). The eye clinic there has a slit lamp, a direct ophthalmoscope and retinoscope. Neither the director of the school nor the psychologist who acts as second in charge was present during the survey. However, Dr. Boneva, a polyclinic ophthalmologist assigned to the school was present to help with both days of the survey. We used the records which she and her predecessors have kept on the children which include information on age at onset of blindness, family history, and history of treatment. She said there were 135 pupils in the school last year, but did not know the enrollment for this year. (As the school just opened for the season, some pupils have not yet arrived, thus the uncertainty in the enrollment). In addition to Dr. Boneva, Dr. Sergie Kuznetzov, a polyclinic ophthalmologist temporarily working in Dr. Mitov's department in Varna, was assigned to help with the survey. Because Dr. Mitov was busy with a visit by ORBIS, we spent relatively little time together; however, he was extremely helpful, had made arrangements for us, and took care that we had all that we needed.

Dr. Filipov reports that children are usually referred to blind schools by parents or teachers who note that the child can't see. They are to be evaluated by the ophthalmologist assigned to the blind school. Criteria for entrance are (1) <20/400 in better eye or VF < 20 degrees (2) progressive disease (3) any other referral by an ophthalmologist.

In general I was very impressed with the schools. The teachers who I met were dedicated, the buildings were reasonably maintained, the children were very well disciplined and bright, and the examinations proceeded in an orderly fashion (once they began).

THE BLIND IN BULGARIA

Dr. Filipov estimates that for every child in blind school there are 3 blind in the community not enrolled. He also reports that communities of blind exist and there is much intermarriage within these (which helps explain the large number of blind children with hereditary diseases). According to Ms. Petinka Hristova (English teacher at the Varna blind school) the blind are not well integrated into Bulgarian society and have little chance to have professional careers. However, she noted that 3 of the Varna graduates last year were accepted for University. Varna blind school does have a program to try to integrate students into normal schools, however this is a difficult process. Students in blind schools receive education and some benefits free of charge which they lose if they go to normal school. Teachers in normal schools are resistant to taking visually disabled students and most have no education in how to deal with such pupils. Therefore, visually disabled students may suffer if they are forced into normal schools without support.

A Union of Blind People exists and supports some factories to employ the blind.

EXAMINATION PROCEDURE

Visual acuity was tested by Dr. Lolova (in Sofia) and by Drs. Boneva and Kuznetzov (in Varna). History had to be obtained from students with some help from teachers in Sofia; in Varna clinic records were used. All examinations were done by Susan Lewallen, with a torch and magnifier, and dilated direct and indirect ophthalmoscopy were performed when indicated.

FINDINGS

Children ranged in age from 6-19 with a mean of 12.5 years. 132 (53.5%) were male and 115 (46.5%) were female.

Table 1

Visual Acuity of Children in the Schools

	number of children (%)		
	Sofia	Varna	Total
≥ 6/18 * (normal)	18 (12.9)	8 (7.48)	26 (10.5)
<6/18 - 6/60 (visually impaired)	24 (17.1)	20 (18.7)	44 (17.8)
<6/60 - 3/60 (severe visual impairment)	26 (18.6)	19 (17.8)	45 (18.2)
<3/60 - no PL (blind)	70 (50)	60 (56.1)	130 (52.6)
cannot test	1 (1.4)	0	2 (.8)
TOTAL	140	107	247

* These were all older children who had been in the school for several years and many had social reasons for being in the blind school.

ACTIONS NEEDED

It is noteworthy that there a NOT large numbers of children in the schools now who have not received some treatment. For example most cataracts have been removed (albeit often too late to prevent amblyopia), most children who need spectacles have them, and children with glaucoma are under treatment now. No children were identified who would have dramatic results from treatment at this point. The largest need (expressed by several children as well as teachers) is for low vision aids.

In Sofia:

Low vision aids would be useful for 49
Careful refraction might improve vision in 10
Spectacles are needed by 2
Continued glaucoma follow up is necessary for 6
Surgery might benefit 1 (posterior capsulotomy)

In Varna:

Low vision aids would be useful for 29
Careful refraction might improve vision in 3
Spectacles are needed by 1
Continued glaucoma follow up is necessary for 6
Surgery might benefit 7 (4 cataract, 2 posterior capsulotomy, 1 iridoplasty)

A report for the director of each school is being prepared which will summarize our findings and identify those children who might be helped.

SUMMARY AND RECOMMENDATIONS

The results of the survey show that the major causes of blindness in the schools are hereditary diseases, retinopathy of prematurity (ROP) and various birth defects. The first two could be reduced by prevention or treatment. Another treatable factor adding to poor vision is amblyopia in children with congenital cataracts in whom operations have been performed late and probably without good optical corrections. Optimal treatment of congenital cataracts and prevention of ROP require collaboration with the pediatricians, particularly those who examine neonates (called micro-pediatricians in Bulgaria); improved training of ophthalmologists alone will be minimally effective.

I recommend that efforts be made to strengthen collaboration with pediatricians. First it may be necessary to learn more about the pediatric health care system in Bulgaria; one might approach the problem from a grass roots level, identifying dedicated pediatricians at the polyclinic level, or start at the top, within the MOH. Unfortunately I was given the impression by several ophthalmologists that morale among doctors is so low in Bulgaria that they expected little cooperation or interest in

childhood blindness from the pediatricians. Incentive programs to improve this situation deserve investigation.

The problem of hereditary disease is difficult and the amelioration of this depends upon integrating the blind into the sighted society as well as education of the public and of ophthalmologists in the field of genetics. Any efforts to support the current efforts of the blind schools to integrate students would be helpful. The ChildSight project might consider including in the lecture program ophthalmologists with special expertise in genetics and genetic counseling (especially how to set up such programs).

The need for low vision aids is great. There are only 3 low vision sets in Bulgaria now and very limited access to magnifiers etc. The identification, further training, and support of ophthalmologists in this field would be very helpful.

In summary, based on the survey, the following recommendations are made with respect to decreasing the burden of childhood blindness in Bulgaria:

1. Improved collaboration with pediatricians, especially neonatologists, with the goal of improving care of neonates at risk for ROP and developing cataract screening for children. Amongst ophthalmologists, improvement of the surgical techniques and post operative care of congenital cataract and of detection and treatment of ROP.

2. Support for efforts to integrate the blind into society starting with school age children. Emphasis on training of Bulgarian ophthalmologists in relevant genetics and genetic counseling.

3. Identification, training, and support for those willing to work in the field of low vision aids. In particular, support for low vision aids for children identified in the survey.

ATTACHMENT E

SURVEY OF OF CHILDREN ATTENDING THE ABRAHA BAHTA SCHOOL FOR THE BLIND

A SURVEY OF CHILDREN ATTENDING THE ABRAHA BAHTA SCHOOL FOR THE BLIND USING THE WHO/PBL EXAMINATION RECORD ASMARA, ERITREA.

Michael Eckstein January 17th-23rd 1995

The purpose of the visit was:

1. To assist Dr Desbele Gebregiorgis conduct a survey of all the children attending the blind school in Asmara using the new "WHO/PBL Eye Examination Record".
2. To discuss the recording methods for the data and to use the computer database to enter the data in order to perform frequency distributions on the data.
3. To finalise plans for the future follow up of those children already attending the school for the blind.
4. To discuss and plan a method for examining children about to enter the school and to record the information on the computer database.

Abraha Bahta School for the Blind

The school was built in 1974 and is situated within the city limits about two miles from the centre of Asmara. It is currently the only civilian school for the blind in Eritrea and is attended by 61 children between the age of 5-15 years. There are a further 20 pupils who are older than 15 and who are integrated into normal schools but who still use the school for the blind as their base.

Future Follow Up

Dr Desbele and his staff are planning to examine all children once every year at the school. They will have the original WHO/PBL forms to compare findings and will be able to update these accordingly.

Assessment of new pupils at the school

All children are already assessed at the eye hospital prior to acceptance at the school. The forms filled in at this examination are kept in the school records of all the children and are easily available for inspection.
Some of the details on the forms are inaccurate and too brief and give little indication of any treatment that may be appropriate. Dr Desbele is keen to introduce a system whereby the children are seen by a senior doctor at this important assessment. The doctor will complete the usual school form and also the WHO/PBL form and this data can then be entered onto the database.

The Survey

All children at the blind school were examined but only those 15 years of age or under have been analysed for this study. Children were asked the age at which they lost vision, whether they knew the cause of their poor vision and whether there was any relevant family history including a history of consanguinity. Limited past medical history was available from the school records, however every child had a record of the hospital examination performed before entry to the school.
Visual acuity was measured using an Illiterate E chart by a single trained observer. All children were refracted where possible. Visual loss was classified according to WHO categories of visual impairment. An assessment of functional vision was made on all children. This tested ability, to walk around furniture unaided, to recognise faces and to see large print.

Anterior segment examination was performed with a torch and magnifying loupe. Posterior segment examination was undertaken after dilating the pupil, using a direct and indirect ophthalmoscope. Intraocular pressure was not measured routinely. Examinations were performed by Dr Desbele and myself. All data were recorded on the WHO/PBL Eye Examination Record for Children with Blindness and Low Vision and entered into a customised database using a portable computer. The database has now also been entered on the hospital computer. Children who required further assessment and treatment were referred to Dr Desbele at the Birhan eye hospital.

RESULTS

Of the children examined 54 (88.6%) were blind (best VA <3/60), 6 (9.8%) had severe visual impairment (best VA <6/60-3/60) and 1(1.6%) had normal vision.(table1).

A total of 36 male (59%) and 25 female (41%) children were examined. The majority of children (76%) were between 10-15 years old and were ethnically Tigrigna (77%).

Anatomical Cause of Visual Loss

Cornea

Corneal scarring or perforation and phthisis due to definate Vitamin A deficiency/measles accounted for 29 cases of visual loss(37%).

Lens

Cataract was responsible for 11 (18%) children being BL/SVI . Uncorrected aphakia usually with amblyopia accounted for 5 cases and unoperated cataracts for 6 cases.

Retina

Retinal disease was the third most common cause of visual loss accounting for 9 (15%) cases of BL/SVI. The majority was due to retinal dystrophies. There was no case of retinopathy of prematurity.

Optic nerve

Primary optic atrophy was responsible for 3 (5%) cases of BL/SVI.

Glaucoma

There were 3 (5%) children with visual loss due to congenital glaucoma or buphthalmos. Drainage surgery had been performed on two of the children. In one case there was a positive family history, a sibling being similarly affected.

Aetiology of Visual Loss

Hereditary disease was responsible for at least 18% of BL/SVI. Most of this was due to retinal dystrophy, cataract and optic atrophy. Intrauterine factors such as congenitally acquired rubella could only be incriminated in one case. Perinatal factors were unusual, there was one case of ophthalmia neonatorum and two cases of cerebral hypoxia. No cases of Retinopathy of Prematurity (ROP) were seen. The majority of children had disease occuring during childhood and this was due to Vitamin A deficiency/measles and trauma from landmine explosions.

Discussion

Given an estimated prevalence of childhood blindness of 1.0 to1.3 per 1000 children, there will be approximately 1500 blind or severely visually impaired children in Eritrea (assuming population of 3 million and 50% under 15 years). It is known that there are 61 children in the single school for the blind and therefore more than 1400 who are not in a formal education program. The approximate 4% sample examined in this study must therefore be viewed as a selected group having a bias towards older children, probably from more affluent households and in whom visual loss is likely to be more severe.

Conclusions

1. The single most common cause of visual loss seen at the school is corneal disease due to Vitamin A deficiency/measles.
2. Traumatic injury from accidental landmine and grenade explosions is the second commonest cause.
3. Congenital cataract is the commonest treatable cause of visual loss seen.

Table 1 WHO Categories of visual loss

WHO Category	Level of Vision	N	%
No impairment	>6/18	1	1.6
Severe visual impairment	<6/60-3/60	6	9.8
Blind	<3/60-NPL	54	88.6
TOTAL		61	100

Table 2. Anatomical site of abnormality leading to visual loss in children (N=61)

Site of Abnormality	N	%
Whole globe	5	8
Cornea/phthisis	29	48
Lens	11	18
Uvea	0	0
Retina	9	15
Optic nerve	3	5
Glaucoma	3	5
Other	1	1
Total	61	100

Table 3. Aetiological categories of visual loss in children (N=61)

Aetiological category		N	%
Hereditary disease		**11**	**18**
Intrauterine factor		**1**	**1**
Perinatal factor		**3**	**5**
-cerebral hypoxia	2		
-ophthalmia neonatorum	1		
Childhood factor		**33**	**55**
-Vitamin A / Measles	22		
-trauma	10		
-other	1		
Unknown		**13**	**21**
-cataract / aphakia	5		
-glaucoma/buphthalmos	3		
-other	5		
TOTAL		61	100

Table 4. Avoidable causes of childhood blindness

Preventable causes	N	%	Treatable causes	N	%
Vitamin A Def/Measles	22		Cataract	5	
Landmine blast	10		Glaucoma	3	
Rubella	1				
Total	**33**	**54%**		**8**	**13%**

Table 5. Action needed

Optical services	N	Treatable causes	N
Spectacles/refraction	5	B-scan, plan surgery	2
		Cataract extraction	4
		Yag capsulotomy	1
TOTAL	5	TOTAL	7

Children requiring further assessment

Number	Name	Procedure
001	Tecklezghi W/Maryam	cat extn, yag caps
003	Haile Debrezion T/Gherguis	B scan
007	Mulugaita Tesfai Mersh	Aphakic glasses
031	Liul Okbamedhin	Aphakic spectacles
008 (326)	Elyas Yakob G/Zgihair	Cataract extraction
(320)	Samrawit G/Eyesus	B scan
036 (244)	Mozolo Siele	aphakic glasses
015 (335)	Yordanis Tsegai	yag capsulotomy
058 (268)	Yemane Teckeste	B scan ?cataract extn
063 (315)	Desale Ghidey	Aphakic glasses
055 (257)	Teckle Akelon	B scan
042	Akberet Merid	?cataract extraction
021 (340)	Fortuna Z/Mariam	cataract extraction

ATTACHMENT F

"Causes of childhood blindness in East Africa"

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Causes of childhood blindness in East Africa: Results in 491 pupils attending 17 schools for the blind in Malawi, Kenya and Uganda

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Abstract Pupils attending 12 schools for the blind in Malawi, 3 schools in Kenya and 2 schools in Uganda were examined to determine the causes of severe visual impairment or blindness (visual acuity in the better eye of less than 6/60). A total of 491 pupils aged 3-22 years was examined. Visual acuity was measured in each eye using a Snellen E chart. The anatomical site of abnormality and underlying cause of visual loss were determined by clinical examination for each eye, and for the child. Information was recorded on a standard reporting form (the WHO/PBL Eye Examination Record for Children with Blindness and Low Vision). Data were analysed for those aged less than 16 years using a database which accompanies the form. Preventable and treatable causes were identified. 260 pupils aged 5-20 years were examined in Malawi, 163 pupils aged 3-19 years were examined in Kenya and 68 pupils aged 6-22 years were examined in Uganda. Of the 491 students included in the study 309 (62.9%) were blind (BL) and 69 (14.1%) were severely visually impaired (SVI). 244 were aged less than 16 years and had SVI/BL. In these 244 children 35.2% of visual loss was due to corneal pathology, 13.5% was due to cataract and 14.8% to diseases of the retina. Corneal pathology, attributed to vitamin A deficiency and measles infection in the majority, was responsible for proportionally more SVI/BL in students in Malawi than in Uganda or Kenya. Overall, 131 (53.7%) of students aged 0-15 years with SVI/BL had causes which could be avoided through the provision of adequate primary health care services and specialist ophthalmic services.

Conclusions:

1 Approximately 1 in 5 students attending schools for the blind in this study had a visual acuity in the better eye of 6/60 or better.

2 Vitamin A deficiency and measles infection were the major causes of SVI/BL in children in Malawi, but were found to be relatively less important in this study population in Uganda and Kenya. These findings should be interpreted with caution as they may reflect selection bias in Kenya and Uganda.

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3 Cataracts and their sequelae are the major surgically correctable cause of SVI/BL in all 3 countries (10.4%-26.7%).
4 One in 4 pupils in Kenya, 1 and 2 in Uganda and 2 in 3 in Malawi are severely visually impaired or blind from conditions which are potentially avoidable, e.g. measles infection, vitamin A deficiency and cataract.

Keywords childhood blindness, etiology, East Africa

Introduction A report by the World Health Organisation estimates that 1.5 million children are blind world wide[1] and of these approximately 300,000 live in Africa. The causes of childhood blindness have recently been reported for three West African countries and also Zimbabwe[2,3] but recent data have not been published from East African countries. The aim of this study was to document the visual status and causes of severe visual impairment and blindness in children attending schools for the blind in Malawi, Kenya and Uganda with a view to identifying the causes which are potentially avoidable.

Subjects and methods All children attending 12 of the 13 schools for the blind in Malawi, 51 pupils from two schools for the blind and 16 university students in Uganda, and 163 pupils from 3 schools for the blind in Kenya were examined for visual status and cause of visual loss.

The distance visual acuity in each eye of every child was measured at 6 meters with glasses if normally worn using a Snellen E chart to measure the levels 6/18, 6/60 and 3/60. If the visual acuity was less than 3/60 each eye was tested for the ability to perceive light. Ophthalmic examination was performed using a slit lamp (when available), or magnifying loupe and torch, to examine the anterior segment of the eye. Examination of the posterior segment was by direct and/or indirect ophthalmoscopy after dilating the pupils. Visual fields were tested to confrontation. Intraocular pressures were not measured. The visual acuity, anatomical site of abnormality leading to visual loss and underlying aetiology were recorded on the standardised reporting form (WHO/PBL Eye Examination Record for Children with Blindness and Low Vision)[4] following the guidelines and criteria laid down in the Coding Instructions. Data were analysed using software which accompanies the form. The anatomical site of abnormality and underlying aetiology were recorded for each eye, and one selected as the main site and cause for the child. The results presented below are the findings for the child.

Results

1 Categories of visual loss A total of 491 students was examined. Levels of visual loss according to WHO categories for each country and age group are shown in Table 1. At presentation, 4.6%, 11.0% and 4.4% had no impairment ($\leq$ 6/18) in Malawi, Kenya and Uganda, respectively. 10.4%, 22.7% and 19.1% had visual impairment ($<$ 6/18-6/60); 7.7%, 17.2% and 30.9% were severely visually impaired (SVI) ($<$ 6/60-3/60) and 76.2%, 49.1% and 45.6% had vision in the range of less than 3/60-no light perception (BL). Overall, 62.9% were blind and 14.1% severely visually impaired, but 1 in 7, 1 in 3 and 1 in 4 students in Malawi, Kenya and Uganda, respectively, had a visual acuity in the better seeing eye of 6/60 or better.

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TABLE 1. Visual status of 491 students attending schools for the blind in Malawi, Kenya and Uganda by age group.

A Malawi:

		0-5 N	6-10 N	11-15 N	16+ N	All N	*All %*
6/6-6/18	NI	0	4	6	2	12	*4.6*
<6/18-6/60	VI	0	6	15	6	27	*10.4*
<6/60-3/60	SVI	0	4	13	3	20	*7.7*
<3/60	Blind	2	28	90	78	198	*76.2*
Cannot test		0	1	2	0	3	*1.1*
Total	N	2	43	126	89	260	
	%	*0.8*	*16.5*	*48.5*	*43.2*		*100*

B Kenya:

		0-5 N	6-10 N	11-15 N	16+ N	All N	*All %*
6/6-6/18	NI	0	5	9	4	18	*11.0*
<6/18-6/60	VI	1	7	19	10	37	*22.7*
<6/60-3/60	SVI	0	12	9	7	28	*17.2*
<3/60	Blind	2	21	33	24	80	*49.1*
Cannot test		0	0	0	0	0	*0*
Total	N	3	45	45	45	163	
	%	*1.8*	*27.6*	*27.6*	*27.6*		*100*

C Uganda:

		0-5 N	6-10 N	11-15 N	16+ N	All N	*All %*
6/6-6/18	NI	0	1	1	1	3	*4.4*
<6/18-6/60	VI	0	2	5	6	13	*19.1*
<6/60-3/60	SVI	0	3	8	10	21	*30.9*
<3/60	Blind	0	6	13	12	31	*45.6*
Cannot test		0	0	0	0	0	*0*
Total	N	0	12	27	29	68	
	%	*0*	*17.6*	*39.7*	*42.7*		*100*

NI = No impairment VI = Visual impairment SVI = Severe visual impairment

2 Anatomical causes of SVI/BL in students aged 0-15 years 244 of the students had a visual acuity of less than 6/60 and were aged 0-15 years. In these pupils corneal pathology was responsible for 48.9%, 16.9% and 20.0% of SVI/BL in Malawi, Kenya and Uganda, respectively (Table 2). Lesions of the retina were a common cause of severe visual loss in Kenya (24.7%) and Uganda (20.0%), principally due to retinitis pigmentosa, cone dystrophies and Leber's amaurosis, and 8 students had oculocutaneous albinism. Lesions of the

TABLE 2. Anatomical site of abnormality in children with severe visual impairment and blindness (< 6/60 in the better eye) aged less than 16 years in schools for the blind in Malawi, Kenya and Uganda.

Anatomical site:	Malawi N	Malawi %	Kenya N	Kenya %	Uganda N	Uganda %
Whole globe	21	15.3	20	26.0	4	13.3
Cornea/phthisis	67	48.9	13	16.9	6	20.0
Lens	18	13.1	7	9.1	8	26.7
Uvea	6	4.4	3	3.9	1	3.3
Retina	11	8.0	19	24.7	6	20.0
Optic nerve	7	5.1	8	10.4	4	13.3
Glaucoma	5	3.7	5	6.5	1	3.4
Other	2	1.5	2	2.5	0	0
Total:	137	100	77	100	30	100

whole globe, such as microphthalmos, anophthalmos and disorganised eyes, accounted for 15.3%, 26.0% and 13.3% in the three countries, respectively. Unoperated cataract, aphakia or the complications of cataract surgery were responsible for 13.1%, 9.1% and 27.6% in Malawi, Kenya and Uganda, respectively. Nineteen students had lesions of the optic nerve (5.1%, 10.4% and 13.3%), the majority of whom had optic atrophy, and 4 had optic nerve hypoplasia. Eleven children had visual loss from buphthalmos and glaucoma and 10 had visual loss from uveal conditions.

3 Aetiology of SVI/BL in students aged 0-15 years Hereditary diseases, such as albinism and retinal dystrophies, accounted for 12.4%, 33.8% and 23.3% of SVI/BL in Malawi, Kenya and Uganda (Table 3), respectively. Causes occurring during childhood, such as corneal scarring attributable to vitamin A deficiency and measles infection, accounted for 51.8%, 19.5% and 23.3%, respectively. In Malawi 60 out of 71 children (85%) with childhood causes had visual loss attributed to vitamin A deficiency, measles infection and/or the use of harmful traditional eye medicines. Only 3 children had causes definitely due to intrauterine factors such as congenitally acquired rubella, and 4 children had visual loss due to perinatal factors such as ophthalmia neonatorum. In 33.6%, 45.4% and 43.4% the underlying cause could not be determined. These children either had phthisis bulbi of unknown cause, or had abnormalities which had been present since birth (such as microphthalmos)

TABLE 3. Aetiological categories of visual loss in children aged less than 16 years with severe visual impairment and blindness (< 6/60 in the better eye) in schools for the blind in Malawi, Kenya and Uganda.

Aetiological category:	Malawi N	Malawi %	Kenya N	Kenya %	Uganda N	Uganda %
Hereditary disease	17	12.4	26	33.8	7	23.3
Intrauterine factor	2	1.5	0	0	1	3.3
Perinatal factor	1	0.7	1	1.3	2	6.7
Childhood factor	71	51.8	15	19.5	7	23.3
Unknown	46	33.6	35	45.4	13	43.4
Total:	137	100	77	100	30	100

	Malawi		*Kenya*		*Uganda*	
	N	%	N	%	N	%
Preventable conditions:						
Measles/Vitamin A deficiency	60	*47.8*	6	*7.8*	1	*3.3*
Rubella	1	*0.7*	0	*0*	0	*0*
Toxoplasmosis	1	*0.7*	0	*0*	1	*3.3*
Cerebral malaria/meningitis	1	*1.5*	1	*1.3*	1	*3.3*
Ophthalmia neonatorum	1	*0.7*	1	*1.3*	0	*0*
Trauma	2	*1.5*	1	*1.3*	2	*6.7*
Subtotal:	**67**	***48.9***	**9**	***11.7***	**5**	***16.7***
Treatable conditions:						
Cataract	17	*12.4*	8	*10.4*	8	*26.7*
Glaucoma	5	*3.6*	4	*5.2*	3	*10*
Uveitis	3	*2.2*	1	*1.3*	1	*3.3*
Subtotal:	**25**	***18.2***	**13**	***16.9***	**12**	***40***
Total avoidable:	**92**	***67.2***	**22**	***28.6***	**17**	***56.7***

TABLE 4. Avoidable causes of severe visual impairment and blindness (< 6/60 in the better eye) in children aged less than 16 years in schools for the blind in Malawi, Kenya and Uganda.

which could not definitely be attributed either to hereditary or intrauterine factors.

4 Avoidable causes of SVI/BL in students aged 0-15 years Table 4 summarises the potentially avoidable causes of SVI/BL in students aged 0-15 years. Overall, 48.9%, 11.7% and 16.7% of children in Malawi, Kenya and Uganda had preventable causes of visual loss, and in 18.2%, 16.9% and 40% in the causes were potentially treatable. Approximately 1 in 4 students in Kenya, 1 in 2 students in Uganda and 2 in 3 students in Malawi were severely visually impaired or blind from potentially avoidable causes.

Discussion In industrialised countries education for children with visual disabilities or handicap used to be in residential schools, but over the last 20-30 years greater emphasis has been placed on integrated education. In East Africa, special education has been mainly in residential schools as programmes of integrated education are in the process of being developed (Figures 1 and 2). Schooling is usually free and admission criteria may not be adhered to for a variety of reasons. Because of the facilities and care provided parents may seek admission for their child even if he or she is not blind. These factors may explain the relatively high proportion of children in this study who were not blind or severely visually impaired.

In this study we were able to examine children in 12 of the 13 schools for the blind in Malawi, but only approximately 15% of those in schools for the blind in Kenya. In 1988, 976 children in 8 of the 9 schools for the blind in Kenya were examined and 783 (80%) had severe visual impairment or blindness. The causes of visual loss were similar to those found in this study – retinal disease 25.7%, corneal scarring and phthisis bulbi 23.9%, optic nerve disease 13.7%, cataract/aphakia 12.5%, lesions of the globe 10.1% and glau-

Fig. 1. Pupils outside a school for the blind in Uganda. The blind school is an annex attached to a normal primary school built by parents out of locally available materials.

coma 4.5% (M. Wood, personal communication 1994). This suggests that the children included in this study were reasonably representative of the population in schools for the blind in Kenya.

Chirambo reported on 178 children aged 0-15 years in 17 institutions for the blind in Malawi in 1975.[5] He found the main cause of SVI/BL to be corneal scarring (74.7% of cases) which was attributed to measles infection in 51%. Other causes of corneal pathology were smallpox (3.3%) and bacterial infections (15.1%). Chirambo reported that the majority of children with corneal causes of visual loss had used traditional eye medicines. Optic atrophy and cataract accounted for 2.8% of SVI/BL, and microphthalmos for 1.7%. In this study we found a lower proportion of children with visual loss from diseases acquired during childhood, i.e. those causing corneal scarring and phthisis bulbi (48.9%), and a higher proportion due to cataract (13.1%) and retinal disease (8%). Comparative data on the causes of blindness in children in Uganda are not available.

The causes of blindness in children in schools for the blind may not, however, be representative of the total population of blind children for a variety of reasons. For example, children with additional handicap, those of preschool age, and children from isolated, poor rural areas may not be admitted. In addition, vitamin A deficiency is known to be associated with an increased mortality rate, and children blind from this cause may have died before reaching school age.

The results of studies in schools for the blind undertaken in other East and West African countries are summarised in Table 5. They show the main cause of visual loss to be corneal scarring and phthisis bulbi. Corneal scarring is often associated with measles infection.[10] Some of these studies were undertaken during the 1970's, before the Expanded Programme of Immunisation

Fig. 2. Pupils at the primary school for the blind, Thika, Kenya.

was introduced. The lower proportion of children with corneal scarring and phthisis bulbi in this study, particularly in Kenya and Uganda, may reflect the impact of improved measles immunisation coverage rates.

Overall, 1 in 4 children in Kenya, 1 in 2 in Uganda and 2 in 3 in Malawi had SVI/BL which is potentially avoidable. There is a need to improve and maintain measles immunisation coverage, particularly in rural areas and poor urban slums. Vitamin A deficiency occurs in certain foci, particularly at times of crop failure and famine. Community based programmes to improve vitamin A intake infants and young children should be targeted at these at-risk areas.

Cataract and its sequelae is a major cause of treatable SVI/BL in children.

TABLE 5. Anatomical site of abnormality in children with severe visual impairment and blindness (< 6/60 in the better eye) in schools for the blind in East and West African countries.

Country (*no. in study*)	*Kenya* (*749*)	*Nigeria* (*104*)	*Ghana To go/Benin* (284)	*Ethiopia* (*195*)	*Tanzania* (*426*)	*Zimbabwe* (*430*)	*Total* (*2188*)
Year	1976	1979	1993	1988	1978	1993	
Ref.	6	7	2	8	9	3	
Anatomical site	%	%	%	%	%	%	%
Globe/other	28	8	9	9	13	15	17
Scar/phthisis	49	69	36	72	71	67	58
Lens	10	3	16	6	7	7	9
Retina	2	11	20	3	4	5	6
Optic nerve	11	5	6	10	4	4	7
Glaucoma	0	4	13	0	1	2	3
Total:							

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There is a need for education concerning early identification and referral, and for the development of at least 1 unit in each country capable of performing microsurgical extracapsular surgery under general anaesthesia in small children, and to ensure full aphakic correction, treatment of amblyopia and adequate follow up throughout childhood.

Recent studies in East Africa have emphasised the importance of optical correction and low vision services for children in schools for the blind.[11] Approximately 20% of pupils in such schools require spectacles, and almost 50% can read normal print if provided with spectacles and/or low vision devices which offer the possibility of integrated education.

Conclusions More than 20% of the children attending schools for the blind examined in this study had a visual acuity of 6/60 or better, which should be sufficient to enable them to be educated in schools for sighted children.

Vitamin A deficiency and measles are the major causes of blindness in Malawi, but were not found to be as important in students examined in Uganda and Kenya.

Cataract and its sequelae is responsible for 10-25% of cases. There is a need to encourage early referral and provide specialist centres for the long-term management of these children.

Between one quarter and two thirds of all cases of SVI/BL in these children were potentially avoidable.

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ATTACHMENT G

Seminar-Taller, Atención Primaria de la Salud Ocular

SEMINARIO-TALLER
ATENCION PRIMARIA DE LA SALUD OCULAR

PROPOSITO:

Capacitar al personal Técnico de ASECSA en el cuidado primario de los ojos a través del adiestramiento intensivo, a fin de ampliar los servicios de atención de salud a la comunidad.

OBJETIVO GENERAL:

Promover y extender los servicios de salud ocular a nivel de comunidad con énfasis en el área rural.

OBJETIVOS ESPECIFICOS:

1. Identificar las estructuras externas de los ojos.

2. Reconocer las características de las enfermedades más comunes que afectan los ojos.

3. Capacitar a los participantes del curso en el cuidado de los casos simples y referir los casos complicados de salud ocular al nivel correspondiente.

4. Recolectar información en la comunidad y mantener un registro sencillo de los pacientes identificados y orientados sobre su condición.

5. Desarrollar actividades educativas sobre la higiene personal, nutrición, y cualquier otra actividad que conduzca a la prevención de la ceguera.

6. Establecer con los participantes un sistema de supervisión y seguimiento.

TALLER SOBRE SALUD OCULAR - ASECSA CHIMALTENANGO
FUNDACION INTERNACIONAL DEL OJO (I.E.F.) Y
COMITE NACIONAL PROCIEGOS Y SORDOS DE GUATEMALA

Hora	Disertante Conferenciante	Objetivos	Actividades	Materiales
		LUNES 13.FEB.95		
8:30-8:45	**Inauguración** Dr. Edmundo Alvarez Director IEF			
8:45-9:00	**Evaluación inicial** Rosa Amalia de Vásquez	Cuestionario de conocimiento general	Aplicar el cuestionario a los participantes	Cuestionario escrito
9:00-9:30	**Dinámica de grupo** Rosa Amalia de Vásquez	a) Simular problemas de movilidad de personas con baja visión o ceguera b) Conocerse entre el grupo c) Concientización al grupo sobre las limitaciones de ceguera	Utilizar venda en los ojos Movilizarse dentro del salón Hacer parejas y presentar al compañero	Cuentos de tela
9:30-10:30	**Anatomía y función del ojo** Dr. Orlando Oliva	Conocer las partes y funcionamiento del ojo Actividad Dinámica Cuestionario de Anatomía	Plática para dirigir la evaluación con dibujo o modelo	Pantalla modelo del ojo ayudas audio-visuales cuestionario de evaluación proyector de diapositivas
10:30-10:45	Receso			
10:45-11:45	**Agudeza Visual** Sr. Juan Ajsivinac	Aprender a medir la agudeza visual y establecer un sistema de referencia	a) Plática dirigida ejercicio en grupo b) Aprender el uso del Cartel de Snellen c) Discutir formularios de referencia	Carteles de Snellen - Instructivos - Diapositivas - Proyector de Slides - Formas de referencia
11:45-12:45	**Examen externo del ojo** Dr. Orlando Oliva	a) Aprender a hacer el exámen externo del ojo b) Aprender a reconocer las partes de las estructuras del ojo c) Aprender a reconocer un ojo normal del anormal d) Aprender a distinguir casos que se pueden tratar en el lugar y los que se requiere referencias a otras instituciones o especialistas	Plática dirigida a) Examen externo del ojo b) Elaboración de materiales para emergencia c) Cómo hacer un parche ocular d) Discusión de temas	Lámpara de mano Lupa Hojas de Referencia Cartulina Gaza Tela Masking tape Algodón
12:45-14:00	Almuerzo			
14:00-15:00	**Enfermedades comunes del ojo - 1a. parte** - Córnea Dra. Marisol Batres	Reconocer las enfermedades más comunes de las distintas partes del ojo	Pláticas dirigidas	Diapositivas Proyector Folletos o Manuales

Hora	Disertante Conferenciante	Objetivos	Actividades	Materiales
15:00-16:00	- Conjuntiva - Esclera - Párpados - Pupila - Cristalino Dr. Orlando Oliva	Reconocer las enfermedades más comunes de las distintas partes del ojo	Pláticas dirigidas	Dispositivas Proyector Folletos o Manuales

Hora	Disertante Conferenciante	Objetivos	Actividades	Materiales
		MARTES 14.FEB.95		
8:30-10:30	Tracoma Sr. Juan Ajsivinac	a) Reconocer los signos de la enfermedad b) Aprender las consecuencias de la enfermedad c) Aprender el tratamiento preventivo d) Aprender el tratamiento de la enfermedad e) Referencias de casos	Plática dirigida	Ayudas Audiovisuales
10:30-10:45		Receso		
10:45-12:45	Deficiencia de Vitamina "A" Dr. Iván Mendoza	a) Conocer las funciones de Vitamina "A", consecuencias de la deficiencia, diferentes grados de lesiones oculares por carencia b) Apoyar programas de distribución de Vitamina "A" c) Promover la producción y consumo de fuentes de Vitamina "A"	Plática dirigida	Visuales de IEE: Rotafolios, manuales, tarjetas del proyecto UPVA sobre: Carencia, efectos suplementación y fuentes de Vitamina "A"
12:45-14:00		Almuerzo		
14:00-14:45	- Estrabismo Dr. Orlando Oliva	Reconocer las enfermedades más comunes de las distintas partes del ojo	Pláticas dirigidas	Diapositivas Proyector Folletos o Manuales
14:45-16:00	Enfermedades más comunes del ojo - 2a. parte - Vías Lagrimales - Glaucoma Dra. Marisol Batres	Reconocer las enfermedades más comunes de las distintas partes del ojo	Pláticas dirigidas	Diapositivas Proyector Folletos o Manuales

Hora	Nombre Conferenciante	Objetivos	Actividades	Material
		MIERCOLES 15.FEB.95		
8:30-10:30	Traumas Oculares Sr. Juan Ajsivinac	Importancia de la prevención b) Reconocimiento de juegos peligrosos y accidentes de la escuela y del hogar c) Que hacer en casos de emergencia y referencias	Pláticas dirigidas sobre traumas, contundentes y cortantes, quemaduras químicas y térmicas	Ayudas Audiovisuales
10:30-10:45	Receso			
10:45-11:45	Oncocercosis Dr. Edmundo Alvarez	Reconocer Signos de la Enfermedad	Plática Información Plan Nacional	Audiovisuales Folletos
11:45-12:45	Presentación de Actividades de Clínica de Zaragoza T.S. Antonia Valle	Motivar participación en actividades comunitarias	Información sobre Clínica de Zaragoza	
12:45-14:00	Almuerzo			
14:00-15:00	Medicamentos Dra. Marisol Batres	a) Aprender que medicamentos se pueden manejar en el lugar y como reconocerlos b) Aprender que medicamentos no se deben usar	Pláticas dirigidas	Proyector de diapositivas Gotas Ungüentos

Hora	Participante Conferenciante	Objetivos	Actividades	Materiales
		JUEVES 16 FEB.95		
8:30-12:00	**Práctica en Comunidad** T.S. Rosa Amalia de Vásquez Dra. Marisol Batres Dr. Orlando Oliva Sr. Juan Ajsivinac Dr. Lucio Herrera	Aprender a detectar condiciones oculares	Demostraciones y prácticas sobre examen de pacientes en el Centro de Salud	Oclusor Lámpara Lupa
12:00-14:00		**Almuerzo**		
14:00-15:00	**Evaluación Final** **Planteamiento de dudas** T.S. Rosa Amalia de Vásquez Dr. Orlando Oliva	Cuestionario		
15:00-15:30	**Discusión sobre el Seminario** T.S. Rosa Amalia de Vásquez Dr. Orlando Oliva	Información sobre el sistema de referencias	Hojas de Referencia	
15:30-16:00	**Clausura y entrega de Certificados a Participantes Grupo I** T.S. Rosa Amalia de Vásquez Dr. Orlando Oliva			

ATTACHMENT H

Capacitación en detección oportuna de trastornos visuales en niños

and

Report on the workshop

FUNDACION INTERNACIONAL DE OJOS
PLAN DE TRABAJO
Taller de capacitación a maestros sobre: "Detección Oportuna de Trastornos Visuales"

I. **Datos Generales**
Taller de capacitación a maestro de educación pre escolar y primaria, sobre Detección de Trastornos Visuales en niños. Comprendida del 4 al 20 de octubre de 1994 a desarrollarse en cuatro jornadas de tres días cada uno.

II. **Consultores responsables**
LUMEN XXI

Organización promotor
Fundación Internacional de Ojos

III. **Objetivo general**
Promover la prevención de trastornos visuales en niños del nivel preescolar y primario a través de su detección oportuna.

FUNDACION INTERNACIONAL DE OJOS

PLAN DE TRABAJO

Taller de capacitacion a maestros en "Deteccion Oportuna de Transtor 1

OBJETIVOS	No.	ACTIVIDADES	RESPONSABLE	HORARIO	METODOLOGIA	RECURSOS
Primer dia Inauguracion del evento e introduccion del Taller y de los objet.de la FIO.	 1	Inscripcion Inauguracion y explicacion de los objetivos del taller	LUMEN XXI Dr. Raul Gomez Director FIO	7:30 - 8:00 8:00 - 8:10		Hoja de inscripcion
Introduccion y conceptua- lizacion del taller.	2.1 2.2	Concepto de prevencion, niveles, rol e importancia de los participantes dentro del sistema Anatomia y fisiologia del ojo, trastornos mas comunes e identificacion de alterna-tivas locales de atencion	Expositor LUMEN XXI	8:10 - 9:40	Expositiva	-Proyector de slides -Esquema de ojo -Fotocopia de materiales de apoyo -Flujo de servicios -Papel rotafolio, marcadores
		CAFE	FIO	11:00 - 11:15		
Capacitar a los participantes en la deteccion de Tx visuales en ninos de 0 - 4 anos	3 3.1 3.2 3.3 3.4 3.5	Entrega de boleta de funcion visual e instructivos para su estudio grupal Preguntas y respuestas Estrega de materiales del set de evaluacion Demostracion de su manejo Practica Supervisada entre los participantes Asignacion de tareas domiciliaria	Expositor LUMEN XXI	11:15 - 12:00 12:00 - 12:50 12:50 - 1:00	Trabajo grupal Participativa	-Bolétas de funcion visual e instructivos -Foquitos -Oclusores -Juego de ensamble -Pinceles -Papel cartoncillo -Tijeras, bisturi -Pegamento, maskintape
Segundo dia Evaluar la experiencia del dia anterior y asignacion practica en deteccion	4	Evaluacion grupal de resultados obtenidos en la practica individual de los participantes	Expositor LUMEN XXI	8:00 - 8:30	Autoevaluacion	-Resultados de las boletas -Ensamble

FUNDACION INTERNACIONAL DE OJOS

PLAN DE TRABAJO

Taller de capacitacion a maestros en "Deteccion Oportuna de Transtor

OBJETIVOS		ACTIVIDADES	RESPONSABLE	HORARIO	METODOLOGIA	RECURSOS
Tercer dia						
Evaluar la experiencia y aprendizaje del dia anterior	9 9.1	Preguntas y respuestas Revision de materiales y tareas realizadas	Personal LUMEN XXI	8:00 - 8:30	Autoevaluacion	
Evaluar la poblacion infantil de los primeros grados de la Escuela Fca. Reyes como practica de la tecnica de medicion de agudeza visual lejana	10 10.1 10.2	Organizacion de la practica individual supervisada Desarrollo de la evaluacion del nino especialmente de los primeros grados Registro y devolucion de datos a la escuela, instructor y a la FIO	Personal LUMEN XXI	8:30 - 11:00	Participativa	-Set de evaluacion -Coordinaciones -Transporte
		C A F E	F I O	11:00 - 11:15		
Evaluar participativamente la experiencia de evaluacion de agu deza visual en ninos de 2 a 4 a.	11	Preguntas y respuestas aclarando dudas	Personal LUMEN XXI	11:15 - 12:00	Participativa Autevaluacion	-Papel rotafolio -Marcadores -Autoridades FIO
Incentivar a los participantes a la implementacion en su sede de trabajo un sistema perma- de deteccion de Tx visuales	11.1 11.2	Lluvia de ideas Elaboracion de una propuesta de sistema por los participantes Indagar necesidades de apoyo	Personal LUMEN XXI	11:15 - 11:25	Participativa	
Evaluar y clausurar el evento	12 12.1 12.2 12.3	Cada participante llenara una hoja de evaluacion del evento Palabras de clausura por autoridades de la F I O Entrega de diplomas Entrega de directorio a participantes	F I O F I O	12:00 - 12:10 12:10 - 12:25 12:25 - 1:00		Hojas de evaluacion Diplomas
Convivio general		A I M U E R Z O?				

De: Hadizabel Burgos de Izaguirre
Dra. en Educación Especial y Técnico de Lumen XXI

Para: Dr. Raúl Gómez
Director Fundación Internacional de Ojos

Asunto: Informe de Taller de Capacitación en Detección de Trastornos Visuales a maestros del nivel prea-escolar y primaria desarrollado del 4 al 20 de Octubre de 1994.

Local: Sede Scouth, Col. Rubén Darío Tegucigalpa Honduras

Grupo # 1 Fecha: 4-7 de Octubre

NOMBRE	INSTITUCION	LOCALIZACION	CARGO
1.Carmen Chavarría	Registro N. Personas	Barrio la Granja	Educadora Especial Maestra
2.Guilda Cuellar	Esc. Enma Romero	Israel norte	maestra
3. Maira Salgado	"	"	maestra
4.Emidia Ochoa	"	"	
5.Teresa Aguilar	"	"	
6.Sara Rosalea	Esc. Altos San Francisco	Col.Altos San Francisco	maestra
7.Juana Osorto	"	"	
8.Antonia M. Carpas			
9.Asdrubal Aguilar	"	"	maestro
10. Ruth B. Escalante	Esc. Rep. Francia	Col. San Juan Ventura	maestra

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11. Adolfina Sánchez	FIO		A\E
12. Alex E. Garcia	Esc. Repú. Francia	Col. San Buena Ventura	maestra
13. Carmen Cabús	"	"	maestra Pedagóga
14. Francisco Hernández	FIO		?
15. Marylena Arita	FIO		Doctora.
16. Carmen E. Castro	Esc. República Francia	Col. San Buena	maestra
17. Antonia Cerpas	Escuela Altos San Francisco	Col. Altos de San francisco	maestra

Grupo # 2 **Fecha 9-10-11 de Octubre**

NOMBRE	INSTITUCION	LOCALIZACION	CARGO.
1. Ada M. Guifarro	**Esc. Francisca Reyes\Dowal School**	Barrio El Jazmin	Trabajadora Social y maestra
2. Idalia I. de Guerrero	Esc. Francisca R.		Directora
3. Lucia de López	"	"	maestra
4. Daysi Iliac	"	"	maestra Pedagóga
5. Maria Iscoa	Esc rep. Costa Rica	Barrio Pueblo Nuevo	Maestra Terapista Ocupacional
6. Irma C. Salgado	"	"	maestra Psicologa y Cátedratica Universidad

7. Rita E. Castellanos	"		Maestra
8. Julio C. Claudino S.	"	"	Pedagógo Director
9. Ana Inedina Diaz	"	"	Pedagóga maestra

Grupo # 3 fecha: 13. 14 ,17 de Octubre

Nombre y Procedencia de los participantes

NOMBRE	INSTITUCION	LOCALIZACION	CARGO
1.Bessy Pacheco	Esc.Francisca Reyes	B. el Jazmin	Biblio-tecaria maestra
2.Ana Martínez	"		Pedagóga Maestra.
3.Clementina Guerra	" "		pedagóga Maestra
4.Aurora González	Esc. Rafael Castillo	Col. Campo Cielo	Pedagóg. Directora
5. Axelia Liliana Alvarenga	"	"	Maestra
6.Vilma Ortega	Kinder Louise M.	Col Israel Norte	maestra Directora
7.Nolvia Morales	"	"	maestra
8.Francie Rueda	FIC		A\E
9.Nelva Fajardo	Supervisión Departamental Pre- Escolar	Ministerio Educación Pública	Maestra del nivel Pre-Escolar Supervisora
10.Yudhy Sánchez	FIC		Supervisora A\E

9. Alba Salgado	Jardin de niños Nacional	Mercado San Isidro	Sub-dir.
10. Nidia Luz Carranza	Jorge Fidel Durón	Col. Ayestas	maestra
11. Ilda Hernández	"	"	maestra
12. Olga Marina Castillo	Esc. A. Guillén Zelaya	Col. Sta. Eduviges	maestra

13. **Se retiro por problemas personales el último día.**

RESUMEN:

Total de participantes: 56 personas

Procedentes de: 8 Escuelas primarias.

3 Jardines de Niños

Otros: Registro Nacional de las Personas
Fundación Internacional de Ojos
Supervisión Departamental de Pre_Escolar

Localización Geográfica:

7 Colonias Urbano Marginales como son:

1. Israel Norte
2. Altos de la San Francisco
3. San Buena ventura
4. Campo Cielo
5. Santa Eduviges
6. Nueva Orocuina
7. Ayestas

3 Barrios tales como:

1. La Granja
2. Pueblo Nuevo
3. El Jasmin

Otros como:

Colonia Ruben Dario "FIO"
Mercado San Isidro en Comayagüela Jardin de Niños Nacional y
Supervisión de Pre- Escolar Ministerio de Educación

Nivel Académico y cargo de los participantes:

Participaron :

41 maestros de Educación Primaria en ejercicio especialmeente de los primeros grados.
1 trabajador Social
8 Auxiliares de enfermeria
1 Enfermera Profesional
1 médico
1 desconocido

Otras profesiones y cargos actuales de los maestros y otros pofesionales participantes:

1 Licenciada en Educación Especial
1 Trabajadora Social
1 Bibliotecaria
7 Pedagógos
1 Terapista Ocupacional
1 Sicólogo
1 Educador de media del Nivel Pre_escolar y Supervisor del MEP
1 Orientador del Nivel Superior de Educación
4 Directores de Educación Primaria (en el llenado omito 1)
1 Director de educación Pre- Escolar
1 Sub- Director de Educación Primaria
1 Sub-Director Educación Pre-Escolar
1 supervisora FIO
1 Supervisora Educación Pre-Escolar
2 Coordinadoras de Programas FIO
1 Trabajador socialee

RESULTADOS DE LAS PRACTICAS:

Sedes de práctica:

1. **Lactario de la Colonia Campo Cielos:** 43 niños evaluados, 6 detectados y remitidos (no remitimos conjuntivitis y menos de cinco años por su estado asociado o sospechoso)

2. **Escuela República de Francia:** 66 niños evaluados, 11 niños detectados

3. **Jardin de Niños del Mercado San Isidro:** (Varios)

66 niños evaluados 8 niños detectados

Felicitamos a los encargados ya que aparte de que los niños cuentan con condiciones de atención, aseo, nutrición, etc. en el momento y una de la causa de los resultados obte[illegible]

4. Escuela Francisca Reyes:

Cuarenta y tres niños evaluados 14 niños detectados remitidos en Noviembre al HGSF.

5. Jardín de niños Nacional: (dos veces)

23 niños evaluados dos detectados y remitidos.

treinta niños evaluados 5 detectados y remitidos, tres en observación.

6.Escuela República de Costa Rica:

cuarenta y seis niños evaluados, 16 niños detectados pendientes de remisión.

TOTAL DE NINOS EVALUADOS: 340

TOTAL DE NINOS DETECTADOS: 58

Lo que representa aproximadamente el 16.5 % de incidencia con relación al total de la muestra.

CONCLUSIONES Y RECOMENDACIONES DE LOS GRUPOS:

PRIMER GRUPO

a. Implementar en sus Centros Educativos un Servicio de detección en el período de matrícula a más tardar en el primer trimestre de cada año, e instituirlo con carácter obligatorio y como requisito para ser matriculado en primer grado

b Incluir en la matrícula la cantidad necesaria para fotocopias de las boletas o el costo de mimiografiado

c Evaluar por medio de citas

d Capacitar a otros maestros en este proceso especialmente a los de los primeros grados.

e.Solicitar el apoyo de la dirección y supervisión de Educación a cargo del centro escolar.

f. Solicitar el apoyo al esquipulteco a los padres, organizaciones y gobierno

II.GRUPO:

a. Implementar el servicio la primera semana de Febrero

b. Crear un Servicio de detección con proyección en su Distrito Escolar.

c. Solicitar apoyo a padres de familia, FIO, al equipo de maestros capacitados durante la capacitación para el desarrollo de la detección.

d. Orientar a los padres de niños detectados en alternativas de atención existentes y como buscar ayuda.

e. Solicitar apoyo a la FIO para brindar atención en el Centro de Salud las Crucitas.

GRUPO III.

a. Gestionar con la FIO, Carteles de evaluación de agudeza visual.

b. Apoyo a la capacitación de otros maestros que por la época del año escolar no pudieron participar

c. Coordinar esta actividad de capacitación con el Consejo de Directores de Escuelas Primarias del Distrito Central y con las Supervisiones, para implementar la obligatoriedad de esta capacitación dentro del contexto de las capacitaciones de los Directores y maestros.

GRUPO IV.

a. Gestionar lentes ante el Patronato Nacional de la Infancia PANI, asociaciones como Rotarios Juniors, Leones Clubes y otras organizaciones.

b. Implementar lo aprendido mediante esta capacitación

c. Registrar los casos

d. Impartir esta capacitación a otros maestros de Pre-escolares y escuelas Públicas que por la época del año no asistieron sobre todo los de Pre-Escolares

RECOMENDACIONES:

1.Recomendar a los padres la utilización de [illegible] y opticas de menor costo para la adquisición de lentes tales como: Bardales, Menonitas de la Colonia la Vega, Escuela privada San Buena Ventura de la Colonia San Francisco.

2. Coordinar con voluntarios de Salud y de la FIO de las zonas donde estan ubicados los centros escolares que realizarán este trabajo de detección.

3. Solicitar a la FIO apoyo en la detección que se realicen en lo relacionado con apoyo técnico, carteles y otros.

4. Solicitar a la FIO y al HSF, el apoyo en cuanto a la atención de los niños detectados de más escazos recursos económicos a través de brindar a los directores de las escuelas que lleven a cabo la detección un talonario de remisión para maestros. Además de instruirlos en su uso y número factible de remisiones semanales.

5. LUMEN XXI proporcionar remisiones para el HGSF.

6. Calendarizar las capacitaciones a principio de año.

7. Brindar esta capacitaciones a otros [illegible] de año.

8. Solicitar a la FIO apoyo en materiales, y a INPACNOVI en aspectos relacionados con rehabilitación.

9. Reforzamiento y seguimiento a esta actividad

10. Apoyarlos en la capacitación de otros aspectos tales como: Atención integral, Vitamina A, lenguaje etc.

11 Incluir en próximas capacitaciones a [illegible] lecheros.

RESULTADO DE LA EVALUACION DEL TRABAJO REALIZADO:

Según los resultados de la evaluación realizada [illegible] material utilizado les resultó de fácil manejo y rápido de [illegible]

Solicitan más tiempo para profundizar, reforzar y [illegible] más prácticas. Que se dé seguimiento a la capacitación y [illegible] que realizarán, mejorar el manejo del tiempo, dar [illegible] capacitación, mejorar el trabajo en equipo [illegible] que este curso sea por etapas principalmente [illegible] del Nivel Pre-Escolar y Primaria

AUTO-EVALUCION:

[illegible] grupos fueron [illegible] y participativos y [illegible]

[illegible] cumplió la meta en cantidad en [illegible] de los talleres programado, según lo manifestado [illegible] año en que se realizó representando [illegible] cuanto a los Niveles Pre-Escolar, y [illegible] los niños estan cubiertos y dejarían [illegible] posiblemente no volverían en este año.

ATTACHMENT I

Taller sobre Detección Temprana de Problemas Oculares

PLAN DE GIRA A DESARROLLAR PARA LA CAPACITACION DE MAESTROS EN SALUD OCULAR

I. DATOS GENERALES

A. Instituciones Responsables:

a. Ministerio de Educación

- Ministerio de Educación Pública. Dirección Nacional de Educación Primaria.

b. Fundación Internacional de Ojos

B. Lugar y Fecha de Ejecución:

a.	Comayagua:	25 de marzo
b.	Choluteca:	1 de abril
c.	Comayagua:	22 de abril
d.	San Pedro Sula:	29 de abril

C. Beneficiarios:

- 15,840 niños de primer grado
- 166 maestras de ciento treinta y dos escuelas con Aula Recurso.

II. PROPOSITO

Capacitar a docentes de Educación Especial en Detección Temprana de Problemas Oculares a fin de que realizen un diagnóstico a los niños de primer grado.

III. OBJETIVOS

Que los 166 maestros de Educación Especial que laboran en el Aula Recurso, conozcan las enfermedades oculares más comunes y la utilización de la técnica para la toma de agudeza visual.

IV. OBJETIVOS ESPECIFICOS

Que los participantes puedan tomar la agudeza visual, remitir y detectar enfermedades mas comunes a través del exámen preliminar de ojos.

Que los participantes elaboren un plan de acción para implementar con todos los alumnos de primer grado de sus escuelas.

V. PARTICIPANTES

SEDES	FECHA	TOTAL PART.	PARTICIPANTES CON VIATICOS (Traslado a otra ciudad	To-tal
1. Comayagua	25/3/95	35	Comayagua, Intibucá, La Paz, El Paraizo	34
2. Choluteca	1/4/95	38	Valle, Choluteca, San Francisco	26
3. Comayagua	22/4/95	38	Olancho, Francisco Morazán	38
4. San Pedro Sula	29/4/95	53	Colón, Cortés, Atlántida, Yoro, Copán, Santa Rosa, Ocotepeque, Lempira	31
Dos Técnicos				2
		164		129
Total		166		131

EXPOSITORES: Dr. Alberto Erlher
Dra. Marylena Arita

CRONOGRAMA DE ACTIVIDADES

HORA	ACTIVIDADES	METODOLOGIA	RESPONSABLE	RECURSO
9:00 - 9:10	Inscripción de partici-pantes	Participati va	S.E.E.	Listado
9:10 - 9:20	Inaugura-ción de Ac-tividad		M.E.P. FIO	
9:20- 9:30	Indica-ciones Generales de Trabajo	Expositiva	FIO	
9:30- 10:00	Conceptos anatomo-fisiológi-cos bási-cos	Expositiva	FIO	Láminas Maniqui
10:00 10:10	Receso			

HORA	ACTIVIDADES	METODOLOGIA	RESPON-SABLE	RE-CURSO
10:10 - 10:50	Enfermedades ocula-res más frecuentes	Expositiva	FIO	Slide
10:50 - 12:30	Exámen Preliminar del Ojo, Agudeza Visual	Demostrati-va	FIO	Car-teles
12:30 - 1:30	Receso			
1:30 - 2:00	Elaboración de un Plan para hacer Diagnóstico en su Centro	Trabajo Grupal	FIO	Mode-lo
2:00 - 3:00	Indicaciones Genera-les		SEE	
3:00 - 3:20	Clausura		FIO SEE	Cir - cular 1

SECRETARIA DE EDUCACION PUBLICA

DIRECCION GENERAL DE EDUCACION PRIMARIA

SECCION DE EDUCACION ESPECIAL

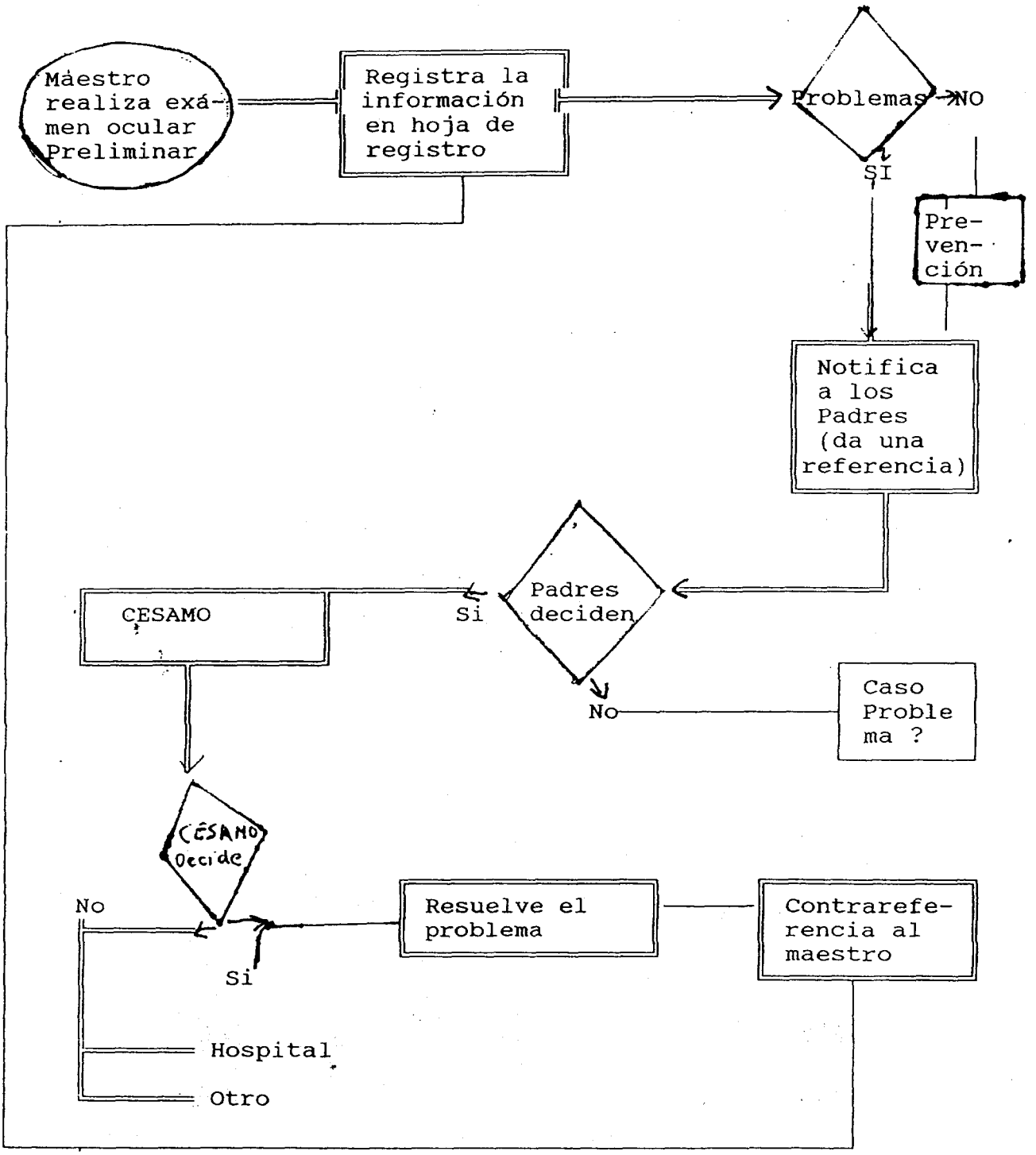
FUNDACION INTERNACIONAL DE OJOS

HOJA DE REGISTRO DE FUNCION VISUAL

No	NOMBRE	EDAD	SEXO		AGUDEZA VISUAL LEJANA			HALLAZGOS	ALTERNATIVAS OFRECIDAS
			F	M	OI	OD			

1/8

Flujograma para Registro de Información
Detección Oportuna de Problemas Oculares
Niños de Aula Recurso



CUIDADO DE LOS OJOS.

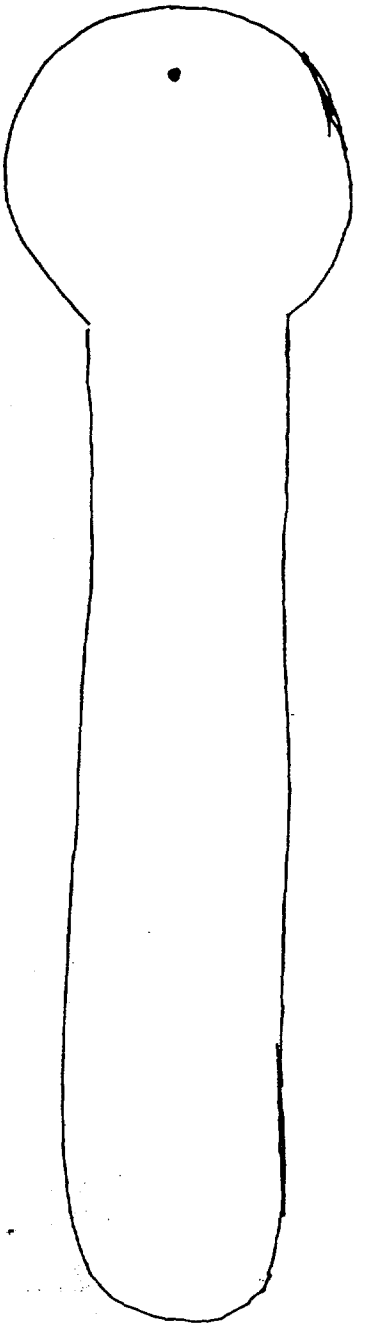
Los ojos son muy delicados por lo que deben cuidarse bien. Las enfermedades de los ojos pueden conducir a la ceguera y la ceguera limita en gran medida las actividades del sujeto. Evitar LA CEGUERA a través del cuidado de los ojos es una tarea sencilla si se siguen las recomendaciones para cuidado.

AL IGUAL QUE MUCHAS ENFERMEDADES LA CEGUERA PUEDE PREVENIRSE, Y AL TRABAJAR EN PREVENCION DE LA CEGUERA SE MEJORA LA SALUD GENERAL DE LA COMUNIDAD Y SE CONTRIBUYE CON EL PAIS.

Señas de Peligro para los Ojos.

1.- Cualquier herida, corte o golpe en el globo del ojo.
2.- Un grano doloroso que se forme en el globo del ojo.
3.- Dolor muy fuerte dentro del ojo (posibilidad de iritis, glaucoma o un tumor).
4.- Cualquier dolor del ojo o de la cabeza y si una pupila se pone más chica o más grande que la del otro ojo.
5.- Si la visión de un ojo o los dos empieza a fallar.
6.- Si cualquier mal de ojo dura más de 4 ó 5 días, a pesar de curarlo con una pomada antibiótica.
7.- Enrojecimiento de la parte blanca del ojo con escozor agudo.
8.- Crecimiento de carnosidad en la parte blanca del ojo. Generalmente crece de los costados hacia el centro del ojo.
9.- Enrojecimiento de la conjuntiva en la que se pueden observar folículos (gran cantidad de pequeños vasos sanguíneos).
10.- Secreciones blanquesinas o verduzcas que se acumulan en los ojos.

AGUJERO ESTENOPEICO



ATTACHMENT J

Memoria: Capacitacion a Maestros de Educacion Especial

Introducción

Se estima que para el siglo XXI, en el continente americano habrá alrededor de 83 millones de personas discapacitadas. De éstos, 53 millones procederán de América Latina y el Caribe. Más del 50% de ésa población estará discapacitada por falta de medios de prevención.

Un estudio realizado en el país en 1994, donde se evaluaron 8429 niños de cero a 10 años procedentes de 32 comunidades mostró que el 9.4 % de los niños presentó alguna alteración de la agudeza visual que va de leve a severo.

Tomando en cuenta esta situación , el limitado acceso a los servicios especializados (un oftalmólogo por cada 125,000 habitantes) surge la necesidad de capacitar otros profesionales que estan laborando directamente con la población infantil a fin de que sean capaces de detectar temprana y oportunamente los problemas visuales para buscar las alternativas de atención más inmediatas.

En vista de lo anterior, la Sección de Educación Especial del Ministerio de Educación Pública solicita a la Fundación Internacional de Ojos el apoyo técnico para capacitar a maestros especiales que laboran en las Aulas - Recurso del país.

A principios de marzo ésta solicitud se ve concretizada al establecerse un compromiso de trabajo entre FIO, la Ministra de Educación, a través de la Dirección General de Planificación Educativa y la Dirección General de Educación Primaria.

De inmediato, se realiza la planificación de una serie de talleres a nivel nacional sobre Detección Temprana de Problemas Oculares y toma de agudeza visual, dirigido a maestros de educación especial que laboran en las aula recurso; con el compromiso de hacer un efecto multiplicador con los maestros de primer grado de sus escuelas, los cuales procederán a evaluar la agudeza visual de los niños.

A través de éstos talleres tambien se promovió la interrelación de autoridades y maestros de aula recurso de todo el país,
el apoyo interinstitucional , la captación de otros recursos que se encuentran disponibles en la comunidad que pueden contribuir a la prevención de la salud ocular de nuestros niños.

Todo lo anterior viene a contribuir con las políticas de la nación y sobre todo con las políticas planteadas en el nuevo modelo educativo: "Mejorar la calidad de la educación".

I. LO PLANIFICADO

Tema: Capacitación en Detección Temprana de Problemas Oculares

Propósito : Capacitar docentes de educación especial en detección temprana de problemas oculares.

Objetivos: Que los 166 maestros de educación especial que laboran en las aula recurso, conozcan las enfermedades oculares mas comunes y la técnica para la toma de agudeza visual

Elaborar un plan de acción para implementar con todos los alumnos de primer grado.

Beneficiarios:

Directos: 166 maestros de aula recurso de 132 escuelas.

Niños Beneficiarios: 15,840 niños de Primer Grado

Sedes, Fechas de Ejecución:	Departamentos Participantes:
Comayagua: 25 de marzo de 1995.	El Paraíso, La Paz, Intibucá y Comayagua.
Choluteca: 1 de abril	Valle, Choluteca y 50% de maestros de Aula Recurso de Francisco Morazán.
Catacamas: 22 de abril	Olancho y 50% de maestros de Aula Recurso de Francisco Morazán.
San Pedro Sula: 29 de abril	Atlántida, Yoro, Ocotepeque, Copán, Lempira, Colón, Santa Bárbara, Cortés.

EQUIPO RESPONSABLE:

Planificación: **Licda. Betulia Cárcamo**

Sección de Educación Especial, Ministerio de Educación.

Dr. Raúl Gómez
Fundación Internacional de Ojos

Dra. Marylena Arita
Fundación Internacional de Ojos

Coordinación: **Licda. Betulia Cárcamo**
Dr.Raúl Gómez
Dra. Marylena Arita

Administración: **Sra. María Luz Napki**
Fundación Internacional de Ojos

Expositores:

Dr. Alberto Erlher
Oftalmólogo (FIO)

Dra. Marylena Arita
Asesor Técnico (FIO)

Licda. Betulia Cárcamo
Jefe Sección de Educación Especial

Dr. Jorge Cisneros
Comité Nacional para
Prevención de la Ceguera.

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II. QUE LOGRAMOS:

1. Se logró la participación de 22 Supervisores auxiliares y departamentales, beneficiando directamente a un total de 188 profesionales.

   Indirectamente se logró la capacitación de 664 maestros de primer grado superando la meta en un 400% en vista que se determinó que los maestros de aula recurso realizaran el efecto multiplicador con los maestros de primer grado de sus escuelas.

2. Los talleres se desarrollaron en cuatro fines de semana (sábados) utilizando cinco horas diarias en las fechas y lugares establecidos.

3. Los niños beneficiarios sobrepasan la cantidad de 15,840 niños en vista de que algunos supervisores como el de la Paz, Choluteca, Valle, El Paraíso, sugirieron que los maestros beneficien a niños de otras escuelas donde no hayan aulas recurso.

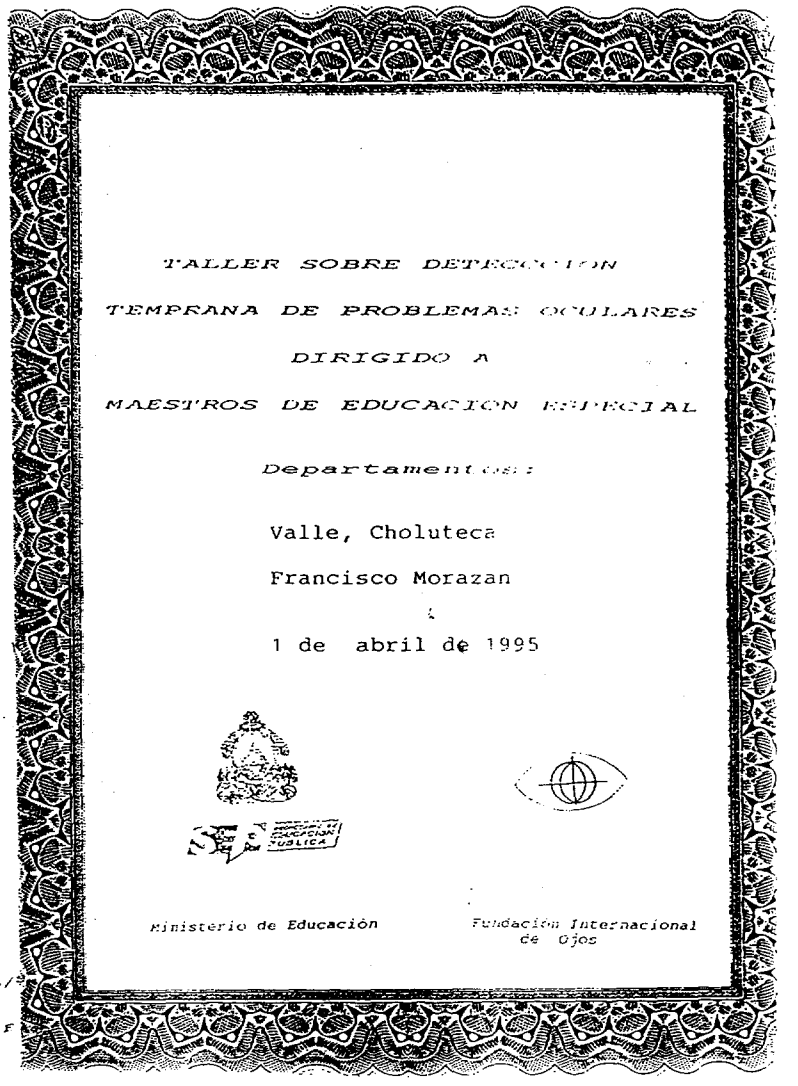
4. Participación de:
   a. Autoridades y Técnicos del Ministerio de Educación: Directora General de Planificación Educativa, Director General de Educación Primaria, Técnicos del Instituto Nacional de Investigación y Capacitación INICE, Técnicos de la Sección de Educación Especial, Técnicos de FIO, Voluntarias Japones y Medios de Comunicación como: Alcalde, diputados, representantes de medios de comunicación escrita y televisivo, Directores Generales de Planificación Educativa, Dirección General de Educación Primaria, Técnicos del Instituto Nacional deInvestigación y Capacitación INICE y Técnicos de la Sección de Educación Especial.

   b. Autoridades Municipales

   c. Medios de Comunicación escrita y televisivos.

ANEXO # 1

1. Programa desarrollado en cada sede .



TALLER SOBRE DETECCION

TEMPRANA DE PROBLEMAS OCULARES

DIRIGIDO A

MAESTROS DE EDUCACION ESPECIAL

Departamentos:

Valle, Choluteca

Francisco Morazan

1 de abril de 1995

Ministerio de Educación

Fundación Internacional de Ojos

PROGRAMA

	ACTIVIDAD	RESPONSAB
- 9:10	Inscripción de participantes	S.E.E.
0 - 9:20	Inauguración	M.E.P./F
9:20 - 9:30	Indicaciones Grales	FIO
30 - 10:00	Anatomía Básica del Ojo	FIO
0:00 - 10:10	Receso	
10:10 - 10:50	Enfermedades Oculares más Comunes	FIO
10:50 - 12:30	Exámen Preliminar del Ojo Agudeza Visual	FIO
12:30 - 1:30	Receso	
1:30 - 2:00	Elaboración de un plan para hacer diagnóstico en su Centro	FIO/
2:00 - 2:30	Indicaciones Generales	S.F
3:00 - 3:20	Clausura	

Conjuntamente con los maestros de primer grado aplicaran la prueba de agudeza visual dos semanas despues

Entregar la hoja de registro de niños evaluados al supervisor respectivo.

Buscar las alternativas de atención dentro del aula, comunicar a los padres de familia y hacer referencias apropiadas a cada caso.

2. **COMPROMISOS DE FIO**

En coordinación con la Sección de Educación Especial dar seguimiento al proceso de capacitación.

Buscar las alternativas para capacitard a un mayor número de docentes a través de tecnología apropiada.

Elaborar en coordinación con la Sección de Educación Especial la Memoria del Proceso de Capacitación y su Divulgación a las autoridades correspondientes.

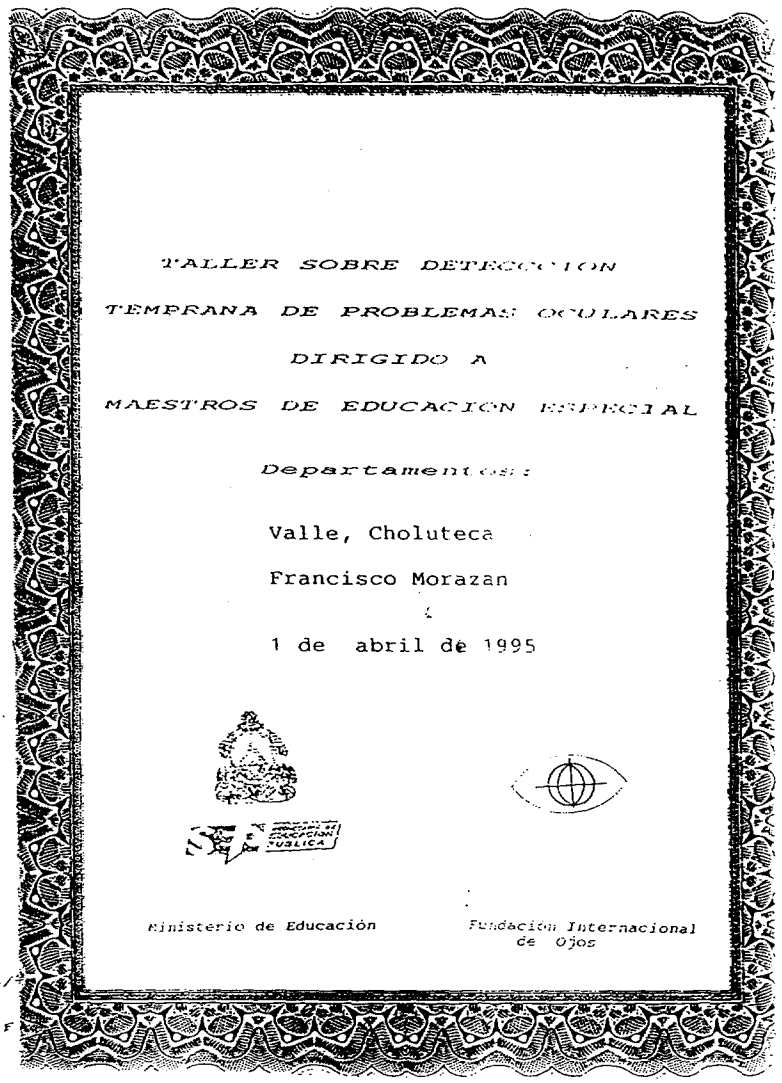
Gestionar brigadas oftalmológicas de apoyo a la problemática detectada en los diferentes departamentos.

Editar y divulgar la memoria del proceso de capacitación ante las autoridades y organismos correspondientes.

Coordinar con la Secretaría de Educación la posible dotación de vitamina "A", a las escuelas participantes en el proceso de capacitación.

ANEXO # 1

1. Programa desarrollado en cada sede .



TALLER SOBRE DETECCION

TEMPRANA DE PROBLEMAS OCULARES

DIRIGIDO A

MAESTROS DE EDUCACION ESPECIAL

Departamentos:

Valle, Choluteca

Francisco Morazan

1 de abril de 1995

Ministerio de Educación

Fundación Internacional de Ojos

PROGRAMA

	ACTIVIDAD	RESPONSAB
- 9:10	Inscripción de participantes	S.E.E.
0 - 9:20	Inauguración	M.E.F./F
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30 - 10:00	Anatomía Básica del Ojo	FIO
0:00 - 10:10	Receso	
10:10 - 10:50	Enfermedades Oculares más Comunes	FIO
10:50 - 12:30	Exámen Preliminar del Ojo Agudeza Visual	FIO
12:30 - 1:30	Receso	
1:30 - 2:00	Elaboración de un plan para hacer diagnóstico en su Centro	FIO/
2:00 - 2:30	Indicaciones Generales	S.F
3:00 - 3:20	Clausura	

" La integración educativa, un derecho de todos "

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ANEXO 3

HOJA DE REGISTRO DE FUNCION VISUAL

SECRETARIA DE EDUCACION PUBLICA
DIRECCION GENERAL DE EDUCACION PRIMARIA
SECCION DE EDUCACION ESPECIAL
FUNDACION INTERNACIONAL DE OJOS
HOJA DE REGISTRO DE FUNCION VISUAL

No	NOMBRE	EDAD	SEXO		AGUDEZA VISUAL LEJANA			HALLAZGOS	ALTERNATIVAS OFRECIDAS
			F	M	OI	OD			

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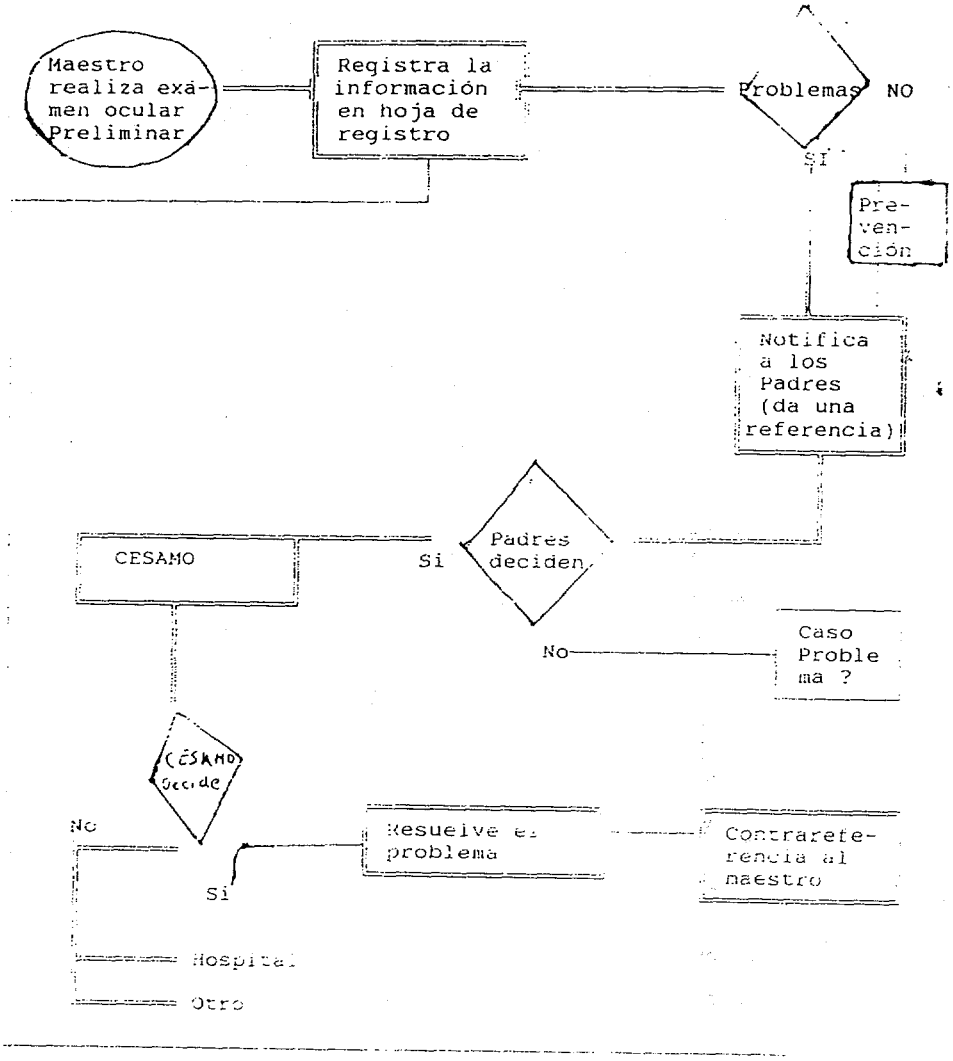
ANEXO 4

FLUJOGRAMA

Flujograma para Registro de Información
Detección Oportuna de Problemas Auditivos
Niños de Aula Recurso



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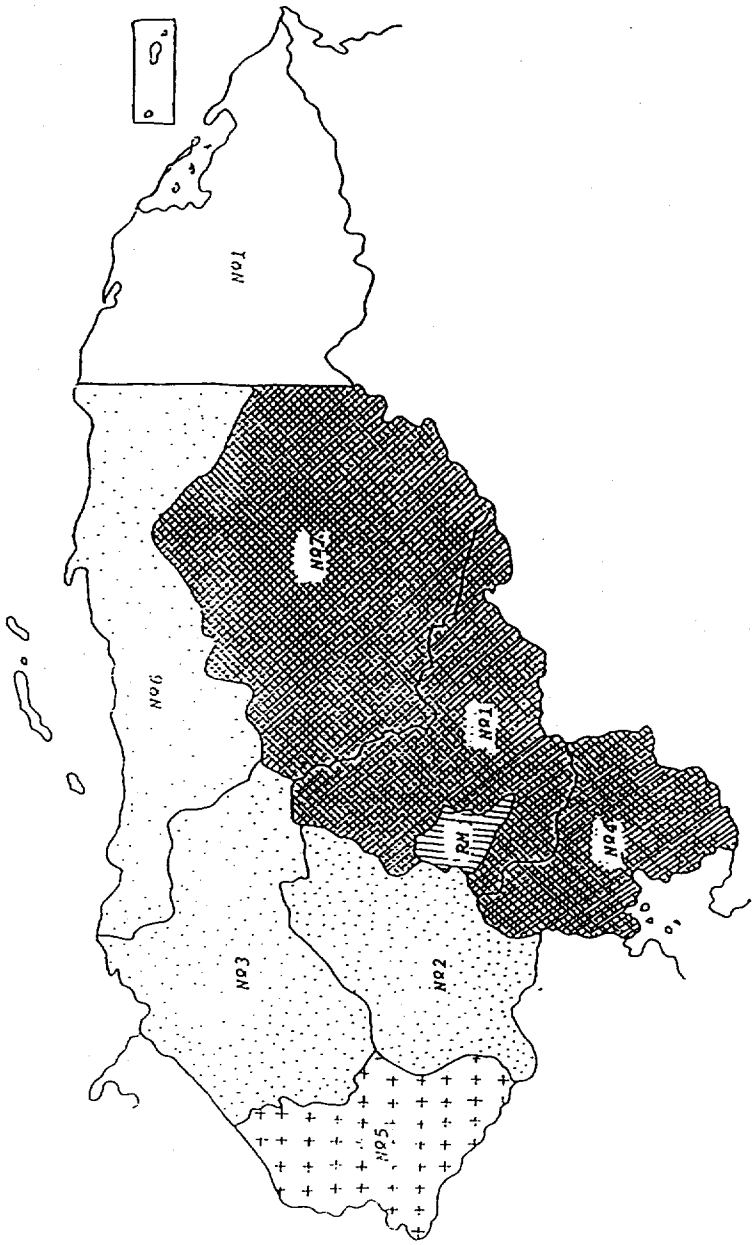
ANEXO 5

MAPA DE LAS SEDES



SEDES DE LOS TALLERES

A. COMAYAGUA

B. CHOLUTECA

C. CATACAMAS

D. SAN PEDRO SULA

TOTAL DE MAESTROS CAPACITADOS :

San Pedro Sula:	57 maestros
Choluteca:	45 maestros
Comayagua:	45 maestros
Olancho:	38 maestros
	185 maestros

Esto representa mas de el 100 % de la meta propuesta. (169 maestros).

En la Sede de Comayagua se reunieron los siguientes departamentos:

1.	La Paz	11 maestros
2.	Comayagua	4 maestros
3.	Intibucá	2 maestros
4.	Siguatepeque	9 maestros
5.	El Paraíso	15 maestros
6.	Tegucigalpa	4 maestros
	Total	45 maestros

En la Sede de San Pedro Sula se reunieron los siguientes Departamentos:

A. DEPARTAMENTO DE YORO:

1.	El Progreso	4 maestros
2.	Santa Rita	2 maestros
	Total	6 maestros

B. DEPARTAMENTO DE CORTES:

1.	La Lima	1 maestros
2.	San Pedro Sula	16 maestros
	Total	17 maestros

C. DEPARTAMENTO DE COLON:

1.	Sonaguera	2 maestros
2.	Tocoa	1 maestro
	Total	3 maestros

D. DEPARTAMENTO DE COPAN:

1. Santa Rosa .....9 maestros

Total **9 maestros**

E. DEPARTAMENTO DE OCOTEPEQUE:

1. Ocotepeque..... 2 maestros
2. San Marcos..... 1 maestro

Total **3 maestros**

F. DEPARTAMENTO DE ATLANTIDA:

1. Tela..... 2 maestros
2. Ceiba..... 6 maestros

Total **8 maestros**

G. DEPARTAMENTO DE LEMPIRA:

1. Lepaera..... 1 maestro
2. Gracias..... 1 maestro

Total **2 maestros**

H. DEPARTAMENTO DE SANTA BARBARA:

1. Santa Bárbara..... 4 maestros
2. Jutiapa..... 1 maestro

Total **5 maestros**

Total **53 maestro**
4 técnicos del MSP

En la Sede de Campamento , Olancho se reunieron maestros de los siguientes lugares:

A. DEPARTAMENTO DE FRANCISCO MORAZAN:

1. Francisco Morazán.....16 maestros

B. DEPARTAMENTO DE OLANCHO:

1. Juticalpa.....18 personas

Total **34 personas**

4 técnicos del MSP

En la sede del Departamento de Choluteca se capacitaron maestros de los siguientes lugares:

A. DEPARTAMENTO DE FRANCISCO MORAZAN:

1.	Tegucigalpa.....	18 maestros
2.	Valle de Angeles.....	1 maestro
	Total	**19 personas**

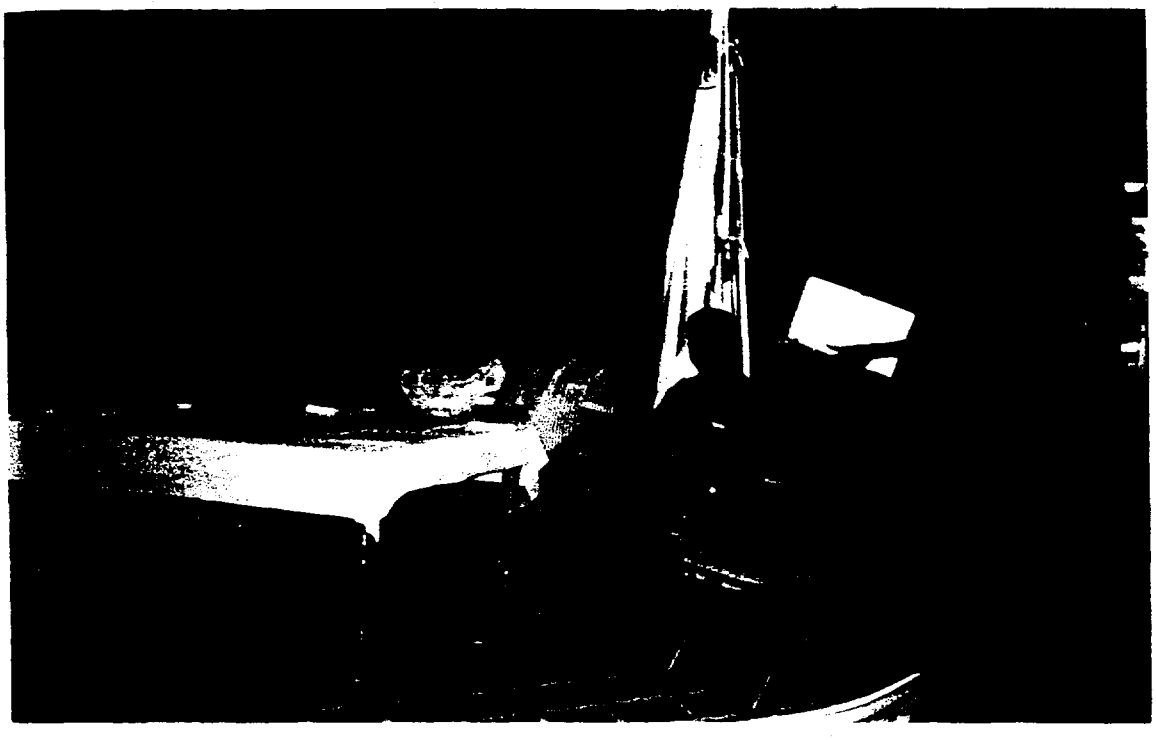
B. DEPARTAMENTO DE CHOLUTECA:

1.	Amapala.....	1 maestro
2.	Langue.....	1 maestro
3.	Nacaome.....	2 maestros
4.	San Lorenzo.....	2 maestros
5.	San Marcos.....	1 maestro
6.	Choluteca.....	14 maestros
	Total	**21 maestros**

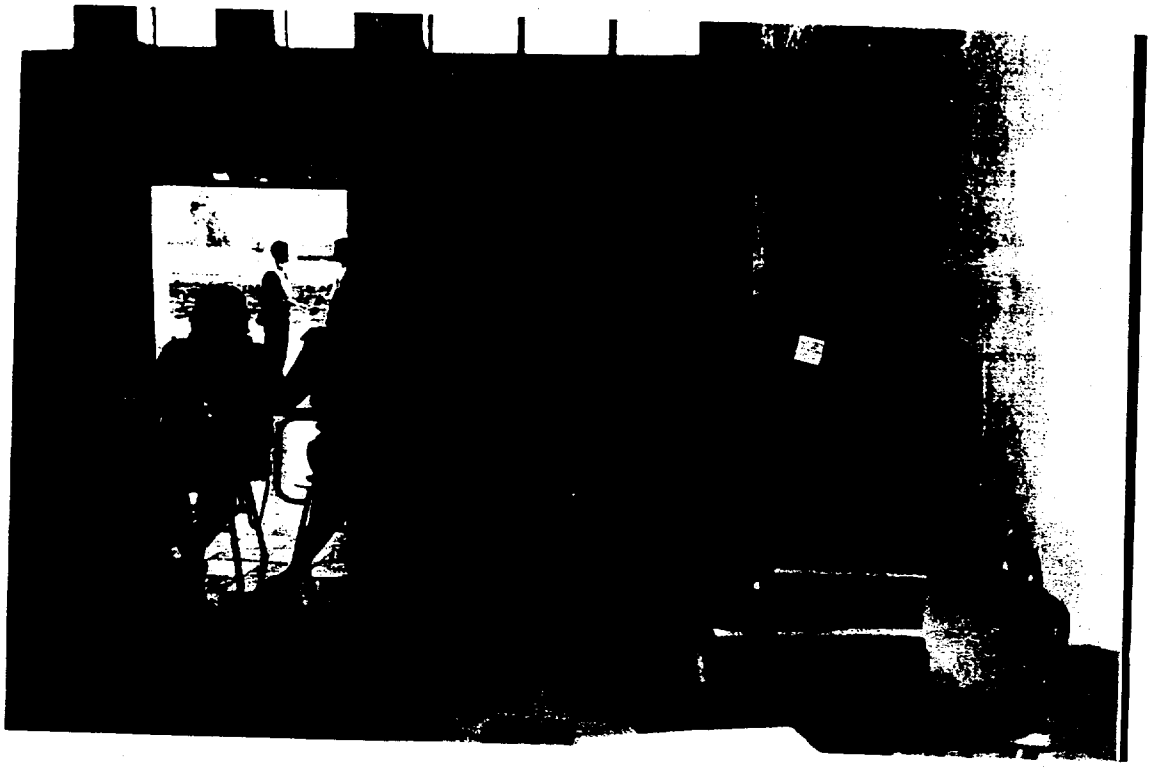
5 técnicos

ANEXO6

Lo que pasó en Comayagua.....



Lo que pasó en Olancho.....



VIVENCIAS DE LO QUE PASO EN CHOLUTECA.....

Lo que pasó en San Pedro Sula.....


4 29 95

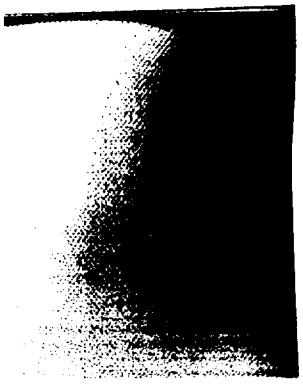
LISTA DE CONTROL DE ASISTENCIA

TALLER SOBRE DETECCION TEMPRANA DE PROBLEMAS OCULARES EN NINOS

DIRIGIDO A MAESTROS: Olancho

FECHA : OLANCHO – Catacamas

	NOMBRE	ESCUELA	DEPTO.	FIRMA
	Sonia Torres	John F Kennedy	Francisco Morazan	
2	Carmen A de Núñez	Oswaldo López Arellano	Francisco Morazán	
	Maria Eloisa Hernández	Supervisión	Francisco Morazán	
	Angela Levi Martinez	Escuela Honduras		
5	Juana Olimpia Acosta	Esc "Juan J. Castro"	Campamento C.	
	Maria Colto de Mejia	Esc "Miguel Morazan"	Juticalpa Olancho	
7	Olga Larios de Herrera	Esc "Dr. José Rosales" "Villeda Morales"	Juticalpa Olancho	
	Ramona Clementina Rodas de Velásquez	"Ramona Tejeda"	El Guayabito	
9	Nora Isolina Paolilla de H	Esc. Manuela Garay C.	Juticalpa	
10	Nelly Eunice Palacios --- Felicita Navarro		Olancho	
	Martha B. Padilla M. - "Rosa Luisa Bodden"		Olancho	
12	Leslie Paz de Rosa	de Ensayo Dionisio de Herrera		
13	Rosa Lidia de Pineda	" " " "		
14	~~Hector~~ Jimenez C.	Supervisión E.P.	OL.	
	Silvia Pineda Lopez	"Sonrisas Infantiles"	Tegucigalpa D.C.	
16	Elba Rosibeth Motute	Esc. Concepción de María	Olancho	
17	Ana Soberda García Gutierrez	Esc "Remo"	F.M.	
	Fernanda María Hernandez	Esc Policarpo Melara	Olancho	
19	Lidia maradiaga de Velasquez	Esc. O. del Uruguay	F. M.	
20	Gabriela Lainez de Heneada	ensayo "D de H"	F.M.	
21	Hernan Avila Aleman	"Amiguito"	F. Morazan	
22	Ilse Helen González Murillo	Esc. de Ensayo Dionisio de Herrera		
23	Makiko Kawai	Ministerio de Educación	F.M.	Makiko Kawai
24	Saúl Alonso Cartagena	D.P.S. de E.P.	F.M.	
25	Magdalena Murcia	escuela Las Américas		
26	Denia de Figueroa	Esc. "José Raúl Castro"	F.M.	
27	Orfilia B. de Pineda	Esc. Monseñor Fiallos #1	F.M.	
28	Elda Hernández de Herrera	Esc. Dr. Esteban Mendoza	F.M.	
29	Luisa Rodriguez	Esc. Dr. Esteban Mendoza	F.M.	



30.- Alided del Carmen Avila Esc. Felicita N. cotacamas.

31- Ada Esmeralda Avila Insp. E. A. Obrero

32 Oscar Zuniga

33 Oscar Orlando Lopez

34 Jorge Rosendo Loreda

35 Varinia Martinez A.

36 Emma Martinez

37 Bede

38 Guillermina Guifarro

600 — tecnico — (4) → 150 00

2720 medio — } 34 pxs — 80.00 (=90) } 10

3320 00

340.00 (x10.00 x80.

3660 00

4440 -

3660

0780.00 M. L

150.00

Gasolina Diesel → 86.00

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ATTACHMENT K

TRIP REPORT: ALBANIA
EUN-JOO CHAN

TRIP REPORT: ALBANIA

July 29 - August 4, 1995

Prepared by Eun-Joo Chang, Consultant

Contents

PURPOSE OF TRIP

The purpose of this consultancy was to address the need for primary eye care training related to childhood blindness in Albania, as specified in the International Eye Foundation's (IEF) Matching Grant Program "SightReach," for Component #2, ChildSight. The consultant was asked to make recommendations for the design and implementation of a training program, to be comprised of four workshops.

INTRODUCTION

Prior to leaving for Albania, I had several briefings in-person and over the telephone with IEF staff to discuss the findings of previous IEF trips to Albania, the current status of the project, and possible constraints to implementation. We also clarified the purpose of my visit and established realistic expectations, given the shortness of the visit, and the fact that it had been originally scheduled as a two-person trip (the second consultant being a training specialist). Also in preparation, I read background documents related to Albania (sources: IEF, ORBIS, and World Bank).

In discussions with John Barrows, IEF's Director of Programs, just prior to my departure, we agreed that the highest priority would be to gain a clear understanding of the current health care system and how pediatric eye care fits in. The plan for the ChildSight training workshops would have to flow from the findings, since it was not at all clear which would be the appropriate audiences to target for the trainings. Also, we recognized having to balance the need to fulfill the terms of the AID grant by holding four workshops within the coming year, with the need to find ways of institutionalizing primary eye care through the trainings. As John noted in his last Albania trip report, the ChildSight workshops should be part of a larger, emerging plan for training related to eye care.

OVERALL IMPRESSIONS

As others before me have realized, the health care reforms underway since 1991 make understanding Albania's health care system a challenge, somewhat like aiming at a moving target. It was apparent that things are still in a state of flux -- within society, the economy, the health care system, and ophthalmology -- and what may be true today, may not hold true tomorrow. Given the uncertainties -- from who the Minister of Health will be come next year, to where and what the jobs for opthalmologists will be in the future -- trying to plan any kind of sustainable program is somewhat problemmatic. It will be especially important to stay abreast of the MOH's plans for retraining and redeploying of medical personnel, as this will directly affect IEF's own program.

Within the world of ophthalmology, there seems to be a surprising amount of activity, especially for a small country with limited resources. As one government health official recognized, the

potential exists for these eye care programs to make important contributions to the broader health care system -- by modeling an interdisciplinary and team approach to a specific health problem, by integrating prevention and health promotion concepts, and by incorporating modern training methodologies into training activities. IEF has played, and continues to play an important role in realizing this potential, along with Health for Humanity and two individuals in particular: Dr. Zhugli and Garth Pollock. Dr. Zhugli has been designated by the MOH to develop eye care activities in Albania. It is fortunate that, in addition to being a well-respected ophthalmologist, he is open-minded and forward-thinking. As for Garth Pollock, who is both Health for Humanity's representative and IEF's deputy country representative, he has an excellent grasp of the opportunities and constraints involved in trying to develop a sustainable eye care program in Albania. It was unfortunate that he had to leave for Uganda in the middle of the week, but despite his need to prepare for his trip, he spent as much time with me as he could and was a tremendous help.

SUMMARY OF OUTCOMES

Apart from numerous discussions with Dr. Zhugli and Garth, I met with Deedee Blane at USAID, Mr. Bashkim Berisha at the Ministry of Education, Dr. Tatjana Harito at the MOH, Mr. Astrit Koka, head of the Tirana Nursing School, and Dr. Florian Dangllia, Chief of Polyclinic nr. 3. The difficulty of contacting people and getting appointments resulted in my not being able to meet everyone I had hoped to meet.

One of our first visits was to USAID. Dr. Zhugli joined Garth and me for the meeting with Deedee Blane and Sylva, the Albanian project officer. We explained the purpose of my visit and our initial thoughts about the workshops. Ms. Blane seemed glad to see some movement on the project and was supportive of our ideas. Dr. Zhugli raised the issue of whether equipment could be provided under this grant, and Deedee told him to discuss the matter with IEF.

Mr. Berisha, Director of the Dept. of Compulsory Education, provided us with information about the school-age population and health-related activities in the schools. (See below for details.) He expressed interest in the IEF project and supported the idea of including eye health education activities in the health education curriculum of schools. We also learned from him that there are no school nurses, per se, although nurses sometimes go to schools to give immunizations.

Dr. Harito, Director of the Public Health Dept. at the MOH, gave us a brief overview of the health care system and the World Bank-financed restructuring which is underway. So far, the project is mainly dealing with physical infrastructure improvement. She supported the idea of including primary eye care in the curriculum for family practitioners. The new 2-year program in family practice will begin in September, 1996, and they expect to graduate 40-50 FPs each year. This year, a group of trainers are studying in the U.S.

Mr. Koka, Director of the Tirana Nursing School (and a good friend of Dr. Zhugli's), described

the World Bank project's nursing component, in particular the changes in the nursing schools. (See below for details.) He seemed very open to the idea of IEF helping to update the eye care component of the nursing curriculum, as well as having the newly-trained nurse trainers at his school participate in a training of trainers workshop for primary eye care.

Dr. Dangllia heads one of three polyclinics in Tirana which have ophthalmologists. He provided information about the pediatric eye cases seen at his polyclinic and about the role of the polyclinic ophthalmologists. We were unable to meet with either of the two ophthalmologists working there.

By the end of my visit, after several rounds of discussions, including two phone calls with John Barrows to clarify certain issues and to get his initial feedback, Dr. Zhugli, Garth and I agreed on a plan for the four ChildSight "workshops." The program would gradually build up a sustainable (we hope) system for addressing the eye care needs of Albania's children. We tried to consider a broad and interdisciplinary approach which would have the best chance of making system-wide impact, and which would create a sense of ownership in the program on the part of those expected to play a role. In designing this program, we took into account both the realities of, and hopes for, the health care system in Albania.

There had already been some communication between Dr. Zhugli and IEF regarding the workshops, and when I arrived in Tirana, Dr. Zhugli seemed to have some ideas about who should be trained -- Tirana pediatricians, Tirana ob/gyns and nurses, nursing school trainers and trainees, and one other group. As the following indicates, to some extent Dr. Zhugli's original ideas have been incorporated.

The first two activities are more definite and clearly defined than the latter two, which will to some extent depend on the earlier efforts. (See Appendix A for details.) The four "workshops" are as follows:

1. National Conference on Prevention of Blindness (late Nov. or Dec. 1995)
2. Training of Nurse Trainers (March 1996)
3. Chief Pediatricians (April 1996)
4. Pilot District-level Team Building (May 1996)

The national conference for ophthalmologists was seen as a critical first step because the success of any community-level initiative will ultimately depend on the support and involvement of the ophthalmologists, who must be able to handle increased referrals as well as to supervise those who are trained in primary eye care. In particular, it was felt that the Albanian ophthlmologists would benefit from receiving an orientation to public health ophthalmology in general, and to the ChildSight project in particular. I was told that something similar was done in the case of Bulgaria, which is also participating in the ChildSight project.

The training of nurse trainers was seen as a way to eventually reach the vast numbers of nurses in

the country who come into contact with children at various levels, and who are probably in the best position to serve as front-line primary eye care workers. At the same time, by working through the existing nursing schools, the trainings can be institutionalized and thus outlive the IEF project.

As for the third group -- the pediatricians -- Dr. Zhugli had initially wanted a training for all pediatricians in Tirana city. We agreed, however, that it would be more effective in the long run to bring together the chief pediatricians of each district to discuss the relative roles and responsibilities of their peers in providing primary eye care (including a referral system) and to design an appropriate training for this group. Also, this workshop will sensitize and prepare the group for the work which will be expected of them at the district level.

And finally, the fourth workshop is envisioned as a pilot project in one district -- Vlore, selected because it has 5 ophthalmologists (one of whom will be trained to be an orthoptist) and it is one of the districts targeted by the MOH and the Health for Humanity project for strengthening as a secondary eye care center. Ultimately, it is at this level -- the district -- that an eye care program for children will have to be implemented and where it can be sustained, since reform plans include decentralizing management of health services at the district level. The basic idea is to bring together a team of key individuals who could plan and implement a district-wide screening program, as well as form the core of a district-level prevention of blindness task force.

The timetable for the four conference/workshops was to some extent based on the availability of Garth Pollock, who is expected to play an important role in implementing them.

I gave copies of IEF's Bulgaria training curriculum and manual to Dr. Zhugli and Garth. We did not have time to go over it in any detail, but Dr. Zhugli seemed to like the manual and felt it would be useful for a number of different training audiences, with some modifications.

BRIEF OVERVIEW OF HEALTH CARE SYSTEM

As I stated earlier, the health care system is undergoing so many changes that it is difficult to get an accurate and clear description. Dr. Harito at the MOH gave us a thumbnail sketch. Starting from the bottom of the system, every village has a nurse or midwife who lives within the community and does immunizations, normal baby deliveries and basic treatment. At the next level, there is one health center in every rural "commune," staffed by doctors (number varies). There are over 900 health centers throughout the 36 districts; when the restructuring is complete under the World Bank-financed reforms, about 500 centers will remain. According to Dr. Harito, there is a growing problem of getting doctors to go work in the rural areas, since there are no incentives for them. She is hopeful that under a new health insurance scheme, such incentives will exist in the future. Whoever ends up staffing these centers (probably family practitioners) should have training in primary eye care.

At the district level, there is a General Director of Public Health, who is appointed by the MOH. Under this person are two directors or chiefs: one for primary health care, and one for hospitals. **Any work at the district level would need the blessing and support of the General Director.** The PHC director is responsible for 3 areas: 1) ambulatory care (this includes all GPs; 2) epidemiology (mainly control of infectious diseases; 3) hygiene (water, pollution, etc.) Each district also has a person responsible for health education.

STATUS OF NURSING

The Director of the Tirana Nursing School, Mr. Astrit Koka, explained that there are three nursing schools in Albania -- in Tirana, Vlore and Korce. The Tirana Nursing School is under the MOH, while the other two are under the Ministry of Education. (The reason for this was not made clear.)

He spoke of the World Bank project's nursing component, which includes $90,000 for the physical rehabilitation of the nursing school in Tirana, and an additional $220,000 for other components. With help from a Swiss nursing school, Ecole le Bons Secours (Maria-Teresa Engelbert, Director), which has a contract under the World Bank project, they have developed a new three and a half year curriculum for nurses. Mr. Koka pointed out that they reviewed American as well as European standards and incorporated elements of both.

As a first step, six nurse trainers have been trained for the Tirana Nursing School. While Le Bon Secours is responsible for helping all 3 schools, apparently they were not able to find appropriate nurses to serve as trainers at the other two schools, where teaching is done completely by physicians. In Tirana, most of the training is now done by the newly-trained nurse trainers, with physicians giving specialized lectures. Mr. Koka mentioned that there would be a meeting later in August to discuss coordination among the 3 nursing schools.

The old two-year nursing curriculum has been replaced by a new basic 3½ year curriculum; midwives take an additional 6-month course. Others get specialized training on-the-job. Where the nurses go to work will depend on a combination of exam results, desires, and available openings. The first group of nurses (no.=85) to be trained under the new curriculum have completed their first year; the second class (about 75) are entering this September.

As for continuing education for nurses, there are no formal programs, only ad hoc short-term trainings conducted by some NGOs. Le Bon Secours, for example, held some trainings for chief nurses of various departments in Tirana.

At the moment, 40-60 hours are allocated for **eye care**, as part of an ophthalmology/ENT unit in the second year. This eye care component has traditionally been taught by ophthalmologists, strictly in the didactic mode. Mr. Koka was enthusiastic about having the eye care curriculum updated to include primary eye care topics and wanted to see it incorporated as soon as possible

for the current second-year students.

We asked for information about numbers of nurses at different levels, postings, etc., and were told to talk to the director of nursing personnel, Ms. Enkeleida Mborja, whom we tried unsuccessfully to see.

CHILDREN AND HEALTH/EYE CARE

Albania has the youngest age structure in Europe, with an under-16 population of 1.1 million, out of a total population of 3.4 million (1993 estimate). As in most other countries, eye care is a low priority, especially with children dying of acute respiratory ailments and diarrhoeal diseases brought on by poor hygiene and neglected sanitation services.

There are no statistics on the prevalence of eye disease in children. Apparently, about 4 months ago, some ophthalmologists (unclear who) started to survey small children, but stopped because there was no proper protocol for the study. When Dr. Mike Makovic (Health for Humanity) comes in September, he will train the 17 residents at the university clinic in the use of a protocol for screening children. The plan is for the residents to go and conduct "campaign-style" screenings in 3 locations: Tirana, Vlore and Shkoder. The purpose is to get a rough idea of the extent of eye disease found in children.

Based on anecdotal information, **refractive errors and strabismus** have been identified as the leading eye problems in children. For example, Dr. Zhugli noted that the majority of the 200-250 pediatric surgical cases he has each year (10% of his total) are strabismus cases. At the polyclinic we visited, we were told that of the 510 children seen at the clinic over the past 6 months, the majority were for refractions, and some for strabismus. Dr. Zhugli also mentioned a study which showed that from 1983-1990, 15% of the children in Tirana had monocular amblyopia.

I was told that, unlike in Romania for example, the *price* of eyeglasses is not a barrier to having refractive errors corrected, but sometimes cultural attitudes about wearing glasses are.

There is no institutionalized system for regularly screening children for eye problems, nor for providing primary eye care as we know it. Apparently, children are required by law to have an eye exam before starting school, but Dr. Zhugli pointed out that this does not happen in the rural areas. Even in the cities, it is unclear how consistently this is done. The director of the polyclinic we visited told us that once a week, an ophthalmologist from his clinic goes to schools to do screenings, but this seems to contradict other information we heard about the absence of any regular screenings.

Furthermore, unlike what I had heard/read elsewhere, apparently there are no school nurses. In the past, nurses from polyclinics would occasionally go to schools to do screenings, but this is not happening anymore. However, nurses are still going to schools to give vaccinations.

There is a group of Italian ophthalmologists who come twice a year to 3 sites to do refractions and dispense glasses to children who present themselves. Dr. Zhugli emphasized that they are not doing screenings.

From Dr. Zhugli's perspective, even if screenings were held regularly, the ophthalmologists would still face the problem of not knowing how to treat certain cases, and not having the necessary equipment. Several times during my visit he returned to the theme of needing both equipment as well as training. He identified his top four priorities for improving pediatric eye care in Albania as follows:

1. Equipment: especially autorefractometer, amblyoscope, eutoscope (?).
2. Public education.
3. Training in orthoptics (in the U.S.; train a trainer).
4. Screening: train residents at first to do pre-school screenings.

Referrals: There was no clear answer regarding the referral patterns for children with eye problems, probably because there is no established system. Some parents, especially in Tirana, will go straight to the university eye clinic. Others use the polyclinics (at polyclinic nr. 3, the ophthalmologists see about 50 children each month), where cases requiring surgery are referred to the hospital. Health professionals in Albania tend to be compartmentalized into specialties, with little cross referrals. For example, ophthalmologists feel that pediatricians should play a bigger role in referring pediatric cases.

Schools: We met with the Director of the Dept. of Compulsory Education in order to get some information about the numbers of schoolchildren and the links between the schools and health system. Mr. Berisha is responsible for both pre-schools and primary schools, and he gave us the following numbers:

	National	Tirana City	Tirana Total	Shkroder District	Vlore District
pre-schoolers*	81,000	5,350	7,770	3,430	4,600
1st graders**	81,000	5,700	9,200	4,780 (urban) 3040 (rural)	4,290 (urban) 2,500 (rural)

* approximately 35% of this age group (3-6 years) are in pre-schools.
** nearly 100% of the age group (6-7 years) are in school by 1st grade.

There are approximately 550,000 children in primary school nationwide (represents nearly 100% of the age group 6-14).

The reason why only 35% of the 3-6 year olds are in preschools is two-fold. First of all, although pre-school is free, there are not enough spaces in the schools, because many of the previously existing schools were destroyed in the post-communist transition period. As a bitter reaction against symbols of the old authority, about 1,000 of 3,700 schools (along with other

infrastructure) were destroyed or seriously damaged through vandalism and looting. Major repairs have not yet been affordable. A second reason for the low enrollment is that many parents are now unemployed and prefer to keep their kids at home with them.

Furthermore, according to UNICEF, there has been a trend of higher drop-outs in recent years. In 1991, nearly 10,000 children dropped out of school, ten times more than in the previous three years. Given these facts, any school-based eye care screening program would obviously have to take into account the out-of-school population.

I asked the Director about his experience teaching in village schools for 15 years, in terms of the eye problems he saw in the children. He noted that while eye problems were common, cultural attitudes were a barrier to parents getting eyeglasses for their children, especially girls. It was felt that wearing eyeglasses would make their daughters less desirable. Only when the eyesight got really bad and he strongly suggested the parents take their child to an ophthalmologist would they do anything. Although these attitudes have changed somewhat, he believes they still exist in some parts of the country. I told him about a project in Bolivia which seeks to address a similar problem by producing public educational posters showing famous and popular people wearing eyeglasses.

Regarding health education in the classroom, one hour/week is supposedly devoted to the topic. Over the last several years, with Soros funding and technical assistance, they have developed a series of teacher's guides covering: smoking, nutrition, AIDS, alcohol and drugs, and environment. These include information for the teachers, as well suggested activities, etc. This is part of Soros' Regional Health Education Project, developing health education curricula for Central and Eastern European secondary schools.

STATUS OF AND FUTURE PLANS FOR OPHTHALMOLOGY IN ALBANIA

While a precise number seems elusive, I was told there are some 80 ophthalmologists (including 17 residents) in Albania. Of these, approximately 50 are outside Tirana. According to Dr. Zhugli, 50% of the ophthalmologists are near retirement age; the implication being that efforts should be directed at the younger ophthalmologists and residents.

Twenty-five (25) of the country's 35 districts have from 1-5 ophthalmologists, depending on the size of the district. The district ophthalmologists divide their time between polyclinics and hospitals, but the majority do not have the equipment to do surgery. Dr. Zhugli acknowledges that Albania has more than enough ophthalmologists, and he would like to see most of the ophthalmologists in the rural areas turned into primary eye care workers. This seems like wishful thinking, though.

In Tirana City, there are 19 ophthalmologists: 8 at the university clinic (3 of these are professors), 3 at the military hospital, one neuro-ophthalmologist, and 7 at the 3 polyclinics. Of

the 17 residents, 6 will be graduating in 1996. Although the placement of the new graduates is planned, they will no longer be required to go where they are told. Dr. Zhugli says he already knows that some want to stay in Tirana rather not want to return to the districts, but want to stay in Tirana. To address the oversupply of ophthalmologists, starting this September, they plan to admit only two new residents (one of whom Dr. Zhugli hopes will be his son).

The relationship between the university and polyclinic ophthalmologists seems to be somewhat strained. In the past, when there was one polyclinic in Tirana with 6 ophthalmologists assigned there, the University ophthalmology department supervised those ophthalmologists. According to Dr. Zhugli, only 2 of them actually worked at the polyclinic, while the other 4 hung out at the university hospital. Because he felt the situation was unsatisfactory, he changed the system, so that 7 ophthalmologists would be spread out among 3 polyclinics and no longer have direct ties to the university. Apparently, all 7 of them are of the older generation and expected to retire before too long. Dr. Zhugli will still have to address the issue of what role the polyclinic ophthalmologists should play vis a vis the university clinic ophthalmologists, especially with regard to a childhood blindness program.

There is already some rethinking regarding the organization of ophthalmic services in the country. Six out of seven regional secondary surgical centers which the MOH has identified for strengthening will include strengthened ophthalmic services. The 5 outside of Tirana are: Vlore (5 ophs.), Korce (3), Gjirokaster (2), Peshkopi (1), and Shkoder (5). Health for Humanity is planning to support the strengthening of these regional hospitals.

With regard to pediatric ophthalmology, currently, no one is properly trained or recognized as a sub-specialist in this area. There are, however, those who call themselves orthoptists, although their training is unclear. Dr. Zhugli feels that the ideal situation would be to have one or two ophthalmologists in Tirana specialized in pediatrics, particularly surgery; then 6-7 ophthalmologists in the regional centers who are responsible for supervising screening programs and treatment; and finally, ophthalmologists and nurses in polyclinics to do the actual screenings.

National POB Committee: One of the strategies outlined in IEF's ChildSight project for ensuring sustainability is to "encourage the MOH to establish a national prevention of blindness committee based on WHO standards." According to both Dr. Zhugli and Garth, there is strong support for such a committee by the Vice Minister of Health, who sees eye care work as a potential model for other areas of health. A proposal for establishing a national prevention of blindness committee has been submitted by the Albanian Ophthalmological Society to the MOH, and they hope to have a response soon. The 8-member committee would be chaired by the Vice-MOH, and also include someone from the Public Health Institute, as well as ophthalmologists. Dr. Zhugli feels it is too early to consider including representatives from the private sector, media, etc. As for the Ministry of Education, he feels they will not want to get involved, but he will try to include them.

Ophthalmology Society: I was asked to learn more about the workings of the Albanian Ophthalmological Society (AOS), and to discuss the idea of the AOS taking a more active role in

developing and overseeing programs. In particular, John Barrows was interested to know whether the AOS could serve as a mechansim for organizing continuing education programs, provided funding is made available for administrative functions. Both Garth and Dr. Zhugli felt this would be a good idea, but only if the Society received the appropriate guidance and support. One advantage is that apparently the AOS does not face the kind of internal politics found in Romania or Bulgaria.

Dr. Zhugli explained that the Society meets every 2 months, although not everyone attends each meeting. The one-day meeting usually focuses on a pre-determined topic, with members being asked to prepare papers in the case of a scientific program. Sometimes the meetings are organized around foreign visitors. In a first attempt at a CME program, they are giving out certificates for attending a certain number of meetings in one year.

The Society is divided into different committees, including one which deals with foreign relations, one for budget/finance, one for setting agendas, etc. The Society was the one which proposed the idea of a national POB committee to the MOH. The MOH and AOS are also planning to establish a Pan-Albanian Ophthalmology Society, to include Albanian ophs living outside Albania, e.g. in Macedonia, Greece, and Israel.

Other Eye Care Projects:

Health for Humanity seems to be quite involved in supporting ophthalmology in Albania. Numerous visits have already been made by ophthalmologists from the U.S. They plan to help strengthen the 5 regional centers plus Tirana by equipping them and training the ophthalmologists. This will include sending one ophthalmologist from each of the 6 centers to the U.S. (Northwestern or University of Chicago) for training in pediatric ophthalmology for 4-6 months, over the course of the next two years. The first one to go to the US will be Dr. Zhugli's son, Andy, who is hoping to pass his exams to get an ophthalmology residency slot.

In addition, HFH plans to send a pediatric ophthalmologist from the U.S. twice a year; during those times, the six ophthalmologists will come to Tirana, bringing pediatric cases with them, for teaching purposes. Finally, each of the six will rotate through the Tirana university eye clinic for 6 months of intensive training.

The schedule of upcoming HFH visits is as follows:
Sept. 17 - 30, 1995: Dr. Mike Makovic, a pediatric ophthalmologist, will come to train the residents in surveying/screening children; possibly do some training for the ophthalmologist from the regional centers.
Oct. 1-15, 1995: glaucoma specialist will come to Tirana.
End-Oct. or early-Nov., 1995: Dr. Kernan (Kim's father) will spend 2 weeks in Vlore.
End-Nov., 1995: Dr. Oh (sp.?) will spend 2 weeks in Shkoder.

ORBIS International: ORBIS was not able to hold a plane program this year due to the

condition of the airport. Instead, they have proposed an "off-the-plane" program in cornea/cataract from Oct. 15-30, 1995.

El Mahgraby Foundation: I was asked by John Barrows to find out the status of the Foundation's plans to build an eye hospital in Albania. Dr. Zhugli explained how he had met a representative of the Foundation at the AAO meeting in San Francisco, who expressed the Foundation's interest in building a *private* eye hospital on the road between Tirana and the airport (roughly 30 mins away). Apparently, they would provide the equipment and even staff the hospital with ophthalmologists and nurses from overseas (Saudi Arabia?). Dr. Zhugli seems puzzled as to why they want to build a separate, private hospital, instead of renovating the exisiting hospital. He said that the MOH agreed to provide space within the hospital compound for them to build. There has been no further contact with them.

Lions SightFirst: Dr. Zhugli said the current president of the Int'l Lions Club (an Italian) visited Albania and was supportive of an eye care project. Dr. Zhugli, a member of a local Lions Club, prepared a proposal for the reconstruction of the eye hospital (roughly budgeted at $1 million). He says he submitted the proposal about six months ago, but has not had a response.

S.E.E. International: Several years ago, two ophthalmologists came and did some surgery. Dr. Zhugli does not have a good impression of this organization because he feels they are not mainly concerned with teaching and overly concerned with promoting their own efforts. Also, they tried to set up something on their own in one of the districts, without consulting with his department.

RECOMMENDATIONS

The main recommendations of this report, which concern the four conference/workshops, are attached as Appendix A. The following are some additional general recommendations:

• It will be important for the success of IEF's program to have someone who can closely guide and monitor activities. While Dr. Zhugli is the official country representative, he is clearly not in a position to play this role. Garth Pollock, especially with his Albanian fluency and training background, seems ideally suited for this. Currently, however, he seems to be pulled in many directions, and it is unclear how much time he could devote to IEF. It would probably help a great deal if he could have some administrative support.

• It may be worth following up regarding the Soros Regional Health Education Project and the possibility of developing a teacher's guide for eye care. The contact in the U.S. is Susan Shapiro, Health Education Project Director for Soros.

• Learn more about the National Commission for the Protection and Development of Children, which was formed in 1992, and which has developed a National Program of Action. UNICEF is supporting the training of health professionals at all levels, as well as government and NGO health education activities (including expanding health instruction in schools, sensitizing national policymakers, raising awareness at the community level, and producing educational materials). Perhaps UNICEF would be a possible source of funds for activities beyond IEF's ChildSight grant. In any case, coordination with that program should be explored.

• Continue to provide moral and technical support to the establishment of a national POB committee and the subsequent preparation of a national eye care plan, especially as it relates to training..

• If resources permit, it would be worthwhile working on a primary eye care curriculum for family practitioners, which could be incorporated into the new program slated to start in 1996.

NEXT STEPS/FOLLOW-UP

• See Appendix A for follow-up actions directly related to the workshops.

• Get copy of MOH's National Primary Health Care Plan, which was not available at the time of my visit.

• Send Dr. Zhugli/Garth Pollock the following: WHO booklet on Childhood Blindness, sample national prevention of blindness plans, information/materials related to child development and vision, and to school eye health education.

• Get results of the screenings which residents will be conducting in three cities. This information will be useful in planning all the workshops.

APPENDIX A: PROPOSAL FOR CHILDSIGHT WORKSHOPS

1. NATIONAL CONFERENCE ON PREVENTION OF BLINDNESS

Who: All ophthalmologists and residents to be invited. Also, representatives of MOH, Institute of Health Education, Nursing School (including the 6 nurse trainers), Pediatrics, Tirana City and Tirana District health depts., and local WHO office.

Purpose: To build understanding and consensus re: the development of a national blindness prevention program (and specifically a program targeting children) by: 1) introducing public health concepts, with an emphasis on interdisciplinary approach; 2) discussing needs, obstacles and solutions to Albania's eye care problems; 3) presenting existing efforts and planned activities related to pediatric eye care.

When: Late-Nov. or early-Dec. Three days. Tentative daily schedule of 8:30am-4:00pm, with 45 minutes for lunch and two 15-minute coffee breaks each day.

Where: Tirana; exact venue to be determined, but probably within the hospital compound (possibly at the nursing school).

Estimated Costs:

International: a) transportation: ?
b) accomodations: $70-90/night
c) meals and expenses: ?

Local: a) transportation: $280 (average of $8 round-trip/person for 35 persons, max.)
b) accomodations: $1,050 ($10/person/night x 3 nts x 35). Based on rates at Hotel Arberia where single rooms are 1000 leke and doubles are 1,500 leke. [Dr. Zhugli thinks that some of the participants might be interested in doubling up.]
c) per diem: $2,100 ($20/person/day x 3 days x 35)
d) coffee breaks: $60 (2 breaks per day @ $20/day x 3 days)
e) materials (folders, pads, pens, name tags, etc.): $250 (50 people @ $5)
f) interpreters (?): it may be possible to find medical school students to volunteer; we did not discuss the cost of hiring simultaneous interpreters, but in John Barrow's last report, he noted that the cost would run about $20/day.
g) secretarial assistance (?): this too, did not come up as an issue, but should be kept in mind as a possible need and cost.

Some Possible Topics:

- state of ophthalmology and eye disease in Albania today.
- MOH plans for human resource development for ophthalmology; hopes for nat'l POB committee.
- MOH plans for primary health care system (Dr. Harito)
- needs at the district level for improving eye health of population and what can be done to meet those needs.

- case studies of experiences in different countries (Bulgaria, Romania, etc.).
- ChildSight project and plans for future trainings under this project.

Resource People:

-IEF (V.Sheffield or J.Barrows)
-WHO rep. (Dominique Negrel)
-Claire Gilbert or other ICEH or ped. ophth.
-someone to give other CEE perspective
- MOH (Dr. Harito & Vice Minister of Health for opening ceremony)
- Dr. Zhugli

Initial Follow-Up Actions:

- ▸ Draw up draft agenda.
- ▸ Prepare questionnaire for ophthalmologists (to be given out at next AOS meeting beginning Sept. 15).
- ▸ Contact potential resource persons.
- ▸ Set dates based on availability of key resource persons.
- ▸ Secure venue.

2. TRAINING OF NURSE TRAINERS FOR PRIMARY EYE CARE

Who: Six nurse trainers at Nursing School of Tirana; ideally, also include 2 each from other 2 nursing schools -- in Vlore and Korce.

Purpose: To create a core of nurse trainers trained in primary eye care so they can provide in-service training to existing nurses, as well as eventually incorporate PEC into new curriculum for new nurses. Emphasis will be on skills related to recognizing, treating or referring, and preventing eye disease in children.

When: Early-March 1996; 5 days.

Where: Nursing School of Tirana or University Eye Clinic's Resource Center (if renovations are complete).

Estimated Costs:

International: a) transportation: ?
b) accomodations: $70-90/night.
c) meals and expenses: ?

Local:
a) transportation: $28 ($6 R/T x 2 from Vlore + $8 R/T x 2 from Korce)
b) accomodations: $200 ($10/night x 5 nts x 4 persons)
c) per diem: $580 ($20/day x 5 days x 4 out-of-towners; $6/day x 5 days x 6 local nurses)
d) coffee breaks: $25 (2/day for 15 persons @ $5 x 5 days)
e) materials: $225 ($15/person x 15 persons)

Resource People:

-Garth Pollock
-Albanians, including Dr. Zhugli

-Nurse trainer from US -ideally, one other external resource person

(Note: trainers should have sufficient opportunity to be involved in planning for the course, and there should be ample opportunities for the trainees to get hands-on training.)

Initial Follow-up Actions:
- ► Confirm with the Director of the Tirana Nursing School, Mr. Astrit Koka, his agreement to support this training.
- ► Select dates for training.
- ► In consultation with Mr. Koka, identify appropriate nurse trainers from other two nursing schools.
- ► Assemble training team.
- ► Design TOT curriculum.

3. WORKSHOP FOR DISTRICT CHIEF PEDIATRICIANS

Who: Chief pediatrician of each district, including Tirana (no. = 36).

Purpose: To get the pediatricians "on board" for eventual participation in district-level teams for pediatric eye care. The support and involvement of pediatricians is considered important as they are often the first health professionals to see children and are therefore in a position to make referrals to ophthalmologists. The workshop would introduce the principles of public health ophthalmology and primary eye care; provide orientation to proposed plan for district-level pediatric eye care activities; discuss roles and responsibilities of pediatricians relative to eye care; and give practical training in primary eye care.

When: April 1996; 3 days.

Where: Tirana, University Eye Clinic Resource Center.

Estimated Costs: [we did not calculate these costs, but they are expected to be comparable to those for the first national conference, minus the international costs]

Resource People:
-Dr. Zhugli -pediatric ophthalmologist
-Garth Pollock -

Initial Follow-up Actions:
- ► invite representatives of pediatrics in Tirana to national conference.
- ► get necessary approval(s) and support for this workshop.
- ► survey pediatricians re: knowledge of eye care.

4. TEAM-BUILDING WORKSHOP FOR DISTRICT-LEVEL IMPLEMENTATION OF EYE CARE PROGRAM, PILOT PROJECT FOR VLORE DISTRICT

Who: Key members of the health care system of Vlore District, specifically the ophthalmologists, a senior district health official such as director of public health, district health educator, the chief pediatrician, a nurse representative, a school official.

Purpose: To create a district-level eye care coordination team which will design and implement a screening program, and eventually, implement other components of a national eye care plan. Presumably, by this point, the ophthalmologist(s) and chief pediatrician have already attended courses and have been sensitized and given some tools for taking activities to this level. The functions envisioned for this team include: defining roles and responsibilities; getting baseline information and setting up an information system; designing early detection/screening program; conducting training; planning education/promotion activities; planning for handling referrals; etc.

When: May 1996; 3 days.

Where: Vlore District.

Estimated Costs: [The actual workshop costs would be fairly modest, but the project should try and provide the equipment and supplies which will be needed for implementing a full-scale district-wide screening program.]

Resource People:
-Dr. Zhugli or other interested/committed ophthalmologist from Tirana.
-budget permitting, it would be nice to have someone from overseas who has strong experience with setting up screening programs.
-Garth Pollock

Initial Follow-Up Actions:
- contact Vlore District health officials, discuss plans, and get support.

APPENDIX B: PERSONS MET

Garth Pollock
Deputy Country Rep., IEF
Country Rep., Health for Humanity

Dr. Sulejman Zhugli
Chief, Dept of Ophthalmology, University Eye Clinic
IEF Country Rep.

Deedee Blane
Representative, USAID
Int'l Cultural Center, Tirana
Tel./Fax: (355-42) 42551 Fax: 32222

Tatjana Harito, MD, MS
Director, Dept. of Public Health
Ministry of Health
Phone/Fax: (355-42) 34671

Bashkim Berisha
Director, Dept. of Compulsory Education
Ministry of Education, Tirana
Tel./Fax: (355-42) 25832

Astrit Koka
Director, Nursing School
Ministry of Health

Dr. Florian Dangllia
Chief, Polyclinic of Specialties Nr. 3
Br. Qemal Stafa
Tel: (355-42) 25440
Fax: 42678

Tried, but unable to meet:
Ms. Enkeleida Mborja, Inspector of Nursing Personnel, MOH
Ms. Sara Hargraves, Director, ARCH Health Information Center/SOROS
Dr. Vladimir Gusmali, WHO rep. (Albanian)
ophthalmologist at polyclinic #3
Tirana City health officials
World Bank Health Sector Reform Project's project coordinator

ATTACHMENT L

HEALTH FOR HUMANITY
REPORT OF ACTIVITY 1995

COPY

Health for Humanity

Improvement of Eye Services in Albania
Report of Activities for 1995

This report summarizes the results of the first year of a five-year eye project to improve eye services in Albania. The goal of this effort is to reduce blindness and vision loss in Albania. At the end of the five year project, we will be able to evaluate the effectiveness of the project in meeting this goal. One year is too short a time to evaluate outcomes. Our aim, therefore, in this report is to summarize the activities aimed at raising the standard of eye care, improving accessibility to eye services, and developing public eye health initiatives.

This report will review the progress over the entire year of the project. Some of these items have already been included in other interim reports, but will again be reviewed here. Since the last update at 9 months, the major project activities of the last quarter have been the following and will be emphasized in the body of this report: visit of glaucoma specialist, Dr. David Hillman to the University Eye Clinic; visit of Dr. Cereesa Longest to Vlora; visit of Dr. Kong Oh to the University Eye Clinic and to Shkodra; visit of biomedical engineer, Mr. Alan Levenson; establishment of the Learning Resource Center; creation of six examination lanes in the eye clinic and two operating areas; organizational meeting of the Albanian Ophthalmological Society; approval of the National Blindness Prevention Committee by the Ministry of Health; and the pilot survey of blindness in children.

We are pleased to report not only that all the objectives were successfully met, but that the outputs of the first year far exceeded our expectations. The value of the donated funds of $114,892 by Soros Foundations was more than quadrupled through support from many quarters in goods and services, as well as in cash donations.

Background

In January 1995, Health for Humanity (HH) received funds from Soros Foundations' Open Society for Albania to implement a one-year eye project to improve eye services for the country. In February 1995, a HH team visited Albania to initiate the eye project. Mr. Garth Pollack was recruited and employed as Project Coordinator residing in Albania. In close collaboration with Dr. Sulejman Zhugli, Chairman of the Department of Ophthalmology at the University Eye Clinic (UEC) in Tirana and with the support of the Ministry of Health, a five year plan for a comprehensive and multi-layered system of eye services was generated and, through group consultations with Albanian participants, has been periodically refined. The plan envisions that in the first three years, the infrastructure of a comprehensive program of eye services will be developed and existing services improved. This will include expanding services and strengthening training at the UEC in Tirana, which will serve as the tertiary referral center, as well as setting up five other eye centers (secondary centers), strategically placed according to the Ministry of Health's plan for developing surgical capability across the country. These five centers, covering all regions of the country, are Shkodra, Vlora, Gjirokastra, Korca, and Peshkopi.

Once the capability to care for medical and surgical eye problems has been established at eye centers throughout Albania, the last two years of the five year project will focus on establishing public health and primary eye care programs, with continuing support for development and improvement of services at the tertiary center in Tirana as well as the five new secondary eye centers.

In order to ensure sustainable progress with continuation and development of programs into the future, this project will work intimately with three existing Albanian institutions in meeting the objectives of the project. These are: University of Tirana Eye Clinic, the Albanian Ophthalmological Society (AOS), and the National Blindness Prevention Committee (NBPC). There will be regular evaluations to chart progress in meeting the goals and objectives of the eye project with implementation of any needed changes throughout the five years.

First Year Review

The stated objectives of the first year of the project (Phase I) were as follows:

1. Strengthen the role of the University Eye Clinic in Tirana as a true tertiary referral and academic training center.
2. Develop capability at two secondary referral centers (in Vlora and Shkodra) for modern anterior segment microsurgery.
3. Conduct a low-cost representative survey of eye problems in children to determine the needs in the area of pediatric ophthalmology.
4. Provide continuing educational opportunities for the Albanian ophthalmologists by establishing a current library of textbooks and journals and creating opportunities for participation at ophthalmology conferences abroad.
5. Assist active Albanian involvement in identifying problems, maintaining and improving current services, and strategic planning for the future by acting as external consultant to the National Blindness Prevention Committee once established.

Progress to Date

I. Capacity Building: Health for Humanity has steadfastly adhered to a belief in the inherent capacity of people to arise to advance their own welfare. Years of dictatorial rule in Albania had quelled this ability. Persistent efforts to encourage our Albanian partners to participate in planning and working toward their own vision of eye services in Albania have awakened this inherent capacity and resulted in a spirit of enthusiasm and confidence in the future. This awakening of initiative in Albanians has been manifested in various ways:

   A. Development of Capacity at the University Eye Clinic: The following initiatives have been taken at the University Eye Clinic to improve resident education and patient care:
      1. Initiating the creation of a Learning Resource Center for resident education and for use of staff ophthalmologists and members of the Albanian Ophthalmological Society.
      2. Initiating the acquisition of a surgical video camera for teaching surgical procedures to residents.
      3. Adopting eye examination protocols and encouraging systematic evaluation of patients.
      4. Initiating the creation of six (instead of one) examination areas so that many patients can be seen simultaneously, thereby greatly increasing the capacity of the eye clinic to deliver care and the opportunities for residents to learn.
      5. The creation of two operating areas so that the number of surgeries performed and the opportunities for resident surgical education are doubled.

   B. Development of Capacity of the Albanian Ophthalmological Society: The following are initiatives taken under the auspices of the Albanian Ophthalmological Society:
      1. Sponsorship of three residents to attend the European Congress of Ophthalmology held in Milan, Italy during June 1995.
      2. Improvement of continuing educational opportunities through the organization of educational conferences to coincide with HH visiting professors.
      3. A consultation meeting between the AOS Board of Directors and the HH Project Coordinator in Albania to plan organizational strengthening seminars for the coming year. As a result, the Society is beginning to see more possibilities for improvement of eye care conditions in Albania.
      4. The creation and submission of a grant proposal with the assistance of the HH Project Coordinator in Albania. This grant proposal from the Albanian Ophthalmological Society, entitled "Creation

of Capacity for National Eye Screening Program," was recently awarded $15,250 by the Soros office in Albania.

C. Creation of the National Blindness Prevention Committee: In late November the National Blindness Prevention Committee was finally named by the Ministry of Health, with the Vice Minister of Health, Dr. Zamira Sinoimeri, accepting to be its president. Because of this very late appointment, it was difficult for this project to begin the institutional strengthening activities during 1995. However, the mere creation of this committee under WHO guidelines is an encouraging first step.

This committee, just instituted in Albania, has a great role to play in establishing national policy for blindness prevention. The active role of the Ministry of Health in its creation and leadership bodes well for its future in this responsibility. Over the next few years, HH will work closely with this committee to assist it in developing its institutional strength.

Health for Humanity will be participating in an international blindness prevention conference to be held in February, 1996 at WHO headquarters in Geneva, Switzerland. This two day conference will gather together organizations from all over the world involved in blindness prevention programs who will have an opportunity to share strategies and explore the short and long term goals of National Blindness Prevention Committees formed under the WHO guidelines.

II. Ophthalmology Training: Six U.S. ophthalmologists have made visits to assist the training of residents and to lecture to the staff ophthalmologists. Two of these volunteers have visited secondary centers in Vlora and Shkodra. In addition, there was a visit from biomedical engineer, Mr. Alan Levenson, who was sponsored by the International Eye Foundation (IEF) to visit Albania and review the equipment that had been sent to make sure it was all in good working order and to resolve any problems.

A. Volunteer activities:

1. Evaluation of pediatric eye problems: Dr. Kim Curnyn, pediatric ophthalmologist from the University of Illinois visited Albania April 30 - May 12, 1995. Her visit was jointly sponsored by the International Eye Foundation which also has a project to improve the level of eye care for children in Albania. During this visit, she provided instruction on retinoscopy, sensory vision testing, evaluation of amblyopia, measurement of eye muscle mis-alignment, pediatric anterior segment and fundus examination, and spectacle correction in children. The training utilized lectures, slide presentations, demonstration of techniques on patients, and workshops concluding with an examination reviewing concepts learned by the end of the two week training. In addition, she provided a lecture/slide presentation on general ophthalmology problems for the pediatric department and assisted Dr. Zhugli in surgery. She expressed great appreciation for the opportunity to participate in this project and has committed to going back for another training visit.
2. Evaluation of the adult patient: Dr. Michael Goldberg, general ophthalmologist from Washington DC. visited Albania May 21 - June 2, 1995. During this time, he provided instruction on various aspects of the complete adult examination including: tonometry, gonioscopy, biometry, indirect ophthalmoscopy, use of the 90D lens to examine the macula, as well as visual field examination and evaluation. He utilized the lecture/slide format, showed techniques in patient examination, demonstrated surgical techniques and assisted in surgery. At the end of the two week session, he offered an examination to evaluate the learning process of the residents. In addition, Dr. Goldberg participated in an international medical/surgical conference sponsored by Health for Humanity and held May 31 - June 1 in Tirana. He gave a lecture on Diabetic Eye Disease for the conference participants (including over 150 Albanian physicians). Dr. Goldberg has already committed to returning to Albania in May-June 1996.
3. Preparation for pediatric pilot survey and further evaluation of the pediatric patient: Dr. Michael

Mockovak, pediatric ophthalmologist from Northwestern University in Chicago, Illinois, visited September 16-29, 1995: He reinforced the pediatric ophthalmology training provided by Dr. Kim Curnyn with special emphasis given to complete evaluation of each patient and analysis of problems in a systematic fashion. He also prepared the residents to conduct the pilot survey of eye diseases in children which was carried out October-December 1995.

4. Further evaluation of the adult patient: Dr. David Hillman, glaucoma specialist from University of Illinois in Chicago, visited Tirana October 1-14, 1995. He focussed on the complete adult evaluation and treatment, the follow-up of patients with glaucoma, and reinforced previous training on gonioscopy and applanation tonometry provided by Dr. Michael Goldberg.
5. Initiation of training in Vlora: Dr. Cereesa Longest from University of Illinois in Chicago visited Albania October 29 - November 10, 1995. Her greatest contribution was assisting the ophthalmologists in Vlora to develop a more systematic approach to the patients by performing complete eye examinations and evaluating problems utilizing the concept of differential diagnosis. Significant steps for initiating systematic record keeping and documentation of each eye examination were begun through her efforts. She also gave an excellent presentation to the neonatal and pediatric specialists in "Retinopathy of Prematurity" and examination of small children for referral to the ophthalmologist.
6. Initiation of training in Shkodra: Dr. Kong Oh from Youngstown, Ohio visited Albania November 26 - December 7, 1995. He gave numerous lectures to the staff at the UEC and in Shkodra. He also lectured at a meeting of the Albanian Ophthalmological Society. In Tirana, he demonstrated the technique of small incision sutureless cataract surgery with foldable lens implant using a manual technique. In Shkodra, he taught the techniques of a complete eye examination utilizing the applanation tonometer, indirect ophthalmoscope, keratometer, and gonioscope. He made some excellent suggestions on improving the functioning of the eye clinic and the residency training program and made a very generous donation towards improving the physical surroundings of the University Eye Clinic. He will be a very valuable resource in future years of this project and has offered to continue to assist with the training program and with obtaining needed equipment for the UEC. He plans to return to Albania again in 1996.
7. Equipment review and technician training: The IEF made it possible for Mr. Alan Levenson, a biomedical engineer with ORBIS, to visit Albania during the first two weeks of December in order to review the newly arrived equipment, to repair any damage incurred en route, and to train Albanian biomedical engineers and technicians in the installation, maintenance and repair of ophthalmic equipment. During this time he checked all the equipment that had been purchased through this project. He also expressed interest in returning to provide further training in the future and has already been of great assistance in obtaining needed parts for the eye equipment.

B. Lessons Learned: From the visits of the seven volunteers a number of lessons were learned that will be implemented for future visits. Some of the valuable lessons previously outlined in the six month report permitted the remainder of the year to function more smoothly. For example, the use of teaching teams and review sessions in resident education have greatly enhanced the learning process. Also utilization of visiting professors in continuing educational programs for the AOS was carried out during Dr. Oh's visit. New changes that will be implemented in the future are as follows:

1. Shortened volunteer visits at the University Eye Clinic: Returning volunteers all commented that two weeks was too long a period for the training tasks they were assigned. They all felt that their time could have been more productive if their visits were shortened to one week but were scheduled with greater intensity. They felt their workdays could have been much longer with more surgery and training programs scheduled. Since the volunteers go through great sacrifices to make this trip

to Albania, they need to feel that their time is being maximally utilized. Therefore, in the future, the training sessions at the UEC will be shortened to one week but activities will be scheduled with greater intensity. This may also work out better for the staff at the UEC since volunteer visits do place greater demands on the time of the staff.

2. Continuing medical education: Persistent efforts to assist the AOS to assume its leadership in continuing education activities, initially in coordination with HH visiting volunteers, will continue.

III. Equipment: Health for Humanity, assisted by the IEF, was able to mobilize a very significant donation of capital equipment. The smaller items were sent with visiting volunteers while the larger items were reviewed and shipped by the IEF and arrived in Albania in October 1995.

A. University Eye Clinic: Needed equipment to complete the establishment of six patient examination areas, two operating areas, and a Library/Learning Resource Center has been obtained. The exact itemized list of equipment purchased and donated appears in the budget report.

B. Secondary Eye Centers: Basic ophthalmic equipment needed to do complete eye examinations and perform modern microsurgery has been obtained for Shkodra and Vlora. Items that were in good working order and were already at these centers were not duplicated. Each eye center now has the necessary equipment to evaluate patients and perform basic microsurgery. For exact list of items purchased and obtained through donations, see budget report

C. Lessons Learned: The lessons outlined in the previous six month report have been addressed in the second half of the project. For example, six examination areas with adequate security have been created to better utilize space, improve patient care capability, and maximize resident clinical educational opportunities. Use of a complete eye exam protocol and record keeping system has been instituted to improve patient care and follow-up. An inventory system is in the process of being established to track equipment, parts, and needed supplies. Following are additional changes that will be instituted in the future.

1. Equipment destination to be predetermined: All the equipment purchased for the project was sent to the UEC. As a result, sometimes it was difficult to determine if certain supplies destined for a secondary eye center reached their destination. In Vlora, for example, the ophthalmologists stated that they did not receive the surgical instruments sent for their clinic. Another two sets of instruments have been sent to Vlora to make sure they have the necessary tools they need for modern surgery. To avoid this problem in the future, all equipment and supplies will be earmarked.

2. Increased efforts at collaboration with partner agencies: The IEF's assistance with equipment procurement, shipping, and particularly its swift response to installation problems was exemplary. HH considers its collaboration with the IEF one of the great strengths of this project and looks forward to continued joint efforts in the future.

IV. Pilot Survey:

A. Purpose: Early in the project the need for a survey to determine the prevalence of blindness in children became evident as there are strong clinical impressions by Albanian experts in the field that monocular blindness in children is a more serious problem than anticipated by prevalence studies in other countries. Since this has never been systematically investigated in Albania, it was felt that this information was vital to long term planning of blindness prevention programs. This initial pilot survey was conceived of as a low cost add-on component to the first year of the project. The goal of the pilot

survey is to provide experience in the design and implementation of a larger scale survey scheduled for Phase Two of the project as well as to provide preliminary data that can be used as baseline information and can guide blindness prevention programs for children until more definitive information becomes available.

The results of this pilot survey are still pending since follow-up efforts in Tirana are not yet complete. As soon as the Tirana results are in, we will be able to have valuable information about blindness and decreased vision in Albanian children. HH is greatly indebted to Nikon for the loan of their new portable autorefractor for this effort. This generous assistance permitted valuable information gathering on refractive errors in children without excessive time commitment.

B. Activities: During the months of October and December 1995, all first grade children at all the schools in Tirana, Vlora, and Shkodra were scheduled for vision screening.

1. Communication and planning: A screening/survey committee was formed composed of three senior ophthalmology residents and the HH Project Coordinator, Mr. Garth Pollack. The committee visited Ministry of Health (MOH) and Ministry of Education (MOE) officials at the national, regional, and local levels, presented the aims and goals of the projected activity, and consulted with each on how they could work together at each level. Excellent cooperation was obtained in this manner. At the national level, letters of authorization and support were given to the project by each ministry. At the regional levels, a second letter was extended for use in each of the schools. Information about all the schools in each area, their directors, number of first grade classes, addresses, and numbers of children were obtained from the ministries. In one city, the regional MOE provided a school inspector to accompany the screening teams. In another city, the school physician accompanied the screening teams. In all three cities each school was visited. During these visits the program was presented to the school directors and first grade teachers, the screening day was scheduled, and the teachers were instructed on how to prepare the children for the screening and how to fill in the class list/screening form.
2. Development of screening program and materials: The following materials and forms were developed:
   a. Program information sheet
   b. Letter to directors
   c. Letter to teachers
   d. Tumbling "E" game sheet
   e. Class list/screening form
   f. Individual exam form
   g. Parent notice form
   h. Data totaling form
   I. Checklist
   j. Calendar
3. Training: Training of the residents took place during Dr. Mockovak's visit in September at the Eye Clinic. The training sessions covered program goals, design and procedure, eye tests, forms, and checklists. A trial run was conducted at an elementary school in Tirana in order to evaluate materials and procedures. After field testing and consulting on the results, adaptations were made to procedures and forms.
4. Survey/Screening: This was first carried out in Shkoder during a six day period in October. Three teams of two resident physicians each were sent to Shkoder. Two-thirds of the schools met mornings from 8:00-11:00 with the remaining one-third meeting in the afternoons. Cost per day for the screening was about $100 for the teams. During the six days all 18 schools in the urban area were screened. In order to save money and maximize efficiency, a two person team was sent back later in December to do more complete eye exams on those children who failed the screening. Had the more complete exams been done at the time of the original screening, it would have more

than doubled the time and the cost necessary to carry this out.

In Vlore, a similar approach was taken. Three teams carried out the screening of first graders at 18 schools in six days. The only difference was that instead of the residents doing the more complete eye examinations later, the hospital staff in Vlore were willing and able to effectively carry this out.

In Tirana, though larger in population with simpler logistic problems, a slower approach was taken. The costs in Tirana were negligible as the residents did not require accommodations. Five teams were equipped and carried out the screening. The children who failed the screening were sent home with a letter to their parents requesting that they visit the UEC for more complete eye examinations.

5. Follow-up: In every school there were children who were absent. In each case different arrangements were made to capture these children for screening. In Shkoder, when the resident team returned, they visited each school to invite the children who had failed the original screening to the polyclinic for more complete exams. During these visits, they also screened the previously absent children. If they were still absent, a letter was sent home to the parents inviting them to come to the polyclinic. In Vlore, the hospital staff ophthalmologists and the school doctor revisited the schools with absent children to finish the screening. In Tirana, forms were sent to the absent children through their teachers requesting that they go directly to the UEC to be screened. If after a month there remain significant numbers of absent children still unscreened, further follow-up will be designed. Also, if the children who failed the screening do not show up for further examination, a more aggressive approach will be taken.

   Care was also taken to communicate results of the screening to the schools and the ministries. A report was sent to each of the school directors showing how many of their six and seven year olds were screened and what the results of that screening showed. This report names the class and the students individually. At the regional level, a report was sent to the MOH and MOE in each area summarizing the survey information from each school. The Tirana results are still pending. This information will be passed on as soon as this portion of the survey is complete. Finally, a summary report by region will be sent to the MOHand MOE at the national level once the Tirana results are all in.

6. Summary:

Region	Total Screened	Absent	Failed Screening
Vlora:	1687	16	146
Shkodra:	1682	78	195
Tirana:			
Total:	3369	94 (2.79%)	341 (10.12%)

7. Additional benefits:
   a. Because of the care taken to communicate with schools, teachers, parents, and various officials, this activity created goodwill and a wonderful spirit of cooperation and receptivity to develop an ongoing screening program.
   b. Program materials development as a result of this effort will serve the project well when the larger survey activity is scheduled and when regular screening programs are instituted.
   c. The residents, the ophthalmologists in Vlora, as well as school officials have received valuable training and experience in conducting surveys as well as carrying out screening programs.

d. The important follow-up activities create important mechanisms through which future efforts will be facilitated.

V. Supportive Educational Activities

A. Learning Resource Center at the UEC: A room with security at the UEC was refurbished with fresh paint, chairs, and built-in cabinets to house the learning materials for residents, staff, and members of the AOS.

1. Library: The following books, journals, audio tapes, etc. have been procured to start the collection of a current library at the UEC:
   - A six volume set on basic science and clinical ophthalmology.
   - A recent edition of a two volume set on *The Glaucomas* by Ritch, Shields, and Krupin.
   - A two year subscription to *The British Journal of Ophthalmology.*
   - The entire set of 1994 and two sets of 1995 *Archives of Ophthalmology.*
   - A complete set of 1995 *Ophthalmology.*
   - A complete set of 1994 and 1995 *Audio-Digest Ophthalmology* audio cassette tapes.
   - American Academy of Ophthalmology 12 volume set review books.
   - A book on small incision cataract surgery (utilizing a manual technique) with video.
   - 1994 and 1995 *PDR for Ophthalmology.*
   - Various teaching slide sets.
2. Other learning resources:
   - Computer with printer
   - Copy machine
   - Slide projector
   - Overhead projector
   - Video player and monitor is to be contributed by the Albanian Ophthalmological Society.

B. Participation by Albanian physicians at ophthalmology conferences abroad and opportunities for exchange with foreign colleagues:

1. Dr. Sulejman Zhugli participated in and presented a paper at the International Conference on Ocular infections, held this year in Jerusalem, Israel, June 18-22, 1995. This is a significant milestone for the development of ophthalmology in Albania as it represents the first time an Albanian ophthalmologist has presented a scientific paper at an international medical conference.
2. Four Albanian ophthalmologists, three of whom were residents, attended the European Ophthalmological Congress held this year in Milan, Italy, June 25-29, 1995. The AOS assisted with this effort by contributing $1,000 towards the cost of sponsoring the physicians. This kind of local professional support bodes well for future sustainability of the improvements gained.

C. An Albanian physician receiving special training in pediatric ophthalmology in the US: Starting in October 1995, an Albanian physician began a special six-month training in ophthalmology with special emphasis on pediatric ophthalmology at Northwestern University in Chicago, Illinois. It is hoped that this physician will utilize the knowledge gained to assist the development of pediatric ophthalmology in Albania. Plans are underway to provide training for an additional 4 physicians in the area of pediatric ophthalmology through a separate grant proposal.

Conclusions & Highlights:

- This eye project has served as a catalyst through which the inherent capacity of the Albanian ophthalmic community to actively plan for and carry out improvement of eye services in Albania with interested NGO's is evolving. This is clearly demonstrated by the initiative taken at the University Eye Clinic to improve its own services and training program. It is also amply demonstrated in the initiatives taken by the Albanian Ophthalmological Society to improve educational opportunities for its members and access donor funds to improve eye services.
- The value of the SOROS donation has been more than quadrupled by Health for Humanity and its partner agencies during 1995. For the $114,892 grant donation, Health for Humanity has mobilized $384,073.08 in matching value, for a total of $498,965.08 in goods and services.
- The enhanced physical facilities at the University Eye Clinic now permit greater efficiency and higher quality eye care for Albanian patients in addition to a vastly improved educational environment for the residents.
- The provision of basic equipment, the initiation of training at the two secondary centers, and participation in the pilot survey have resulted in greater interest and initiative by the ophthalmologist staff in Vlora and Shkodra not only in comprehensive patient care, but also in prevention and screening programs.
- The pilot survey of blindness in children was a component that was added on to the project during the first quarter and had not been originally budgeted for. By gathering support from a variety of sources and economizing on expenses, this survey was conducted at very nominal cost. Although it is not yet complete, since data from Tirana as well as data analysis and manuscript preparation are still pending, this effort greatly enhances the value of the accomplishments in this first year.
- The training program for residents has become much more systematic and "hands on" in its orientation, although the residents still do not care for patients independently. Clearly, however, the initiative taken by the residents is unquestionably improving.
- All the volunteers have expressed an interest (while some have actually planned) to return to Albania in continued support of this project. This creates excellent continuity and integration for the learning process.
- A special training program for an Albanian physician in pediatric ophthalmology at Northwestern University in the US was another component that was added on more than halfway into the project and had not been budgeted for. This has opened the way for other physicians to obtain training in pediatric ophthalmology in the future and greatly enhances the ability of the eye care system in Albania to address blindness prevention in children.
- The partnership of Health for Humanity with the International Eye Foundation in equipment procurement and shipping was a significant highlight that greatly enhanced the project. The IEF's diligence in addressing problems as they arose was outstanding. This continued cooperative effort will be a greatly valued asset in future years of the project. In addition, HH has cooperated with IEF's Sightreach program for children through co-sponsorship of a pediatric ophthalmologist volunteer . We look forward to continued joint efforts to enhance the overall program of blindness prevention in Albania.

Improvement of Eye Services in Albania
First Year Financial Report: 1995

Budget Category	Soros: Rev. Budget	Soros: Expenditures	Other*: Expds.+In-Kind	Total: Expds+In-Kind
PERSONNEL				
Alb. Ophthalmologist (expns)	$1,200.00	$1,200.00		$1,200.00
Proj. Coord./Alb.(2/3 @30K)	$11,100.00	$11,100.00	$8,900.00	$20,000.00
Public Health Cons./Sr. Adv.			$11,500.00	$11,500.00
Dir. of Admin. (1/2 @ 45K)	$9,450.00	$9,450.00	$13,819.00	$23,269.00
Sec'y./Logistic Asst., Alb.	$350.00	$350.00		$350.00
Ophth. Consultants			$45,000.00	$45,000.00
Med. Director/Prog. Mgr.			$42,010.00	$42,010.00
Support Services			$4,224.74	$4,224.74
SUB-TOTAL PERSONNEL	$22,100.00	$22,100.00	$125,453.74	$147,553.74
CAPITAL EQUIP./Tirana				
2 Op. Micros. (1 video cam)	$12,000.00	$12,000.00	$3,500.00	$15,500.00
slit lamps (3 bt; 2 donated)	$7,900.00	$9,250.00	$1,600.00	$10,850.00
3 indirect ophthalmoscopes			$1,600.00	$1,600.00
3 instrument sets			$16,333.00	$16,333.00
3 retinoscopes w/handles	$730.00	$682.80	$200.00	$882.80
trial lens sets (2 bt;3 donate)	$1,200.00	$1,000.00	$792.00	$1,792.00
4 adjustable trial frames	$200.00	$200.00		$200.00
4 Goldmann 3-mirror lenses	$208.00	$208.00	$460.00	$668.00
1 90, 2 30, 1 60, 4 20D lens	$370.00	$470.00	$500.00	$970.00
prism bar sets(2 bt; 2 donate)	$50.00	$50.00	$200.00	$250.00
Titmus tests (1 bt; 3 donated)	$120.00	$120.00	$230.00	$350.00
4 Worth 4-dot flash lights	$30.00	$30.00	$90.00	$120.00
three direct ophthalmoscope			$600.00	$600.00
1 slide projector	$800.00	$714.00		$714.00
1 overhead projector	$800.00	$360.00		$360.00
1 computer w/prtr, man.& CD	$3,000.00	$2,295.00		$2,295.00
1 photocopier	$1,000.00	$1,180.00		$1,180.00
Books, journals, slides	$1,000.00	$876.11	$1,933.95	$2,990.01
Audio tapes			$358.00	$358.00
1 A-scan			$2,500.00	$2,500.00
1 gas sterilizer			$500.00	$500.00
I/A cannulas w/adapters		$304.68	$100.00	$404.68
Other perimeters			$3,816.80	$3,816.80
Miscellaneous items			$2,800.00	$2,800.00
CAPITAL EQUIP./Second. Ctr.				
1 operating microscope	$5,000.00	$5,000.00		$5,000.00
4 instrument sets			$22,667.00	$22,667.00
2 Goldmann perimeters	$2,000.00	$2,000.00	$4,800.00	$6,800.00
2 Goldmann 3-mirror lenses			$208.00	$208.00
3 20D, 2 90D, 2 60D lenses	$370.00	$310.00	$786.00	$1,096.00
2 retinoscopes w/handles	$470.00	$455.20		$455.20
1 tonometer att. for SL	$1,039.00	$1,039.00		$1,039.00
lensometers (1 bt; 2 donated)	$500.00	$500.00	$800.00	$1,300.00
1 keratometer	$600.00	$600.00		$600.00
I/A cannula w/tubing		$555.94		$555.94
Misc. instruments			$10,844.02	$10,844.02
SUB-TOTAL CAPITAL EQUIP.	$39,387.00	$40,200.73	$78,218.77	$118,599.45
TRANSPORTATION/TRAVEL				
In-country @ $.30/mi.				
Airport: 16 trips @ 50 mi.	$240.00	$274.97		$274.97
Vlore: 4 trips @ 150 mi.	$288.00	$285.98		$285.98
Shkoder: 4 trips @ 150 mi.	$180.00	$131.02		$131.02
Local-Tirana 12mo.@130 mi.	$480.00	$244.34		$244.34

Budget Category	Soros: Rev. Budget	Soros: Expenditures	Other*: Expds.+In-Kind	Total: Expds+In-Kind
Future sites:3 trips @ 300 m	$414.00	$220.00	$56.18	$220.00
Addl. fld. visits: 3 @ 100 m	$180.00			
International:				
Prof. Mtgs.-Albanians:				
Israel/Italy	$2,500.00	$1,331.00	$1,000.00	$2,331.00
Volunteer Ophthalmologists--				
6 volunteers @ $1,000 ea.	$6,000.00	$4,259.95	$4,045.09	$8,305.04
Management Visits	$3,000.00	$3,636.85		$3,636.85
Other Mgmt./Support Travel			$1,679.35	$1,679.35
Albanian Resident to U.S.		$894.00		$894.00
SUB-TOTAL TRANS/TRAVEL	$13,282.00	$11,221.93	$6,780.62	$18,002.55
PER DIEM/ALLOWANCES				
Professional Meetings--				
Israel: 2 day@$100/day+fee	$1,200.00	$1,642.45		$1,642.45
Italy 7 day @ $75/day (x4)	$1,100.00	$1,282.51		$1,282.51
Volunteer Ophthalmologists--				
6 visits/14 days @$50/day	$4,200.00	$3,486.70	$177.00	$3,663.70
Management Visits	$2,100.00	$3,005.70		$3,005.70
Albanian Resident Phys.in US		$4,006.34	$2,217.24	$6,223.58
SUB-TOTAL PER DIEMS	$8,600.00	$13,423.70	$2,394.24	$15,817.94
RESOURCE CENTER		$1,630.59	$1,000.00	$2,630.59
SUPPLIES & MEDICINES				
Office Supplies/Albania--				
Computer			$1,750.00	$1,750.00
Computer Printer	$400.00	$379.81		$379.81
Videocamera & microphone	$1,000.00	$1,030.32		$1,030.32
General office	$250.00	$63.58		$63.58
Project materials	$500.00	$93.84		$93.84
Medical Supplies (In-Kind)			$159,256.24	$159,256.24
SUB-TOTAL SUPPLS/MEDS	$2,150.00	$1,567.55	$161,006.24	$162,573.79
SURVEY/CHILD VISION	$4,000.00	$2,431.74	$565.00	$2,996.74
OTHER DIRECT COSTS				
Communica/shipping--				
Tel/fax/postage @$300/mo.	$3,600.00	$2,791.31		$2,791.31
IEF Fee (procurement)	$3,842.00	$3,842.00		$3,842.00
Freight/insurance	$3,000.00	$632.01	$1,984.78	$2,616.79
Equipment spare parts/repair	$1,200.00	$1,314.71	$65.00	$1,379.71
Volunteer recruiting	$1,000.00	$517.92	$645.74	$1,163.66
Promotions	$85.00	$100.00		$100.00
Miscellaneous	$590.58	$411.53	$258.98	$670.51
Facilities: office,warehouse			$5,699.97	$5,699.97
				$18,223.95
SUB-TOTAL OTHER CSTS.	$13,317.58	$9,609.48	$8,654.47	$18,263.95
ENCUMBERED FUNDS		$650.86		$650.86
TOTALS	$102,836.58	$102,836.58	$384,073.08	$486,909.66
Indirect-19% (excl.cap.eqpt)	$12,055.42	$12,055.42		$12,055.42
GRAND TOTAL	$114,892.00	$114,892.00	$384,073.08	$498,965.08

ATTACHMENT M

SEMINAR ON ERITREAN EYE CARE PROGRAM

APPENDIX II

Seminar on Eritrean Eye Care Programme

Date: December 13 and 14 1994.
Venue: IRD Asmara ERITREA

AGENDA

Tuesday 13 December 1994

Chairman:	Dr Nerayo Teklemichel
0830 - 0900	Registration
0900 - 0930	Opening Remarks from the Minister of Health (Ato Sebhat Efrem)
	The Statement of the Eritrean Health situation (Dr Afeworki Abraha)
	Discussion
0930 - 1000	Tea Break
1000 - 1045	Outline of present Blindness Prevention activities and Results to Date (Dr Desbele Ghebregiorghis)
1045 - 1115	Discussion
1115 - 1145	Eritrean National Eye Care Programme (Dr Afeworki Abraha)
1145 - 1215	Discussion
1215 - 1400	Lunch
1400 - 1430	Anticipated needs to meet plans (Dr Desbele Ghebregiorghis))
1430 - 1500	Discussion
1500 - 1530	Statements from NGOs
1530 - 1600	Tea Break
1600 - 1700	Consultations between the Ministry of Health and NGOs on Eritrean Eye Care Program (closed session)

ATTACHMENT N

LOW VISION PROGRAMME MALAWI

LOW VISION PROGRAMME MALAWI

Objectives

* **General**

- To set up Montfort College, through the training of 1 or 2 counterparts, as the co-ordination centre of Low Vision services in the areas of education, and as a liaison between related eye care, pre-school and rehabilitation programmes.
- To train 1 Malawian specialist in Low Vision through the International Low Vision training programme in Sweden.
- Set up and coordinate Low Vision task force, through the National Prevention of Blindness Committee.

* **Vision screening; education**

- To assist in screening all children in the current Education of the Blind programmes and new children, through training of specialist teachers and O.M.A.'S, in order to :
  + identify Blind, Low Vision and Sighted (possibly) children
  + refer children for medical treatment, check-ups and refraction
  + advice on the appropriate kind of schooling for each child.
  + prescribe appropriate Low Vision devices and non-optical devices
  + train children in the use of LVD's
  + train children in the most effective use of vision, amongst others in ADL and O& M.
- Advise on and co-operate in other vision screening programmes (Malawi Eye Care programme; IEF) regarding Low Vision issues
- To provide the identified Low Vision children with appropriate training, support and Low Vision devices, where needed.
- To expand 4 -6 selected existing Resource centres, spread over Malawi, into Low Vision resource centres, to be used for specialised assessment, advice, and continued teacher training and as distribution point for Low Vision devices, Large print materials and other useful training tools; and equip them with the necessary tools
- To integrate as many Low Vision children as possible into their home schools.
- To supervise the Low Vision work of specialist teachers.
- Examine if and how VETP (Vision Efficiency Training Programme) can be used effectively in Malawi.

* **Staff training:**

- To train the 5 O.M.A.'s who have mobile eye clinics in the 5 health service areas, in subjective refraction and assessment of Low Vision people, with emphasis on children, in order to get a sound base for the work of the Low Vision programme in education.
- To provide them with the necessary tools to do the refraction and assessment.
- To develop curricula on Low Vision for all training programmes at Montfort College - Education of the Blind:
  - Training programme of Itinerant teachers (6 months programme)
  - " " of teachers on 3 month programme
  - " " of specialist VI teachers - 1 year programme
  - " " of Special Education teachers (5th country programme)

- To facilitate the training of the following (groups of) people in relevant areas of Low Vision:
  Education:
  - The selected Tutors at Montfort College -Education of the Blind
  - Specialist Teachers, VI, already working in BS, RC, ITP

  Rehabilitation and pre-school:
  - MACOHA staff involved in: CBR, work with children
  - CRO's, CBR volunteers
  - Community Based Rehabilitation Workers (Machinga)

  Pre-school mainly:
  - Cheshire home staff
  - M.A.P. physio therapists and assistants
  - Staff of Association of Pre-school play groups and selected volunteers

  Medical services:
  - O.M.A.'s
  - Other relevant health and education personnel
- To develop appropriate training materials for the different target groups and areas described above.
- To provide for the first 3 years appropriate charts for testing visual acuity and other assessment tools for the specialist teachers.
- To train the following (groups of) people *in training others* in Low Vision:
  - Selected Tutors Montfort VI
  - Relevant MACOHA staff
  - and staff of the other mentioned organisations, in order for them to train their own staff in Low Vision.

* Low Vision Devices/ Large print

- Examine, advise on, and assist in expanding the local production, distribution and sale of Low Vision devices.
- To train a technician at Nkhoma Mission Hospital in the production of Low Vision devices for a period of 1 month (estimate; period as needed; in Kenya or Botswana).
- To organise the production and distribution of Large Print materials.
- To evaluate the correct use, frequency of use and the choice of Low vision device for each child.

* **Records/evaluation**

- To keep records of the relevant data of each Low Vision child centrally, at Montfort College as a resource for:
  + Evaluation
  + Research

- To develop and use appropriate indicators and tools for Monitoring and evaluating the Low Vision programme.
- To evaluate the effectiveness of all training, and related to this:
- To evaluate the input of Low Vision issues in the existing programmes of all organisations involved and its effects on the performance and life of the Low Vision clients.

Karin van Dijk, February/March 1995

Work areas Low Vision programme (1995 - 1997)

- **Co-ordination: Education of the Blind - Montfort College**
- **Main funding from Christoffel Blindenmission, Germany.**

* **Target groups:**

1. Low vision school children
2. Pre-school visually impaired children
3. Low vision adults (possibilities still to be investigated)

* Training in Low vision of

- Ophthalmic Medical Assistants (O.M.A.'s) and other relevant health and education personnel in selected pilot areas.
- Specialist teachers - visual impairment 50-60 (itinerant teachers, resource rooms, 2 blind schools)
- Tutors at Montfort College -Education of the Blind
- MACOHA staff involved in: CBR, work with children
- CRO's, CBR volunteers with
- Community Based Rehabilitation Workers (Machinga)
- Cheshire home staff
- M.A.P. physio therapists and assistants
- Staff of Association of Pre-school play groups

Including the development of curriculi, training materials and training- of-trainers.

* (Assistance in) screening all children in the current Education of the Blind programmes and new children, through training of specialist teachers and O.M.A.'S, in order to :

+ identify Blind, Low Vision and Sighted (possibly) children
+ refer children for medical treatment, check-ups and refraction
+ advice on the appropriate kind of schooling for each child.
+ prescribe appropriate Low Vision devices and non-optical devices
+ train children in the use of Low vision devices
+ train children in the most effective use of vision
+ integrate as many Low Vision children as possible into their home schools.

* Expansion of the local production, distribution and sale of Low Vision devices and non-optical devices.

Contact:

Karin van Dijk Advisor on Low Vision and Blindness Tel: 265 634783 (Office and home) Fax: 265 632928 (Temporarily)	Education of the Blind Montfort College PO Box 5192 Limbe

OMA training in low vision: assessment and refraction

Objectives:

- to assess low vision children's vision (distance, near visual acuity, field of vision) accurately
- to refract (subjective/objective ?) low vision children accurately and prescribe appropriate glasses

(The training will centre on low vision children, both pre-school and school children, but some attention should be given to adults)

Trainees: 5 'mobile' OMA's, 1 OMA from KCH, 1 OMA from QECH

Length of training:

For objective refraction:
- An initial 2 weeks (10 days)
  7 x 1day supervision at a blind school/resource centre/Itinerant Teaching Programme
- After 3 months:
  7 x 1 day supervision at work
- After 6 months:
  3 day refresher training

Total: 13 days formal training + 2 days supervision for each trainee.

For subjective refraction: 3 days formal training
7 x 1 day supervision

Facilitators: Rosemary Lowdon - Optometrist (main facilitator)
Karin van Dijk - Low vision advisor

Materials:

if objective refraction is taught: 7 Retinoscopes
7 Trial frames + lenses
Low Vision acuity charts

subjective refraction only: 7 trial frames + lenses
Low vision acuity charts

Subjective versus objective refraction:

	Advantages	Disadvantages
Objective ref.	- Accurate results	- Who can pay for a complex prescription? Only available from private opticians. - Long training - Higher costs
Subjective ref	- Lower costs - Results translate in glasses that are available mostly from QECH.	- Not all refractive errors corrected

Estimated Costs:

Objective ref:	£	$
Facilitator (Mrs Lowdon) Total 27 days, min. £100 per day	2700	
7 Retinoscopes (£ 200, from India) (*1)	1400	
7 trial frames (£ 30)	210	
7 trial sets (£250, from India)	1750	
Low vision acuity charts (7 x $ 80) (*2, *3)	350	
Transport trainees (2000 MK)	81.64	
Accommodation trainees (free at LHSH???)		
Food trainees (100 MK a day, per person; 15 days, includes 1 weekend)	428.58	
Lunch 1 facilitators (100 MK per day, 13 days)	53.06	
Allowances trainees (200 MK per day??; 13 days) (*4)	742.85	
Training materials/administration (2000 MK)	81.63	
Contingencies 10 %	856.44	
Total	9420.91	15073.46

* need agreement to start th.

Subjective refraction:		
Facilitator (10 days, £ 100 per day)	1000	
7 trial frames (£ 30)	210	
7 trial sets (£250, from India)	1750	
Low vision acuity charts (7 x $ 80) (*2, *3)	350	
Transport trainees (2000 MK)	81.64	
Accommodation trainees (free at LHSH???)		
Food trainees (100 MK a day, per person; 3 days)	85.71	
Lunch 1 facilitator (100 MK per day, 3 days)	12.24	
Allowances trainees (200 MK per day??; 3 days) (*4)	171.43	
Training materials/administration (1500 MK)	61.22	
Contingencies 10 %	372.22	
Total	4094.46	6551.14

(*1) Mrs Lowdon might be able to provide 3 or 4 new ones.

(*2) It is assumed the OMA's have the usual acuity charts

(*3) Exchange rates taken:

1 US $	15.3 MK
1 UK £	24.5 MK
1 UK £	1.6 US $

(*4) Only during the formal training are allowances paid, not during supervision or during the weekend in the 2 weeks training.

May/June June end (last 2 weeks)
end July spread th. for teaching
Kenya 1-19 June gone

Fax transmission to: Joe Canner and John Barrows, International Eye Foundation
Fax No. 632443

From: Rosemary Lowdon, Lilongwe fax 743905 tel 722549

29th April 1995

Dear Joe & John,

The following is a list of subjects to be taught to the OMA's relating to refraction and low vision:

For background information:
Causes of LV, problems of LV, ways of providing magnification, types of LVA's etc.

On refraction & LV:

Ametropia & astigmatism: types, symptoms, correction of.
Lenses: refresher in hand neutralisation and toric transposition
Subjective examination: refresher in Best Vision Sphere (BVS), duochrome, use of pinhole, Stenopaic Slit & Scheiner disc in LV
Retinoscopy: theory & practice, effect of media defects on, modifications for LV
Prescribing: modification of retinoscopy, limitations of subjective in LV
Accommodation: theory, prescribing high reading additions in LV: relationship to convergence, use of prisms
Prescribing for amblyopia, anisometropia & strabismus in the context of LV
Handling potential patient complaints: spectacle aberrations caused by poor centration & fitting, back vertex distance, minification, magnification, aniseikonia, high cylinders, limitations of working distance, etc
Dispensing: theory & practice - fitting of frames, back vertex distance, measuement of interpupillary distance, use of tints in LV
Visual Fields: effect of LV on, simple methods of assesment

In Addition

Useage of forms (to be designed) to be returned by OMA's showing ongoing retinoscopy carried out after the course.
Useage of forms showing examination details of LV pxs (to be designed)
Forms & method for obtaining the glasses - criteria & supplier to be decided

Some of the subjects I've mentioned above sound very technical, but I only propose to touch on the issues that they may come across in the course of their work, and provide enough information so that they know what can be done within the context of working in a developing country - no need to provide information which is irrelevant to work in Malawi.

I look forward to receiving your comments on the above.

Best wishes,

Rosemary

Rosemary E Lowdon (Mrs) BSc MBCO
Optometrist

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Fax transmission to: Karin van Dijk, Advisor on Low Vision & Blindness
632928

From: Rosemary Lowdon, Optometrist, P O Box 898, Lilongwe
fax 743905 tel 722549

19th April 1995

Dear Karin,

Thank you for your fax about low vision and refraction, which was very interesting. The whole Low Vision Programme that you have drawn up looks very comprehensive. I must apologise for not replying sooner, but I have been giving the matter consideration and I have made a few notes below which may be worth thinking about.

Firstly under the objectives of the programme I have assumed that if funding is granted it will cover the cost of providing spectacles where necesarry. This is not mentioned in the objectives, but I draw attention to it because some of the prescriptions required will be complex and therefore not obtainable from QECH or Nkhoma. The full retail price of such lenses would probably be over K1,000 per pair and may have to come from abroad.

Secondly I have assumed that it will be the specialist teachers who will prescribe the LVA's, and not the OMA's. I hope that this is correct.

Thirdly regarding training the OMA's: you speak of training in subjective refraction, whereas to get any degree of accuracy in the prescriptions it is objective refraction that I really feel is needed. The OMA's already carry out subjective examinations as part of their work (with varying levels of success) but in more than two years of carrying out refraction clinics all over Malawi I have repeatedly come across instances where high myopia, high astigmatism and even aphakia has not been detected by even the most conscientious of OMA's.Many patients even with normal vision have great difficulty in participating in a subjective examination, since they are totally unaccustomed to such a procedure. Low vision work is further complicated by abnormal vision to begin with, and then many of the patients will be children who may be completely illiterate and innumerate.For these reasons if it is at all possible the OMA's should have training in retinoscopy.

This does unfortunately require intensive supervised ongoing instruction, which is difficult to fund. However a good start could be made with a two week intensive course as you suggest. I would recommend about 4 hours in total of lectures in refraction in the first few days, followed by 3-4 hours each day practicals in the clinic with selected patients under supervision. After this I would suggest each OMA could visit a Blind School in their district in order to refract the children, accompanied, supervised and checked by an experienced refractionist. If results are good the the OMA could continue with unsupervised, with a visit from the refractionist after two or three months and a 3 day refresher course centrally after 6 months.

If training in objective refraction is not possible I could do a subjective refraction refresher course geared towards LV for, say, 2 days out of your initial fortnight.The content would be on refractive methods etc, but further lectures on causes of LV,effect on visual fields, the theory of the different types of magnification and the optics of LVA's could be added if you wanted. I don't know what fee will be possible, but I would like to look for HBP £100 per day, which is the lower end of locum rates in UK. You also enquire about cost of trial sets - all the OMA'S have trial sets at their hospitals but I don't know if they would be able to take them out as they travel around. Normal Western standard trial sets cost on average GBP £670, but basic ones can be obtained from Zabby's in India for £200 plus freight. Trial frames I would imagine may cost £20-£30 for simple ones. Retinoscopes cost about £200 each, but I would be able to provide three or four new ones myself.

The only other matter which springs to mind is that in addition to training the 5 mobile OMA's it would be good to train someone based centrally at KCH.
KR No space for more here - hope to speak to you soon,

Best wishes, Rosemary Lowdon

ATTACHMENT O

VISION AID OVERSEAS

Vision Aid Overseas

56 - 66 Highlands Road
Leatherhead, Surrey KT22 8NR
Tel: 0372 360822 Fax: 0372 360823

P O Box 898
Lilongwe

21st April 1995

To:

SMS, QECH
DHO, Zomba General Hospital
DHO, Mulanje District Hospital
DHO, Chikwawa District Hospital
DHO, Thyolo Distirct Hospital
Mr Khonje/Mr Chagona, Eye Dept QECH
Mr J Malimba, Eye Dept Zomba GH
Mr D Mkandawire, Eye Dept Mulanje DH
Mr J Chalichi, Thyolo DH
Mr S Kanjoloti, Chikwawa DH
Mr V Makupula, Spectacle Workshop QECH
Prof M Chirambo, Sightsavers Lilongwe
Ms Karin van Dijk, Montfort College

As in former years a team of opticians will be visiting the Southern Region during May to examine patients and dispense glasses. The schedule is below:

Mon 15th May	QECH
Tues 16th	a.m. Nancholi p.m. Naphiyo
Weds 17th	a.m. Chilangoma p.m. Mpanda
Thurs 18th	a.m. Zomba General Hospital p.m. Satamba
Fri 19th	a.m. Namachate p.m. Mpanda/Ndalama
Mon 22nd	a.m. Mulanje District Hospital p.m. Muonekera
Tues 23rd	a.m. Thyolo District Hospital p.m. Nogwe/Ntiza
Weds 24th	a.m. Chikwawa District Hospital p.m. Nsomo
Thurs 25th	a.m. Chikonde
Fri 26th	QECH

OMA's should arrange publicity for the clinic at their hospital. Hospital clinics will begin at 8.00a.m. and finish at 12.00 - except at QECH where patients can also come in the afternoons. The price of glasses will be K25 at all locations except QECH, where the usual charges will be made. Six opticians will be in attendance and a full range of spectacles will be available so please encourage as many patients to attend as possible.

Clinics at non-hospital locations are being arranged by World Vision - please contact Vincent Moyo or Mrs Dina Kachaje on 643444 or 670311 if you require further details.

Thank you for your assitance.

Rosemary E Lowdon

Rosemary E Lowdon (Mrs) BSc MBCO
Optometrist

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ATTACHMENT P

MALAWI SCREENING RESULTS

Summary of examinations done in Nsanje, Malawi

Abbreviations used:
CS = Corneal Scar
TEM = Traditional Eye Medicine
Enuc = Enucleation
Evis = Evisceration
NLP = No Light Perception
LP = Light Perception
OI = Optical Iridectomy

Unless otherwise specified under Prognosis, no improvement in distance or near vision was achieved by refraction

LULWE SCHOOL FOR THE BLIND

Name	Age	Sex	RE	LE	Near	Cause	Prognosis
Low Vision							
Stella Falaji	17	F	Enuc	6/24	N8@17	CS/measles	Read print
Waters Fanuel	18	M	6/60	6/60	N8@10	Congenital, nystagmus	**Refracts to 6/24 w/ 0.50 Near w/ +1.5**
Manuel Faniziko	13	M	6/36	NLP	N8@13	CS/measles	Read print
Margret Alumendu	14	F	6/60	LP	N8@7	CS/measles	Read print
Ereck Lyson	16	M	3/60	1/60	N8@33	CS/measles, Lens opac.	**Refer**
Wetason William		M	3/60	NLP	N12@8	CS/measles	Read lg print
John Milisi	18	M	3/60	2/60	N12@4	CS/measles	Read lg print
Mainja Mbwinja	10	M	3/36	NLP	N32@10	CS/measles, staphyloma(L)	
Joice Jackson	15	F	3/60	2/24	N32@7	Congenital, nystagmus Mental retardation?	**Refraction helps fixation**
Lawrence Thapuleni	20	M	6/36	6/36	N8@22	Congenital optic atrophy	Read print
Peter Sumbulero	14	M	2/60	LP	N32@3	CS/measles	
Rose Stabuleki	10	F	NLP	2/60	N40@7	CS/measles	
Enock Lazaro		M	3/36	NLP	N8@3	CS/measles	
Blind							
Patricia Chiwawa	15	F	NLP	NLP		CS/measles, staphyloma, TEM	

Watson April	16	M	Enuc	Enuc	measles?
Rose Jambodi	23	F	Evis	Evis	measles?
Madalena Terazeo	10	F	Evis	Enuc	conjunctivitis/TEM?
Mavuto Leavson	17	M	NLP	NLP	nystagmus, congential shrunken eye
Dorini Jongwe	16	F	NLP	NLP	congenital shrunken eyes or measles
Kingsley January	18	M	NLP	Evis	Staphyloma/measles
Judith Soza	23	F	NLP	LP	Nystagmus, CS/measles+TEM?
Gladys Wati	15	F	Evis	NLP	Staphyloma/measles
Eliza Njasi	15	F	Evis	Evis	measles
Bernard Sitolo	16	M	NLP	NLP	CS/measles
Maliko Hebel	15	M	Evis	NLP	Staphyloma/measles
Mike Wyson	17	M	NLP	LP	Blind suddenly @age 16 **Refer** Hazy vitreous, glaucoma?/RD?
Mattheu Tanazeo	13	M	LP	NLP	CS/measles, nystagmus
Raphael Gulupira	19	M	LP	Evis	RE) Congenital cataract removal failed LE) CS/measles, TEM?
Chrissy Flyton	10	F	NLP	NLP	conjunctivitis/TEM?
Violet Njerewata	11	F	LP	LP	Cataract, uveitis **Operate**
Regina Stefano	16	F	Enuc	Enuc	measles
Peter Ngalande	26	M	Enuc	Enuc	measles
Charles Everson	16	M	Enuc	NLP	Staphyloma
Ida Andrigu	16	F	NLP	NLP	CS/measles, TEM?
Jonathan Chizenga	16	M	NLP	NLP	CS/measles, TEM?
Joseph Sabulani	7	M	Enuc	Enuc	Conjunctivitis/TEM
Kupatsa Katsekera	17	M	Enuc	Enuc	measles, TEM
Madalitso Julius	18	M	Enuc	Enuc	measles, TEM
Kamtule Tole	7	M	Enuc	Enuc	Blind @ age 2 days, cannot speak
Aluvera Abeto	12	M	NLP	LP	RE) Shrunken LE) CS/Conj/TEM, nystagmus **Operate(OI)**

MPATSA RESOURCE CENTRE

Name	Age	Sex	RE	LE	Near	Cause	Prognosis
Low Vision							
Christina Makungwa	18	F	3/60	NLP	N40@6	CS + Lens Opacity, Congenital?	
Nyamazako Jeke	12	M	Enuc	6/24	N8@15	CS/measles	Read Print
Blind							
Adam Aroni	9	M	NLP	Enuc		Amblyopic, Cataract	
Benedicto Thavera	9	M	LP	LP		Optic Atrophy?	
Khanadzina Mponda	11	M	LP	LP		CS/measles, staphyloma	
Shuwa Edward	13	M	LP	Evis		CS/conjunctivitis,TEM	

MATUNDU RESOURCE CENTRE

Name	Age	Sex	RE	LE	Near	Cause	Prognosis
Low Vision							
Manali Sasefo	9	F	3/60	3/60	N12@5	CS/Trachoma? TEM?	Read lg print
Nyamazao Moffat	11	M	3/36 BE)	3/60 6/60	N16@4/ N8@1	CS, Nystagmus	
Yohane Clemence	11	M	6/18	6/24	N8@7	CS	Read print
Rosaline Mosi	17	F	Evis	2/60	N16@5/ N12@3	CS+Optical Irid.	
Leveson Dickson	18	M	1/60	3/60	N8@3	CS	Read lg print
Blind							
Moffat Anderson	18	M	Evis	NLP		CS/measles	
Caso Stefano	10	M	NLP	Evis		CS/measles, staphyloma	
Ellen Joseph	17	F	NLP	Evis		Staphyloma/measles	
Lita Zeka	15	F	NLP	Evis		Staphyloma/measles,TEM	
Eva Vasco	12	F	Enuc	Enuc		measles	
Zione Dola	13	F	Evis	Evis		measles	
Galasa Vasco	13	F	Evis	Evis		measles	
Esnath Kalitera	17	F	Evis	Evis		measles	

MPATSA RESOURCE CENTRE

Name	Age	Sex	RE	LE	Near	Cause	Prognosis
Low Vision							
Christina Makungwa	18	F	3/60	NLP	N40@6	CS + Lens Opacity, Congenital?	
Nyamazako Jeke	12	M	Enuc	6/24	N8@15	CS/measles	Read Print
Blind							
Adam Aroni	9	M	NLP	Enuc		Amblyopic, Cataract	
Benedicto Thavera	9	M	LP	LP		Optic Atrophy?	
Khanadzina Mponda	11	M	LP	LP		CS/measles, staphyloma	
Shuwa Edward	13	M	LP	Evis		CS/conjunctivitis,TEM	

MATUNDU RESOURCE CENTRE

Name	Age	Sex	RE	LE	Near	Cause	Prognosis
Low Vision							
Manali Sasefo	9	F	3/60	3/60	N12@5	CS/Trachoma? TEM?	Read lg print
Nyamazao Moffat	11	M	3/36 BE)	3/60 6/60	N16@4/ N8@1	CS, Nystagmus	
Yohane Clemence	11	M	6/18	6/24	N8@7	CS	Read print
Rosaline Mosi	17	F	Evis	2/60	N16@5/ N12@3	CS+Optical Irid.	
Leveson Dickson	18	M	1/60	3/60	N8@3	CS	Read lg print
Blind							
Moffat Anderson	18	M	Evis	NLP		CS/measles	
Caso Stefano	10	M	NLP	Evis		CS/measles, staphyloma	
Ellen Joseph	17	F	NLP	Evis		Staphyloma/measles	
Lita Zeka	15	F	NLP	Evis		Staphyloma/measles,TEM	
Eva Vasco	12	F	Enuc	Enuc		measles	
Zione Dola	13	F	Evis	Evis		measles	
Galasa Vasco	13	F	Evis	Evis		measles	
Esnath Kalitera	17	F	Evis	Evis		measles	

Watson April	16	M	Enuc	Enuc	measles?
Rose Jambodi	23	F	Evis	Evis	measles?
Madalena Terazeo	10	F	Evis	Enuc	conjunctivitis/TEM?
Mavuto Leavson	17	M	NLP	NLP	nystagmus, congential shrunken eye
Dorini Jongwe	16	F	NLP	NLP	congenital shrunken eyes or measles
Kingsley January	18	M	NLP	Evis	Staphyloma/measles
Judith Soza	23	F	NLP	LP	Nystagmus, CS/measles+TEM?
Gladys Wati	15	F	Evis	NLP	Staphyloma/measles
Eliza Njasi	15	F	Evis	Evis	measles
Bernard Sitolo	16	M	NLP	NLP	CS/measles
Maliko Hebel	15	M	Evis	NLP	Staphyloma/measles
Mike Wyson	17	M	NLP	LP	Blind suddenly @age 16 **Refer** Hazy vitreous, glaucoma?/RD?
Mattheu Tanazeo	13	M	LP	NLP	CS/measles, nystagmus
Raphael Gulupira	19	M	LP	Evis	RE) Congenital cataract removal failed LE) CS/measles, TEM?
Chrissy Flyton	10	F	NLP	NLP	conjunctivitis/TEM?
Violet Njerewata	11	F	LP	LP	Cataract, uveitis **Operate**
Regina Stefano	16	F	Enuc	Enuc	measles
Peter Ngalande	26	M	Enuc	Enuc	measles
Charles Everson	16	M	Enuc	NLP	Staphyloma
Ida Andrigu	16	F	NLP	NLP	CS/measles, TEM?
Jonathan Chizenga	16	M	NLP	NLP	CS/measles, TEM?
Joseph Sabulani	7	M	Enuc	Enuc	Conjunctivitis/TEM
Kupatsa Katsekera	17	M	Enuc	Enuc	measles, TEM
Madalitso Julius	18	M	Enuc	Enuc	measles, TEM
Kamtule Tole	7	M	Enuc	Enuc	Blind @ age 2 days, cannot speak
Aluvera Abeto	12	M	NLP	LP	RE) Shrunken LE) CS/Conj/TEM, nystagmus **Operate(OI)**

Summary of examinations done in Nsanje, Malawi

Abbreviations used:
CS = Corneal Scar
TEM = Traditional Eye Medicine
Enuc = Enucleation
Evis = Evisceration
NLP = No Light Perception
LP = Light Perception
OI = Optical Iridectomy

Unless otherwise specified under Prognosis, no improvement in distance or near vision was achieved by refraction

LULWE SCHOOL FOR THE BLIND

Name	Age	Sex	RE	LE	Near	Cause	Prognosis
Low Vision							
Stella Falaji	17	F	Enuc	6/24	N8@17	CS/measles	Read print
Waters Fanuel	18	M	6/60	6/60	N8@10	Congenital, nystagmus	**Refracts to 6/24 w/ 0.50 Near w/ +1.5**
Manuel Faniziko	13	M	6/36	NLP	N8@13	CS/measles	Read print
Margret Alumendu	14	F	6/60	LP	N8@7	CS/measles	Read print
Ereck Lyson	16	M	3/60	1/60	N8@33	CS/measles, Lens opac.	**Refer**
Wetason William		M	3/60	NLP	N12@8	CS/measles	Read lg print
John Milisi	18	M	3/60	2/60	N12@4	CS/measles	Read lg print
Mainja Mbwinja	10	M	3/36	NLP	N32@10	CS/measles, staphyloma(L)	
Joice Jackson	15	F	3/60	2/24	N32@7	Congenital, nystagmus Mental retardation?	**Refraction helps fixation**
Lawrence Thapuleni	20	M	6/36	6/36	N8@22	Congenital optic atrophy	Read print
Peter Sumbulero	14	M	2/60	LP	N32@3	CS/measles	
Rose Stabuleki	10	F	NLP	2/60	N40@7	CS/measles	
Enock Lazaro		M	3/36	NLP	N8@3	CS/measles	
Blind							
Patricia Chiwawa	15	F	NLP	NLP		CS/measles, staphyloma, TEM	

REPORT ON THE SCREENING OF VISUALLY IMPAIRED SCHOOL CHILDREN DONE IN THE NORTH AND CENTRAL REGIONS

Screening of visually impaired children was done in the 2 regions. In total a number of 171 children were screened out of these 54 were females and 117 were males.

The following is the breakdown of the data collected:-

FEMALES

Total number - 54

Causes of visual impairement

Measles	- 33
Harmful traditional practices	- 6
Cataract	- 5
Hereditary	- 5
Ophthalmia neanotorum	- 1
Glaucoma	- 1
Others	- 3

Visual acuity was done on all the children and the following are the collective results:-

Category	Results
6/6 - 6/18	1
6/18 - 6/60	4
6/60 - 3/60	1
3/60 - PL	25
NPL	20
Cannot be tested	3

The visual acuity on both females and males, depended on the better vision out of the 2 eyes e.g. if one has RE PL and LE NPL the child was put in the PL category.

Action Needed

Education placement	- 23
Rehabilitation	- 18
Medical/Surgical	- 9
Optical	- 4

MALES

~~Breakdoen of males~~

Total number - 117

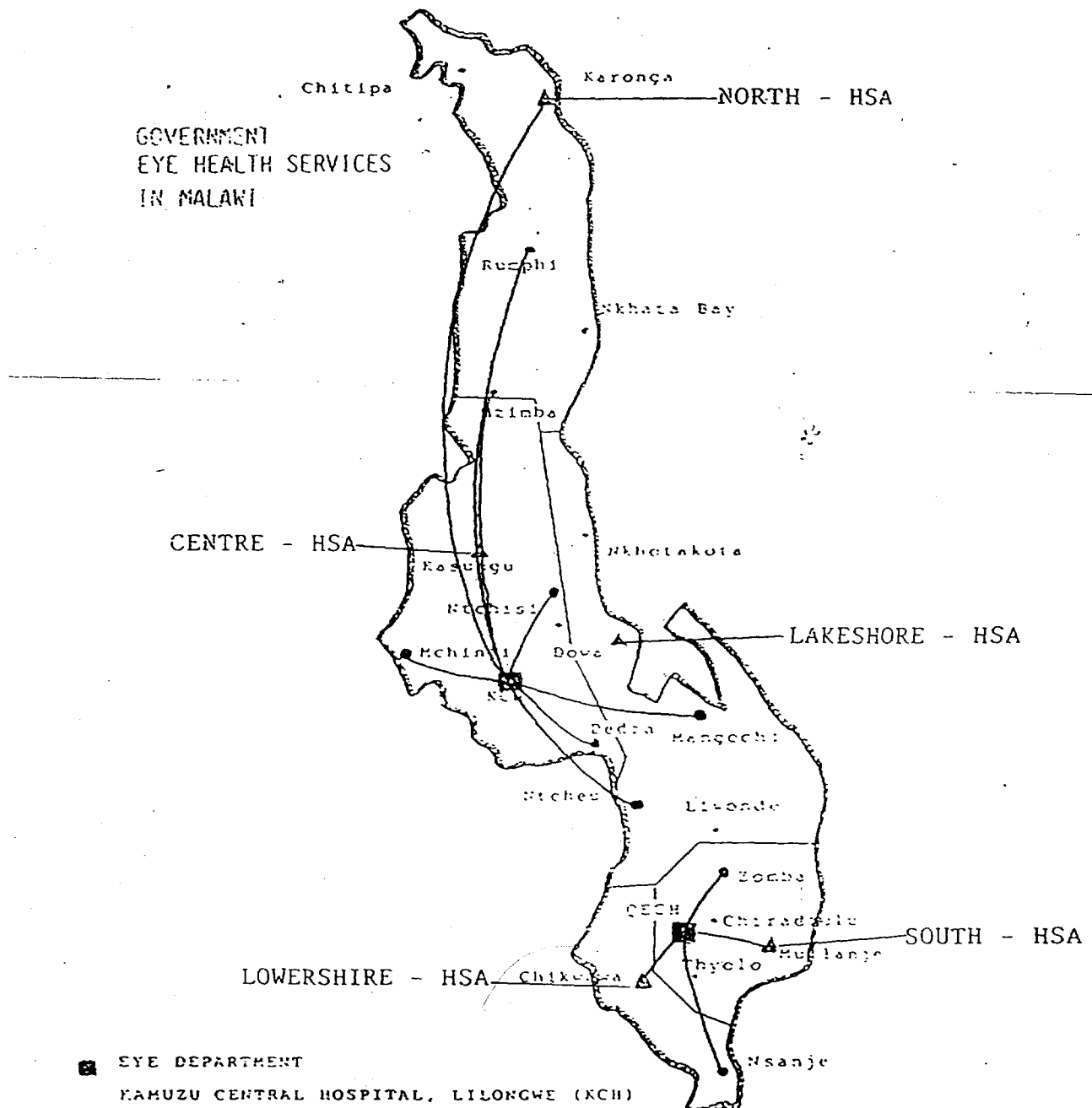
Causes of visual impairment

Measles	- 69
Harmful traditional practices	- 13
Cataract	- 10
Hereditary	- 9
Ophthalmia neanotorum	- 2
Glaucoma	- 3
Others	- 11

Visual Acuity

Category	Results
6/6 - 6/18	5
6/18 - 6/60	14
6/60 - 3/60	9
3/60 - PL	44
NPL	46

HEALTH SERVICE AREAS : OPHTHALMIC OUTREACH



Action Needed

Education placement	- 43
Rehabilitation	- 18
Medical/surgical	- 17
Optical	- 9

ATTACHMENT Q

REPORT ON THE TRAINING OF TRADITIONAL HEALERS ON PRIMARY EYE CARE

Ref: CDH 7th August, 1995.

From: The Senior Ophthalmic Assistant, P.O. Box 32, Chikwawa.

To : The Country Director, IEF, P.O. Box 2273, Blantyre.

cc : The Programme Consultant, Sight Savers, P.O. Box 30858, Lilongwe 3.

cc : The Project Manager, IEF, P.O. Box 142, Nchalo.

REPORT ON THE TRAINING OF TRADITIONAL HEALERS ON PRIMARY EYE CARE

A one day training was conducted for traditional healers in Chikwawa District. The training was done in 11 different areas. The areas were as follows:

Gaga, Chapananga, Kakoma, Chikwawa Boma, Ndakwera, Mpokonyola, Makhwira, Nsua Island, Ngabu, Dolo and Chipwaila. The training started in June and finished in July, funding was done by the International Eye Foundation.

The overall goal was to improve knowledge and practices regarding eye care among Traditional healers, and identification of a Cataract (Senile Cataract which is more common).

Since Cataract is one of the leading causes of blindness in our District we discussed more on this and the difference between a Corneal Scar and a Cataract. We had also to find words which they use in their areas in Chichewa which means Corneal ulcer Corneal scar and Cataract because they become confusing.

Since the early sign of Senile cataract is loss of vision, the healers were taught how to take vision. They were taught figures only. Any patient who had a vision of less than "3m.F.C" they had to refer to the nearest health centre. They had time to practice. There is no medication to treat Cataract both traditional eye medicine or western medicine can not cure Cataract. The only treatment is surgery, we all agreed after discussion for sometime. The healers were told ~~them~~ that Cataract is not an emergency, it is only recommended when the patient can no longer see well enough for daily work.

Healers were made to understand that face washing was a preventive measure for most of the eye diseases and should be promoted along with steam bath. Traditional Eye drops should be discouraged because they are dangerous, can cause the Cornea to melt which will lead to blindness. They should never use them, whether the drops are painless or painful, (Because some healers think that if the drops are not painful then they are good).

All patients who are being treated by the healer should be treated for only 3 days. If the condition is bad the next morning they should refer without waiting for 3 days. The signs which they should be looking for the next morning include the following;

(a) If the eye is more red.
(b) More pain.
(c) Cornea more haze (The black part).

If the conditions above have been observed the patients should be referred immediately without waiting for 3 days. We agreed that they are not going to use traditional eye drops but they will encourage the use of "Face Wash" and steam bath.

All patients should be referred to their nearest health centre. Health centre staff were invited to attend these trainings so that they can know the healers in their areas and hear their problems.

Patients with Ophthalmia Neonatorum should be referred immediately with both parents to their nearest health centre for treatment.

During the training pictures were used for healers to identify the problems, and it was very easy for them to remember the problem. We used discussion as a method of teaching these healers. They were given time to contribute in the discussion as much as possible, so that they could be very free. This also helped me to learn alot from the healers.

Since behaviour change in a Community takes time, and these healers are old enough that they have been practicing these bad methods for a long time, we still need to continue teaching them. In the areas we conducted some training last year there was remarkable improvement in the use of traditional eye medicines and healers ("some") had reported to have referred patients including Cataract patients to their nearest health centre.

I feel there is need to conduct In-Depth training for healers who demonstrated more interest e.g. some healers are already conducting meetings in their villages.

To improve the identification of Cataract patients in the District I think we should train aphakic healers to be motivators. Those aphakic healers who went under this training last year are already bringing Cataract patient for Cataract operation. If they can be trained they can do more then they are doing.

Lastly on behalf of my District Health Officer let me thank the International eye Foundation through you for making it possible that the funding should be available.

Below is the number of healers and their areas: trained

Gaga	25 healers
Chapananga	30 healers
Kakoma	26 halers
Ndakwera	23 healers
Makhwira	30 healers
Chikwawa	29 healers
Nsua Island	28 healers
Chipwaila	30 healers
Ngabu	21 healers
Dolo	26 healers
Mpokonyola	30 healers.

Total 298 healers

ATTACHMENT R

REPORT ON PEDIATRIC TRAINING AT ARAVIND EYE HOSPITAL: MARIA EUGENIA SANCHEZ

INFORM OF THE PEADIATRIC OPHTHALMOLOGY TRAINING AT ARAVIND EYE HOSPITAL (february to july 1995)

DR. MARIA EUGENIA SANCHEZ

INFORM OF THE PEDIATRIC OPHTHALMOLOGY TRAINING AT ARAVIND EYE HOSPITAL (FEBRUARY 15 TO JULY 25 1995)

The pediatric ophthalmology training received at Aravind Eye Hospital consisted of 6 months of clinic and surgical practices supervised by the chief of the department Dr. P.Vijayalakshmi, at ARAVIND EYE HOSPITAL, Madurai India.

I arrived on february 13 1995, this day I met Dr. G. Venkataswamy; Dr. P. Vijayalakshmy and the peadiatric staff as well as all the medical officers. The activities started on february 14 1995; I attended the hospital at 7:30 every morning and atended the operation theatre during the morning. The first week I observed the surgical technics of all the cases done, specially pediatric cases.

The second week I started to do surgery (assisted by a pediatric fellow the first 5 cases). After doing this cases I was doing surgery by my own, with free adult patients (cataracts and IOL). The day after the surgery the patiens were examined and special instructions were given when needed. One day a week the cases were checked with dr G. Natchiar (chief of the IOL clinic) and she gave me her advises of every case. After ending 50 cases with adults I started doing pediatric cases with the assistance of one of the pediatric fellows and the supervision of Dr. P. Vijayalakshmy. After doing some cases with assitence I started to do cases by my own.

Every morning all the pediatric cases were seen at the waiting room, before surgery and a small discusion of the case was done if necesary, with Dr. P.V. After checking all the pediatric cases I start surgery and when this was finished I observed or assisted the Dr. P.V. During the afternoon I started my activities at 2:30 P.M atending the out patients clinic. Since most of the patients didn't speak english I asked one of the nurses help. Most of my time I spendeded at Dr. P.V clinic examining the patients with her, discusing the diagnosis and management. I had time to go to the library when the clinic was finished before 6:0' P.M.

Scientific activities were attended one or two days a week, assisting of the grand round presentation or seminaires organized by the clinic, I presented one case at this grand rounds. (Bilateral Retinoblatoma)

I was asked to give talks to the first year residents about the following topics:

1. Compassion with the ophthalmology patients
2. Slit lamp (basics)
3. Tear duct and tonometry examination of the patient
4. Ocular movements examination and muscular balance.

EYE CAMPS: I went and observed one eye camp (screaning camp) during the first month of my staying at Madurai. During the third month I went and helped the peaditric fellow in one school screening camp.

RESEARCH DONE:
I started to do a retrospective and prospective research about BILATERAL RETINOBLASTOMA. CLINICAL PRESENTATION, on march 1995 and continuing during my staying at Aravind. A preliminar report was writen, but we realized that most of the free cases were missed because of the difficulties to obtain the information, since at the free hospital they don't have a computerized system. One of the pediatric fellows now is in charge to obtain as much information as possible to end the study.

PROBLEMS FOUND

The experience at Aravind Eye Hospital was incredible, specially for the surgical training (see atached); The scientific level and the program is excellent as well as the library and facilities for the fellows. Every month we had a special profesor or guest who gave a talk about different topicis which was very interesting. The American residents that go to Aravind as part of their rotationt in their programs are asked to take talks with them so they can share it with the Aravind residents. This was very interesting too. One of the mediacla officers asked me to give a talk about the programs in my country, I could gave them a brief information about the programs at Guatemala, and so. However It would be very nice to have something prepared for them with slides or special material .

However, the cultural shock is big and it is difficult at the begining to adapte to the food, the weather, the cultural aspects, etc. People at Aravind are incredibly good guests making the adaptation time easier. Staying at the guest house was very helpfull too, because it was very confortable and pleasent.

The residents program at Aravind is very different from Guatemala. I found that many of the residents are not exposed to strabismus surgery in their training unless they join the pediatric ophthalmology training. This was a problem, since I had very few strabismus cases while my staying at Aravind because there were not many and the fellows had to have the experience to do such cases too. However I had the oportunity to assisted the fellows in their first surgeries and it was very nice to show them some of our technichs in Guatemala.

I think that for doing a surgical training Aravind is an Excelent place to go. However the clinc is not so great because of the language problems.
Based on this I think that four months training is enough in terms of clinic and surgical exposure for people who would like to go in the future.
Since many of the health problems in India are similar to Guatemala, as well as the economic situation (malnutrition, lack of money, etc) I've found very interesting and usefull the training at Aravind Eye Hospital

SURGERIES PERFORMED DURING THE PEDIATRIC OPHTHALMOLOGY TRAINING
ARAVIND EYE HOSPITAL
(FEBRUARY 15 TO JULY 25 1995)

CHILDREN:	
CATARACT WITH IOL	19
CATARACT NEEDLING ASPIRATION	22
SQUINT	5
OPTIC IRIDECTOMY	2
DCR	2
ENUCLEATION	2
CORNEAL SUTURE	2
TOTAL	54
TRANS OP COMPLICATIONS	
VITREOUS LOSS	4
DIFICULTIES FOR LENS ASPIRATION	1
SURGERIES ASSISTED	
SQUINT	6
[illegible]	3
D.C.R.	3
ADULTS	
CATARACT WITH IOL	308
CATARACT	12
SQUINT	6
TOTAL	326
SURGERIES ASSISTED	
SQUINT	5
TRANS OP COMPLICATIONS	
VITREOUS LOSS	9

ATTACHMENT S

THE VISIT OF SUSAN DAY AND MARILYN MILLER TO BULGARIA

UIC The University of Illinois at Chicago

Department of Ophthalmology and Visual Sciences (M/C 648)
College of Medicine
Eye and Ear Infirmary
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Chicago, Illinois 60612-7243
(312) 996-7445/6599 Fax: (312) 413-7895

Pediatric Ophthalmology and Strabismus

Marilyn T. Miller, MD
Director

Lawrence I. Chapman, MD
Lise Anne Guay-Bhatia, MD
Lawrence M. Kaufman, MD, PhD

Anna Newlin, MS
Genetic Counselor

Julie Lenth, CO
Orthoptist

TO: Professor Petja Vassileva, Sofia, Bulgaria
Ms. Victoria Sheffield, International Eye Foundation

FROM: Marilyn T. Miller, MD
Susan Day, MD

RE: The visit of Drs. Susan Day and Marilyn Miller to Bulgaria, July 27, 1995 to August 8, 1995.

DATE: September 8, 1995

INTRODUCTION

This program was arranged by the International Eye Foundation with its country director, Professor Petja Vassileva, with funding assistance from U.S. AID and managed by IEF. The purpose of the program was:

1. To visit ophthalmology facilities and meet with personnel involved in eye care for children at four different eye centers in Bulgaria which included 1) the Center for Sight, St. Anna Hospital in Sofia, 2) Eye Department, Higher Medical Institute, Plovdiv, 3) Higher Medical Institute in Stara Zagora, 4) Eye Department, Higher Medical Institute, Varna.

   Additionally, the opportunity was given to visit a school for handicapped children and also an adult blind facility.

2. To offer a series of lectures in three locations: Plovdiv, Stara Zagora and Varna.

3. To perform surgery in two of the institutions (S. Day): Plovdiv and Stara Zagora.

4. To examine (with the local ophthalmology staff) patients in Sofia, Plovdiv, Stara Zagora, and Varna. This gave us an opportunity to have some insight into the problem areas clinically, and to a less extent, a sample of difficult patients presenting to the eye clinic.

5. Prior to the trip there was a series of correspondences involving Professor Petja Vassileva, Professor Emil Philipov, and Dr. M. Miller, with suggestions as to subject matter for the lectures. This was generally adhered to and the lectures given were as follows:

   A. July 31st and August 1st, 1995 (Medical Institute Plovdiv, Plovdiv, Prof. Blaga Chilova, Head)

      1. Introduction to Pediatric Ophthalmology - Comitant Strabismus (M. Miller)
      2. Complicated Strabismus (S. Day, M. Miller)

3. Surgery (S. Day)
4. Genetics, Teratogenic, and Craniofacial Syndromes; (M. Miller)
5. Cataract, Glaucoma, and Retinoblastoma (S. Day)
6. Trauma and Other Ocular Tumors (M. Miller)
7. Developmental Anomalies (M. Miller)
8. Retinopathy of Prematurity (ROP) (S. Day)
9. Refraction and Refractive Problems (M. Miller)

B. August 3, 1995 (Medical Institute Stara Zagora, Prof. Emil Philipov, Head)

1. Recent Advances in Genetics (M. Miller)
2. Glaucoma and Cataracts (S. Day)
3. Retinopathy of Prematurity (S. Day)
4. Teratogenic Diseases: General Principles and Prototypes (M. Miller)

C. August 7, 1995 (Higher Medical Institute - Varna, Prof. Mitov, Head)

1. Retinopathy of Prematurity (M. Miller)
2. Comitant Strabismus (M. Miller)

6. Surgery was performed in two institutions by Dr. S. Day on five patients with strabismus. Although no suitable patients were identified for the adjustable suture, the technique was demonstrated by Dr. Day. Operated patients were seen postoperatively by Dr. Day or the local ophthalmologist. All patients did well.

   Several impressions regarding surgery were made on the experiences in Plovdiv and Stara Zagora. Sterile techniques were fine and noted in both places. An investment (small) in more surgical instruments (such as additional muscle hooks, fine forceps) might expand versatility of strabismus surgery. Negotiation for Vicryl or Dexon sutures with spatula needles would also benefit surgical goals for adjustable sutures.

GENERAL IMPRESSIONS

Our hosts in Bulgaria were incredibly gracious and hospitable. Professor Petja Vassileva and her staff accompanied us throughout the trip and were responsible for all of the details regarding accommodations, eating, and local educational experiences. The prepared itinerary and programs proceeded with remarkable ease and the only problem was that we would have liked to have seen more patients than time permitted. The ophthalmology staff at the hospitals we visited were also exceedingly friendly, helpful and interested in talking about various aspects of pediatric ophthalmology. We were impressed with their level of knowledge and interest in all aspects of pediatric ophthalmology, particularly when there is no opportunity for formal subspecialty training. There were ophthalmologists with particular interest in genetics, ROP, and strabismus, and all seem to be enthusiastic about further interchanges with personnel and didactic material from the U.S. If anything, we may have underestimated slightly the level of expertise in the area of strabismus in one location and in the future, we would suggest added attention be paid to more sophisticated aspects of strabismus, i.e, unusual strabismus syndromes, vertical muscle surgery, prisms, etc. Fresnel prisms may be available, although we are not sure. It would be advantageous to perform surgery in one site over a longer period of time so that more complicated cases such as adjustable sutures, congenital cataracts, etc., could be done with appropriate follow-up.

RECOMMENDATIONS

1. We would support a concept of pediatric ophthalmology centers in Bulgaria that had ophthalmologists particularly interested in children and their special ocular needs. We are not sure of the number, perhaps 3 to 5. In addition to routine problems such as strabismus, there are certain conditions that should be handled by each center, e.g., the examination and treatment of retinopathy of prematurity (ROP). Hospitals that have high risk, low birth weight children should be identified, and an ophthalmologist should volunteer to cover these hospitals. The future follow-up of these children, i.e., refraction and fundus exam, strabismus evaluation, etc., should also be outlined in a protocol that is acceptable to the ophthalmologists in Bulgaria. We could supply a number of examples of protocols used in the United States and these could be modified for use to address Bulgarian needs.

   Each of these centers should have an indirect ophthalmoscope with a 30, 20, and perhaps 14 diopter lens. Good adequate detection of acute stages of ROP is an achievable goal in the future.

   Great caution should be exercised in warranting surgical intervention "abroad" for older, stage V babies as being very successful in many cases.

2. One possibility to more rapidly move the acquisition of examination techniques, treatment skills, and knowledge in ROP would be to offer a training course of 2 days at some central location with a number of goals: 1) skills transfer on the use of indirect ophthalmoscopy, 2) treatment protocols and methods of treatment for threshold ROP, and 3) follow-up evaluation of the premature child. Perhaps one of the instrument companies, e.g., Mentor, would be interested in supplying or loaning some practice indirect ophthalmoscopes.

   If desired by Bulgarian pediatricians, this course could be combined with a didactic and workshop course for neonatologists with some guest faculty experienced in the handling of low-birth weight children (Dr. Dale Phelps from New York would be an ideal person).

3. One center could act as a consultation resource for children with genetic diseases or unusual eye malformations. A useful adjunct to this center would be an ERG and perhaps a VEP. It would be ideal to have a genetic counsellor give a short course to ophthalmologists who would be involved in counselling and also some training of an individual to do genetic counselling. We see no need in having this specialized genetic center in more than one or two locations, since there is usually no emergency evaluation in the child with multiple anomalies. Routine genetic problems are handled locally at all clinics. Additionally, there should be a fundus and external disease camera available at this special location.

4. One of these centers could have special expertise in congenital glaucoma. An ophthalmologist who does a significant amount of congenital glaucoma surgery might go over for a few weeks for special training to the Bulgarian ophthalmologist interested in this difficult problem.

5. A survey of children with poor vision should be done. If it is too expensive to do a true prevalence study, one could still estimate etiologies of visual impairment

from the blind school study. It may be different than other countries with a slightly different prevalence of certain genetic diseases.

6. Strabismus appears to be fairly routine in its prevalence and types, and each center should have someone skilled in strabismus. At some point, a course might be given aimed at strabismus and amblyopia, but with some attention to the more uncommon forms of strabismus and treatment. A number of the Bulgarian ophthalmologists seem very knowledgeable about strabismus.

7. We did not see any library per se at the medical school, but we had a feeling they need assistance to develop some of the core resources. Many ophthalmologists appear to be able to read English, so English texts would be of use, although there is no question that English is not the second language for many. This may change in the future, however. We met some residents who had put aside time recently to learn English. We think most realize that this would be of use in their professional life in the future.

The formal lecture courses were well attended and we had the opportunity to meet and discuss pediatric ophthalmology problems, not only with the staff of the clinic where the courses were given, but also there were a number of ophthalmologists present from other centers. Although there were some language difficulties, many ophthalmologists understood our word slides in English and there were always individuals present who were fluent in English. In the Plovdiv course, there were facilities for simultaneous translation.

Drs. Miller and Day noted interest in their visits by the press. Coverage was provided in both newspapers and radio. The "newsworthy" nature of their visit should assist in the grant justification.

In summary, we felt the goals presented to us prior to the trip were addressed and met adequately for the most part. We hope our hosts feel similarly.

Sincerely,

Marilyn T. Miller, MD

Susan Day, MD

MTM/SD/nes

cc: Professor Emil Philipov
Professor Blaga Chilova
Professor T. Mitov

Очни хирурзи от САЩ обучават наши лекари

Много деца имаха шанса да бъдат излекувани

■ Пловдив
Камелия СИМЕОНОВА

— Как попадохте в България и в Пловдив?

Мерилин Милър: Тук сме с помощта на Центъра за зрение — Тайпей, Международна очна фондация, и със съдействието на Катедрата по очни болести на ВМИ — Пловдив. Нашето посещение е част от националната програма „Детско зрение", която ще се осъществи на три етапа в продължение на две години. Нашата визита в Пловдив е първата част от програмата — обучението на 80 души лекари, които се занимават с детска очна хирургия.

Днешните сега лекари от цяла страна ще обучават свои колеги от големите болници в Стара Загора, Варна, Плевен и София. Идеята е да обучим детските лекари и сестрите в детските очни кабинети да окажат по-добра първична помощ. Колкото по-рано се открият и диагностицират очни аномалии при децата, толкова по-лесно се лекуват те.

Последната част от програмата е обследване на две-

Професор Мерилин Милър и д-р Сюзън Дей *Снимка: Стоян Илиев*

те училища за слепи в София и Варна, за да се открият най-честите причини за вродената слепота у децата.

— Операциите, които направихте в Пловдив, по-различни ли са от тези, които вече сте правили?

Сюзън Дей: Има някои малки разлики, но вашата очна хирургия в общи линии е подобна. Офталмолозите хирурзи тук са много добре подготвени, имат много добра техника. Разликите са главно в технологиите, инструментите и оборудването. Разбира се, разлика има и в допълнителните умения, които идват с новата технология.

— А децата, които оперирахте, по-специални случаи ли бяха?

Мерилин Милър: Много интересни случаи имаше, много трудни, подобни на случаите, които сме срещали в нашата практика. Всички те са трудни, но от професионална гледна точка са много интересни.

— Надявате ли се да помогнете на тези деца?

Сюзън Дей: Те имат прекрасна възможност, чудесен шанс да бъдат излекувани. Ние помагаме и сме много доволни и щастливи от възможността, която ни е дадена. Това е една прекрасна цел.

Парите детски

■ Пловдив
Стоянка МОГИЛСКА

В пловдивските кметства в момента текат конкурсите за фирми, изпълнители на ремонти в училищата и детските градини. Някъде подписват договорите, другаде работниците вече са в училищата. До началото на учебната година има повече от 45 дни и служителите в кметствата са спокойни за сроковете. Притеснява ги по-скоро това, че не всичко, което има нужда от ремонт, ще бъде ремонтирано.

В Първо кметство конкурсът мина още на 20. VII. 1995 г. Ремонтите са в ход. От исканите 3 790 000 лв. са получени 1 530 000. С това автоматично отпадат плановете за освежаване, за благоустрояване на сградите. Ще се ремонтира само най-неотложното: хидроизолацията на многострадалното, предвидено за събаряне СОУ „К. Величков" (сградата тип „Пежос" в „Кючук Париж"); падналите тавани (гредоред) на 70-годишната сграда на ОУ „Ив. Вазов"; течове, подмяна на радиатори...

От разговорите по темата

Пловдивчанинът Ради Христев навършва днес 1 век

Симона МАДЖАРОВА

души останахме само 800.

го се смилила една жени-

смелчаци, подкупили чино-

Отзвук

В изпита по езикова ку

ATTACHMENT T

MALAWI VISIT OF PEDIATRIC OPHTHALMOLOGIST PAUL STEINKULLER

DIANA - Comments

D R A F T C O P Y

SIGHTREACH PROJECT

Malawi visit by pediatric ophthalmologist,
Dr. Paul Steinkuller, 11-22 February, 1995

1. PURPOSE OF VISIT

According to Component II, part 3 of the Executive Summary of the project, the pediatric ophthalmology capabilities of the existing medical system will be appropriately upgraded. This is to be accomplished by: 1. Providing surgical instruments and supplies specific for pediatric ocular surgery, 2. Enabling the ophthalmologists working in the country now to handle more effectively conditions threatening the sight of children, and; 3. Promoting prevention strategies. A visiting pediatric ophthalmologist may be sent once per year for three years to work with the ophthalmologists in country toward these goals. This was the first such visit.

2. PREPARATION

In preparation for this visit existing data was reviewed. This included information from the xerophthalmia survey conducted in the Lower Shire Valley, the 1994 Annual Report of Eye Services for the entire country prepared by Dr. Moses Chirambo, Regional Director for Sight Savers International, and the Report to the International Eye Foundation on Childhood Blindness and Eye Disease by Dr. Clare Gilbert, March 1994. For her report Dr. Gilbert examined 260 children from 12 schools for the blind, using the form "WHO/PBL EYE EXAMINATION RECORD FOR CHILDREN WITH BLINDNESS AND LOW VISION." Dr. Gilbert's report also provides an excellent overview of ocular manpower in Malawi, and that information will not be repeated here. The reader is encouraged to review her report in detail.

The author of the current report worked as an ophthalmologist for the Southern Region 1985-1987 in a project emphasizing xerophthalmia prevention, measles immunizations, and ophthalmology training/teaching for various cadres of health workers.

3. SPECIFIC GOALS OF THIS VISIT

a. Meet with Dr. Moses Chirambo and the IEF Country Director, Mr. Joe Canner, to determine how best to accomplish the fundamental purpose of the project: the reduction of childhood blindness and vision loss. Does this goal require in any way the services of a visiting sub-specialist in pediatric ophthalmology?

b. Meet with Ms. Karin van Dijk, advisor on low vision and blindness, and with Miss Rosemary Hardingham, optometrist, to evaluate the feasibility of integrating their work and ours in optimizing the functioning of visually impaired children in the blind schools and resource centers

c. Meet with Mr. Divala, OMA in charge of the Kasungu MEU, and with Mr. Kanjaloti, OMA in charge of the Chikwawa MEU, to review their work with the Traditional Healers (TH's), and to explore the possible role of the OMA's in examining, treating, and referring visually impaired students

d. As appropriate and as time permits, conduct training sessions in pediatric ophthalmology

e. Attend clinic and surgery sessions as directed by Dr. Chirambo

f. Determine what equipment, surgical instruments, pharmaceuticals, and supplies are needed in order to strengthen the eye care provided to children

g. Determine if existing PEC manuals and other training/education materials should be modified or used differently

h. Determine if the funds allocated to such visits would be better spent on other strategies, such as training workshops for HSA's, nurses, OMA's, and other health care providers

4. RESULTS

a. MEETINGS with Dr. Moses Chirambo, Dr. E. Auerbach, and Dr. Chris Blignaut:

Dr. Chirambo is now retired from government service and works full-time as the regional director for southern Africa for Sight Savers International; he maintains active liaison with the Ministry of Health for ocular matters, and is director of the OMA training program in Lilongwe. He conducts clinics and operates regularly at Kamuzu Hospital in Lilongwe and at Queen Elizabeth Hospital in Blantyre. As he has recently been named as a regional consultant for WHO it is reasonable to believe that his administrative duties will increase and his clinical activities will therefore become more limited.

There are 3 in-patient ophthalmology facilities in Malawi: Kamuzu Hospital in Lilongwe (Central Region) with 80 beds (30 adult male, 30 adult female, and 20 pediatric), Nkhoma Mission Hospital (Central Region) with 24 beds, and Queen Elizabeth Hospital in Blantyre (Southern Region) with 54 beds. At the present none of the wards is full, but this situation should be considered

temporary, and may be due to both decreased availability of ophthalmologists and a brief decrease in patient visits because of seasonal agricultural needs in the community. There are no "eye beds" in the Northern Region.

There are 3 ophthalmologists in the country: Dr. Moses Chirambo, who works for Sight Savers International (nee Royal Commonwealth Society for the Blind) at Kamuzu Central Hospital in Lilongwe; Dr. E. Auerbach, an Israeli citizen now at month 18 of a 24 month contract (with no follow-on likely, but remotely possible), also at Kamuzu, and; Dr. Chris Blignaut at Nkhoma Mission Hospital. Thus all 3 ophthalmologists are in Central Region, although Dr. Chirambo operates on screened and selected patients, when his time and travel schedule permit, at other government hospitals, including a monthly visit to Queen Elizabeth Hospital in Blantyre. Dr. Auerbach occasionally fills in for Dr. Chirambo on the surgical safari to Blantyre.

Similarly Dr. Blignaut conducts (at least) annual surgical sessions at other mission hospitals throughout Central and Southern Regions. Dr. Blignaut, who still performs some of the duties of a general surgeon as well as doing his eye work, plans to retire in 1996, and no successor has been identified to date.

Dr. Chirambo is exploring the possibility of obtaining one or more India-trained ophthalmologist for government service. There is no Malawian currently in ophthalmology training, and none contemplated. None of the 3 ophthalmologists in the country is sub-specialty trained. All are capable of performing up-to-date intra-ocular surgery, including ECCE with IOL placement. ECCE/IOL procedures are done by the ophthalmologists only, and only on selected cases due to time constraints. The OMA cataract surgeons perform only ICCE's. All of the three ophthalmologists (in this country of 9 million people) are 100% busy, 100% of the time, and will remain so.

Five of the 24 OMA's have been trained to perform cataract surgery by the intracapsular technique, using loupes: Mr. Gausi at Rumphi District Hospital in the Northern Region, Mr. Mkandawire and Mr. Njiragona at Kamuzu Central Hospital in Central Region, and Mr. Kamkwamba at Nkhoma Mission Hospital, also in Central Region. Mr. Mwale, the ICCE surgeon at Queen Elizabeth Central Hospital in Southern Region, expired in November, 1994. None of the 4 remaining OMA ICCE surgeons performs cataract, glaucoma, or corneal procedures on children.

b. MEETING WITH MS KARIN VAN DIJK

Ms van Dijk came to Malawi in November, 1994, at the start of a 3-year project to improve the functioning of visually impaired students. She is an expert in low vision and has had considerable experience in developing countries. One of her particular interests is maximizing the vision of children enrolled in the blind schools and resource centers by providing the appropriate optical device(s). Our discussion pointed out a potential collaboration which could be of mutual benefit to the IEF and to her: The IEF would promote the basic refraction skills of the 5 MEU OMA's and would facilitate the periodic (at least annual) evaluation of all of the enrolled visually impaired students, and she (and her trainees in low vision/visual rehabilitation) would then take over in determining what low vision aid(s) would be most appropriate and in training the students in their use. Her work will take her, on a regular schedule, to all of the blind schools and resource centers throughout the entire country. She is funded by CBM.

MEETING WITH MRS ROSEMARY HARDINGHAM LOWDON BScMBCO

She has worked with some of the OMA's in basic refraction, but she has since married and moved from Blantyre to Lilongwe. She is not at this time working, but there is a possibility that the government will hire her to work part-time at KCH. She has a definite interest in working with the OMA's and the OMA students, and she indicates that she would be willing to facilitate the adequate evaluation and refraction of visually impaired students. She maintains ties with optometric groups in the U.K. who travel to Malawi periodically to do large-scale examination/refraction/spectacle dispensing camps. She does not believe that the types of refractions and optical decisions required for the appropriate disposition of visually impaired students can be done by the OMA's, or really by anyone other than a highly skilled professional refractionist, i.e., an optometrist or an ophthalmologist. I agree.

c. **MEETINGS WITH MR. DIVALA AND WITH MR. KANJALOTI**

There are 5 Mobile Eye Units (MEU's) in Malawi, each in the direct charge of an OMA:

District Hospital	OMA	Sponsoring Agency
Chikwawa	Mr. Kanjaloti	OEU*
Mulanje	Mr. Mkandawire	OEU
Kasungu	Mr. Divala	SSI**
Salima	Mr. Godia	SSI
Karonga	Mr. Chisambo	SSI

* Operation Eyesight Universal
** Sight Savers International

At least 2 of the MEU OMA's have been involved with improving the ophthalmic knowledge of Traditional Healers (TH's), specifically to get them to avoid the instillation of potentially harmful (and sometimes blinding!) traditional medication into the eyes. Mr. Kanjaloti worked with Dr. Paul Courtright in such a project in Chikwawa District, and believes that it has had some beneficial effects; he has not seen TEM-induced "melted corneas" since they started the project. A follow-up study is planned. In his district there are 98 registered Traditional Healers, but at unknown number unregistered. 15 of those registered have been trained in the IEF project.

Mr. Kanjaloti expressed his belief that the OMA's would be quite willing to visit the blind schools and resource centers periodically if something positive would actually come from their work, i.e. if the students they referred for surgery could reliably get to the consultant, and if the students could get the glasses (and perhaps low vision aids) they need.

Mr. Divala also instructs the TH's in avoiding harmful preparations. He believes that the main culprit is the undiluted sap of the nkhadze bush, but there are probably many others.

d. TRAINING SESSIONS IN PEDIATRIC OPHTHALMOLOGY

Time did not permit the conducting of such sessions. Dr. Chirambo was in Zimbabwe for most of the time that I was in country. I did attend a Grand Rounds training session for the OMA students conducted by Dr. Chirambo at the new eye facility at Kamuzu Central; 3 of the patients were children, but none had a bilateral blinding condition.

e. CLINIC AND SURGICAL SESSIONS

I made rounds on all of the in-patients on the eye ward at Queen Elizabeth Central Hospital, and saw all of the out-patients screened by the clinic OMA that same day. Most of the admissions were adults with bilateral mature cataracts, followed in number by idiopathic corneal ulcers and bilateral uveitis, in all of whom HIV infection was a possibility. Two of the inpatients were children under age 5 years with bilateral progressive, and now mature, congenital cataracts. These 2 would definitely benefit from ECCE/IOL surgery, and were referred to Kamuzu Central, where the required equipment and skills reside.

I was enjoined from operating at Queen Elizabeth because appropriate official clearance for me to do so had not been received by the hospital administrator.

f. EQUIPMENT, SURGICAL INSTRUMENTS, PHARMACEUTICALS, SUPPLIES

(1) EQUIPMENT

All three hospitals where most eye surgery is now done have operating microscopes. Kamuzu Central also has an A-scan apparatus and an appropriate keratometer for IOL calculations, but does not have a pulse oximeter for pediatric anesthesia monitoring. Pediatric endotracheal tubes are in critically short supply. This information has been passed by FAX to IEF headquarters in the United States.

The OMA's have basic trial lens refraction sets which could be used to determine if spectacles could improve the vision of visually impaired students, or at least for some screening purposes. They do not have retinoscopes and are not experts in refraction at this time.

(2) SURGICAL INSTRUMENTS

There are workable instruments for pediatric ocular surgery at all three hospitals. It is understood that microsurgical instruments are delicate and need to be refurbished/replaced periodically. The OMA's do not have a reliable source for repairing or replacing broken or lost instruments.

(3) PHARMACEUTICALS

Topical ophthalmic medications are made in 3 places: Kamuzu Central Hospital in Lilongwe, Queen Elizabeth Central Hospital in Blantyre, and at Nkhoma Mission Hospital. The following medications can be made locally:

Cyclopentolate
Tropicamide
Phenylephrine
Atropine
Tetracaine
Methylcellulose
Dexamethasone
Hydrocortisone
IDU
Pilocarpine
Fluorescein strips

At this writing only the facility at Nkhoma Mission is operational due to a shortage of supplies at the government hospitals. There is also a shortage of topical antibiotics except at the mission; patients who require a course of such topical antibiotics may be asked to return daily for dosing.

Vitamin A supplies appear to be adequate and sustainable. The immunization program has produced commendable results, with the overall rate of measles immunizations at 78% in 1994, and the incidence of new vitamin A deficiency blindness apparently decreased significantly. Mr. Kanjaloti with the MEU in the Lower Shire Valley, the expected and proven location of the highest prevalence of xerophthalmia in Malawi, states that while he occasionally encounters night blindness, he no longer sees any other signs of new vitamin A deficiency. Appendix 8 of Dr. Gilbert's report shows an increasing distribution of vitamin A capsules to 44,280 in 1993, and a reduction of reported cases of xerosis/ measles to 1422 in the same year.

(4) SUPPLIES

In the context pediatric vision loss the term "supplies" refers to spectacles and to low vision aids (LVA's).

Spectacles are available primarily from 2 sources: private opticians and government/mission hospitals. Those from private opticians are priced out of contention for most Malawians. Low-cost glasses can be manufactured at 2 sites: Queen Elizabeth Central Hospital in Blantyre and at Nkhoma Mission Hospital. The optical shop at QE has stocks to provide low power plus (to +5.00) and minus (to -4.00) spherical spectacles in plastic frames at a cost of 40 to 50 Kwacha. They do not have any high plus lenses for aphakia. The shop at Nkhoma Mission has the ability to make low and high power plus and minus spherical glasses and to repair broken glasses as well. Aphakic spectacles are available and are provided to post ICCE patients.

LVA's are also being made at Nkhoma Mission. They consist of 3 types: a 2X distance Galilean hand-held telescope (-20.00 eyepiece and a +10.00 objective) with a +2.50 Diopter near accessory; a similar set-up as a clip-on for one side of a pair of spectacles, and; a simple 2.5X (+10.00 lens) in a 4" stand for reading. All of the lenses are fixed in position in heat-shrunk PVC pipe.

f. MODIFICATION OF THE PEC MANUAL AND TRAINING MATERIALS

This objective was not accomplished.

g. RECOMMENDATIONS FOR THE MOST EFFICIENT USE OF AVAILABLE FUNDS

Based on the information above, on my previous experience as an ophthalmologist in Kenya (1980-1983) and in Malawi (1985-1987), and on my position as a full-time academic pediatric ophthalmologist, I offer the following opinions and recommendations:

1) Monocular vs Binocular Blindness

- Monocular vision loss and blindness do not represent significant disabilities in Malawi, and we should restrict our efforts to bilateral cases only, and all of the following statements refer to such cases.

2) Corneal Blindness

- **The leading anatomical site of disease producing potentially preventable severe visual impairment and blindness in children is the cornea, and the leading etiologic entities are measles, vitamin A deficiency (VAD), and the use of harmful traditional eye medicines (TEM).** This triad, often occurring in combination, is estimated to be responsible for 2/3 the pediatric blindness in Malawi. Corneal blindness may be treated in one of 2 ways: optical iridectomy, probably potentially beneficial to less than 10% of such patients, and corneal transplantation, which is impossible for all practical purposes in this setting. Prevention activities likely to yield results are:

  - Improving vitamin A distribution schemes;
  - Improving the awareness of VAD induced morbidity (and mortality);
  - Improving nutritional adequacy;
  - Supporting the measles immunization program;
  - Discouraging the use of harmful TEM's.

Ophthalmia neonatorum secondary to congenital gonorrhea may cause some blindness/visual impairment, but it is believed that the numbers are small, or at least small enough to be difficult to evaluate properly. As most children are born outside of a fixed health facility and deliveries are monitored by unskilled relatives or by traditional birth attendants, preventive measures such as the promotion of instillation of Povidone-iodine or Silver nitrate drops in a context of increased awareness offer the only realistic approaches to redress.

3) Congenital Cataracts

- Congenital cataracts occur at a rate low enough that bilateral cases, when identified, can be handled by the ophthalmologists now in country. Optimal vision results require surgery and contact lenses before age 2 months, neither of which is possible in Malawi. But adequate vision (in the 20/100 range) is possible even if surgery is considerably delayed (age 2 years or later) and when the optical correction is by spectacles only. Thus even delayed surgery can be rewarding. Congenital cataracts cannot be prevented except by preventing maternal rubella or by genetic counselling in familial situations - not possible in Malawi. Thus the emphasis here should be on treatment by promoting:

- Early identification of such patients at the local level;
- Cataract surgery as soon as practical. This is available now, but pediatric anesthesia is a concern, as noted above;
- Providing the appropriate optical devices post operatively; IOL's if the surgeon is comfortable with such procedures in children age 2 years and over, or more likely simple pediatric aphakic glasses. These glasses are not now available in Malawi but they can be.

4) Congenital Glaucoma

- Congenital glaucoma is rare but is potentially curable if identified and operated upon early. The surgery is relatively simple. As above, anesthesia concerns can be significant. Emphasis should be on:

  - Early recognition and immediate referral of such cases; the patients will probably be first seen by the OMA's or by the ophthalmic nurses, and their knowledge should be continually reinforced by the most practical means available.

5) Improper Placement

- There are children in the blind schools and resource centers who do not need to be there, as their vision is too good. A system should be developed for:

  - Periodic (at least annual) examinations of all such students by the MEU OMA's, specifically to weed out such unnecessary placements.

- There are children at these institutions whose vision can be significantly improved by surgery. The periodic OMA visits can also serve to:

  - Identify and refer patients whose vision can be improved by surgery (cataract removal, secondary membrane surgery, optical iridectomy) or whose remaining vision can be safeguarded by surgery (glaucoma); the referral system can be strengthened.

- Possibly the most important result from the periodic screening at the blind schools/resource centers could be to:

  - Optimally refract appropriate patients,
  - Provide the best possible glasses, and;
  - Identify patients who would benefit from LVA's,

and notify the low vision specialists, requesting their evaluation and assistance.

- The MEU OMA refraction skills should be updated and enhanced, possibly by:

  - a 1 to 2 week updating session at Kamuzu Central Hospital in refraction and in identification of cases for referral for glasses, LVA's, and surgery; the use of a visiting expert in refraction should be very strongly considered for this training and for regular re-training, perhaps even for the annual examinations of the patients if the OMA updating proves unfeasible.

5. SUMMARY AND RECOMMENDATIONS

a. While this is a situation of subspecialty interest, periodic visits by a pediatric ophthalmologist are NOT necessary to achieve the goal of reducing the incidence and prevalence of pediatric vision loss and blindness, simply because the number of children who can be helped by surgery is quite small, and the ophthalmologists in country have the necessary skills already. However, with only 3 ophthalmologists in a country of 9 million people time constraints are critical.

b. Strengthening of existing programs and enhancing cooperation between organizations and units already in place can produce major benefits. Specifically this means PROMOTING VITAMIN A DISTRIBUTION and NUTRITION EDUCATION, PROMOTING MEASLES IMMUNIZATIONS, and DISCOURAGING THE USE OF HARMFUL TEM's via culturally appropriate education schemes.

c. The refraction and case identification skills of the OMA's should be updated and reinforced, perhaps by workshops and tutorials. Designated OMA's can be tasked with screening and referral to a treatment center or to a location where a detailed accurate refraction can be done by an optometrist or by an ophthalmologist.

d. A system of periodic visits to the blind schools and resource centers by the Mobile Eye Units should be established/maintained. Appropriate cases can be referred for surgery and/or for low vision aids, but only when such services are reliably available.

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ATTACHMENT U

MEMORIA DEL TALLER SOBRE SALUD OCULAR

FUNDACION INTERNACIONAL DE OJOS

MEMORIA DEL TALLER SOBRE

SALUD OCULAR

REALIZADO EN TEGUCIGALPA

SEPTIEMBRE 2, 1994

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RESUMEN EJECUTIVO

El día 2 de septiembre de 1994, en el Salón Presidente del Hotel Alameda se llevó a cabo un Taller sobre: "La Situación de la Salud Ocular en Honduras". Este taller fue auspiciado por el Programa Sight Reach, bajo la coordinación del Dr. Raúl Gómez, Director Ejecutivo de la Oficina Central de Fundación Internacional de Ojos (FIO) de Tegucigalpa y La Licda. Diana Schwartz, oficial de Programas de la Oficina Central de FIO en Bethesda, Maryland.

En éste evento participaron 15 profesionales de la salud que actualmente trabajan en el Instituto Hondureño de Seguridad Social(IHSS), Hospital Catarino Rivas de San Pedro Sula, Hospital Materno Infantil y Hospital General San Felipe de Tegucigalpa, así como también profesionales de algunas instituciones privadas como: INFRACNOVI, Centro Oftalmológico Santa Lucía, Centro Luis Braille, Fundación Para Servicios Médicos Voluntarios y FIO.

El objetivo general del taller era reunir un grupo de personas de varias disciplinas para discutir la situación de la salud ocular, la prevención de ceguera en Honduras y plantear posibles alternativas de solución.

El desarrollo del evento se centró en la discusión de los siguientes puntos:

- La situación epidemiológica de la salud ocular en Honduras
- La situación de la Salud Pública en relación a la disponibilidad, acceso a los servicios de salud
- Expansión, evaluación y detección de las condiciones oculares.
- Capacitación del personal de salud
- Mecanismos de Comunicación y Coordinación

Después de ésta discusión, se formaron grupos de trabajo para plantear algunas alternativas y actividades a desarrollar a corto, mediano y largo plazo para enfrentar ésta problemática.

Uno de los resultados de ésta reunión fue la formación de un Grupo de Trabajo en Pro de la Prevención de la Ceguera, quedando como coordinadores :

- Dra. Denia de Argueta para la ciudad de San Pedro Sula
- Dr. Denis Espinal para la ciudad de Tegucigalpa
- Fundación Internacional de Ojos de Tegucigalpa

Se programó una reunión de seguimiento para el 14 de octubre del presente año en la cual se invitaran algunas personas claves del Ministerio de salud y organismos nacionales e internacionales interesados en resolver la problemática de salud ocular del país como la OPS y otros. Al mismo tiempo se pretende invitar a la Licda. Rosa Amalia de Vásquez, Jefe del del Programa de Prevención de la Ceguera del Hospital Dr. Rodolfo Robles de Guatemala para conocer la experiencia de ese país en las actividades de Prevención de la Ceguera.

Este taller proporcionó una valiosa oportunidad para todos los participantes de compartir su experiencia diaria y puntos de vista ante ésta problemática y al mismo tiempo, promovió la colaboración futura entre las diferentes instituciones participantes que continuarán trabajando en forma conjunta bajo la coordinación del grupo formado en éste taller.

I. INTRODUCCION

Durante los últimos 31 años, La Fundación Internacional de Ojos (FIO), una organización no lucrativa, no gubernamental, ha estado dedicada a la prevención de la ceguera en los países en vías de desarrollo. La tasa de ceguera y deterioro visual en los países en desarrollo es 20 veces mas grande que en las naciones desarrolladas del mundo. De acuerdo a la Organización Mundial de la salud, el 80% de los minusválidos visuales viven en países en vías de desarrollo. Además el 75% de la ceguera éstos países es curable o prevenible. En muchos países menos desarrollados, arriba del 2% de la población esta ciega y el 3.5 % de la población esta visualmente dañada. Las consecuencias de ésta situación son evidentes.

Honduras, al igual que el resto de países del tercer mundo enfrenta una problemática similar.

La pobreza, ignorancia, falta de información son algunos de los factores comunes que dan por resultado que la población no busque ayuda para solucionar sus problemas oculares en forma temprana; o si lo hace, se encuentra con un acceso muy limitado a los servicios de salud tanto a nivel primario como especializado, ya que la gran demanda de pacientes hace que los pocos centros de salud y hospitales con que cuenta el país se vuelvan insuficientes.

Por otro lado, no existe un sistema estandarizado efectivo de referencia de pacientes del nivel comunitario al CESAMO , Hospital, lo que limita aún mas la prestación de un servicio mas eficiente.

En agosto de 1993, la Fundación Internacional de Ojos presenta una propuesta para el desarrollo del Programa " SIGH REACH" para Latinoamérica, dentro de éste existe un componente en el cual se pretende proporcionar capacitación en Cuidado Primario de ojos a profesionales de la salud de los distintos niveles y al mismo tiempo expandir el acceso de los servicios oftalmológicos a diferentes áreas rurales y peri-urbanas.

Es aquí, dentro de éste entorno, que surge la necesidad de reunir un grupo de profesionales interesados no solo en analizar la problemática de la salud ocular en Honduras, sino también de plantear alternativas de solución a corto, mediano y largo plazo.

Como resultado, surge éste taller, cuyo propósito primordial es reunir y conformar un equipo multidisciplinario comprometido a trabajar en forma conjunta en pro de la salud ocular del pueblo hondureño.

PROGRAMA DE ACTIVIDADES

HORA	DESCRIPCION	RESPONSABLE
9:00 - 9:15	-Bienvenida a los participantes. -Objetivos y mecánica de la reunión.	-Lic. Diana Schwartz -Dr. Raúl Gomez
9:15 - 9:30	-Diagnostico de la situación ocular en Honduras. -Presentación de la Investigación de problemas visuales en niños menores de 10 años: Conclusiones	-Dr. Dennis Espinal -Dra. Hadizabel Burgos
9:30 - 9:45	-Morbilidad a nivel hospitalario	-Dr. Carlos González
9:45 - 10:45	-Discusión en grupos de trabajo: La situación de salud ocular en Honduras	-Participantes
10:45 - 11:00	R E C E S O	
11:00 - 12:00	-Reunión del grupo grande: Presentaciones por grupo	-Participantes
12:00 - 13:15	A L M U E R Z O	
13:15 - 14:15	-Trabajo de grupo: Discusión sobre posibles soluciones hacia la situación de salud ocular	-Participantes
14:15 - 15:00	-Reunión de grupos de trabajo: Presentaciones por grupo	-Participantes
15:00 - 15:15	R E C E S O	
15:15 - 16:00	-Conclusiones/Discusión sobre el seguimiento	-Dr. Raúl Gomez -Lic. Diana Schwartz -Participantes
16:00	-Salida	

II. PLANIFICACION Y PREPARACION

A finales del mes de junio, como parte del Programa de " Sight Reach" de prevención de la ceguera de Fundación Internacional de ojos, se realizaron alguna visitas a diferentes instituciones tanto públicas como privadas para conocer la situación de la salud ocular en el país; como parte de esa problemática, profesionales de las diferentes instituciones de salud visitadas plantearon como parte de sus inquietudes que no había un sistematización en la atención del paciente con problemas oftalmólogicos en los diferentes niveles de atención primaria en salud y que si bien existían en el país diferentes instituciones tanto públicas como privadas trabajando en Pro de la salud ocular, éstas trabajaban en forma separada.

Tomando en cuenta la necesidad que éstas instituciones plantean de trabajar unidos en el logro de un objetivo común surge como iniciativa la realización de una reunión de trabajo donde participen instituciones tanto públicas como privadas que trabajan en el campo de salud ocular con el fin de discutir la problemática de salud que el país enfrenta en éste campo específico y plantear algunas alternativas de solución al mismo.

Es así como Fundación Internacional de Ojos en respuesta a ésta inquietudes decide patrocinar un taller para el mes de septiembre donde se pudiera reunir profesionales de diferentes disciplinas relacionadas con salud ocular para discutir ésta problemática y plantear alternativas de solución.

La planificación final del taller se realizó con la participación el staff de la oficina central de FIO en Tegucigalpa, en coordinación con el staff de la Central de FIO en Bethesda, MD, USA .

Una lista de participantes del taller, que incluye el nombre teléfono e institución que representa se encuentre en los apéndices A y B de éste documento.

III. DESARROLLO DEL TALLER

Inauguración :

En horas de las mañana del día viernes 2 de septiembre, teniendo como marco el Salón Presidente del Hotel la Alameda de la ciudad de Tegucigalpa, la Licda. Diana Schwartz, Oficial de Programas de FIO-Bethesda, USA y el Dr. Raúl Gómez, Director de FIO-Tegucigalpa, dieron la bienvenida a los participantes. Luego se explicaron los objetivos y la metodología a desarrollar durante el resto de la jornada. (Ver Programa de Actividades).

Metodología :

Se utilizo una metodología completamente participativa, formando tres grupos de discusión para intercambiar opiniones y luego expresarlas en una discusión plenaria.

Como introducción a la problemática de salud ocular del país, se presentaron dos estudios realizados recientemente en Honduras:

1. Prevalencia de trastornos Visuales en Niños de 0 - 10 años en Honduras.
   Expositores : Dra. Hadizabel Burgos
   Dr. Denis Espinal

2. Morbilidad a Nivel Hospitalario
   Expositor: Dr. Carlos González

Conclusiones del Estudio sobre Prevalencia de Trastorno en Niños de 0 - 10 años

1. El 20% de la población de 0 - 10 años mostró alguna patología ocular al momento de ser evaluada.

2. Solamente el 2.1% había tenido una evaluación oftalmológica previa lo que demuestra el poco acceso a la atención especializada, tanto por la poca cobertura de los servicios oftalmológicos, como por las condiciones adversas de pobreza en que vive la mayoría de la población afectada.

3. Las patologías oculares más frecuentes fueron las ametropías, con un 41.14%, es decir el 8.76% de la población total evaluada. Este número significativo de niños debería estar usando lentes para corregir su problema de refracción. Le sigue en segundo término las enfermedades infecciosas con un 29.93%, las cuales, en su mayoría son producto de condiciones de salubridad e higiene inadecuadas.

4. Entre los antecedentes a tener en cuenta como factores asociados a la patología ocular se encontró principalmente la desnutrición y el uso de anteojos entre los familiares.

5. Del total de la población encontrada con alguna patología ocular, el 81.28% de ella requiere de ayudas ópticas y médico - quirúrgicas adecuadas para su recuperación. Sólo un 18.72% requiere servicios de rehabilitación. Por lo tanto su demanda de medidas de tipo preventivo y curativo más que de atención a la secuela.

6. El 9.48% de la población evaluada tuvo alguna alteración de la agudeza visual que va de leve (corregible con uso de ayudas ópticas), hasta severa (con requerimiento de rehabilitación).

7 . La tasa de debilidad visual se estima en 14.2 y la de ceguera en 6.3 por mil niños de 0 - 10 años de edad o sea que un total de 36,500 niños en todo el país presentan debilidad visual o ceguera.

8. Las causas de ceguera mas comunes son las retinocoroiditis y los traumas oculares.

9. Los niños con trastornos visuales en general viven en hogares medianamente pobres compuestos de 5 - 8 miembros en la familia.

10. El uso del cartel de evaluación de agudeza visual en niños y de la Hoja de Registro de Función Visual resultó ser una forma sencilla y práctica de detectar trastornos visuales en niños.

11. Para el desarrollo de ésta investigación, la participación comunitaria en el trabajo de detección de trastornos visuales fué fundamental, observándose que con ello es posible el logro de una mayor detección y una intervención oportuna.

Despues, algunos asistentes hicieron breves comentarios respecto a las presentaciones, posteriormente, los participantes se dividieron en grupos.

Grupo # 1

1. Dra. Hadizabel Burgos
2. Licda. Victoria Alvarado
3. Dra. Denia María L. de Argueta
4. Dra. Iris Hernández
5. Dr. Luís Boquín

IV. DISCUSIONES GRUPALES EN TORNO A :

1. LA PROBLEMATICA DE SALUD OCULAR EN HONDURAS

PRESENTADOS EN LOS TRABAJOS DE GRUPO DE LOS PARTICIPANTES

Para ésta discusión grupal los participantes se auxiliaron de dos guías de trabajo.

GUIA # 1

COMUNICACION Y COORDINACION INTERINSTITUCIONAL Y COMUNITARIA

1. Que tipo de problemas considera que existen en la captación de pacientes con problemas oculares a nivel comunitario ?

2. Considera que actualmente se realiza un Diagnóstico temprano de patología ocular a nivel de atención primaria en salud. (Comunitario y de CESAMOS). Porqué ?

3. Que porcentaje de las atenciones diarias en la consulta externa son referencias de niveles inferiores? Cuál es su calidad?.

4. De éstas referencias recibidas en la consulta externa de oftalmología que porcentaje estima que debieron ser atendidas a nivel de los CESAMOS por el médico general?.

5. Están los Hospitales (San Felipe y Materno Infantil) recibiendo referencias de pacientes para la consulta oftalmológica de otras instituciones. Cuáles instituciones? En que porcentaje? Calidad de éstas?

6. Existe algún sistema para informar a la población general los pasos que debe de seguir para ser atendido por un oftalmólogo en caso de necesitarlo?.

7. Existe algún sistema estandarizado a nivel de comunidad, CESAMOS, institutos de rehabilitación para referencias de pacientes.

Respuestas del Grupo # 1 a la Guía # 1

A. SITUACION DE LA CAPTACION DE PACIENTES :

1. Los problemas que encontramos respecto a la captación de pacientes son:

   - Falta de acceso de la población a los servicios especializados.
   - escasez de personal y de los servicios especializados accesibles a estas comunidades.
   - Ausencia de un sistema de prevención a nivel comunitario.

2. No existe un diagnóstico temprano de pacientes a nivel comunitario debido a la falta de personal entrenado.

3. De las referencias recibidas en la consulta externa del Instituto Hondureño de Seguridad Social (IHSS) y del Hospital Mario Catarino Rivas de San Pedro Sula, un 15 a 20 % son del nivel de los CESAMOS y son de buena calidad. Consideramos que ninguna referencia que llegue a nuestras manos es mala; es tan poco el recurso especializado para brindar un servicio ocular que no podemos rechazar ninguna persona que sea enviada, ya que pudo ser la única oportunidad en su vida de ser evaluada por un oftalmólogo.

4. Al IHSS nuestras referencias llegan de las clínica periféricas en un alto porcentaje.

5. No existe ningún sistema para informar a la población de los pasos que debe seguir para recibir atención oftalmológica especializada a nivel público.

Respuestas del Grupo # 2 a la Guía # 1

Grupo # 2

A. SITUACION DE LA CAPTACION DE PACIENTES:

1. Problemas en la captación de pacientes por :
   - Falta de vías de comunicación adecuada
   - Falta de centros de salud
   - Falta de equipos adecuados para hacer diagnóstico
   - Ignorancia: Falta de capacitación de los padres de familia, maestros y personal comunitario.
   - Falta de un programa de prevención de la ceguera por parte del Ministerio de Salud Pública.

   Esto conlleva a una oferta de servicios insuficientes.

2. Actualmente no se realiza un diagnóstico temprano de patología ocular a nivel comunitario por falta de una política definida por el Ministerio de Salud Pública y por la falta de una cantidad adecuada oftalmólogos para hacer frente a la demanda de pacientes.

3. Existe un aproximadamente un 20% de las referencias recibidas en la consulta externa de Oftalmología son atendidas por niveles inferiores.

4. El San Felipe está recibiendo aproximadamente un 50% de referencias que pudieron ser atendidas a nivel de los CESAMOS.

5. EL Hospital San Felipe está recibiendo referencias de otras instituciones como: INFRACNOVI, CODOPA, FUHRIL, CAIPAC, ESCUELA PARA CIEGOS, Hospital Materno Infantil, Hospital de Occidente y otros.

6. No existe ningún sistema para informar a la población general

de los pasos que debe de seguir una persona para ser atendida por un oftamólogo en caso de necesitarlo.

7. No existe un sistema estandarizado a nivel comunitario, CESAMOS, Institutos de Rehabilitación para referencias de pacientes.

Respuestas del Grupo # 3 a la Guía # 1

Grupo # 3

A. SITUACION RESPECTO A LA CAPTACION DE PACIENTES :

1. El problema de la captación de pacientes a nivel comunitario es básicamente de educación, hay desconocimiento tanto del personal de salud como de los pacientes y de la comunidad en general .

2. Mala utilización del Sistema de Salud

3. Falta de coordinación del interinstitucional (Pública y privado).

4. No existe formación adecuada en el nivel de atención primaria para hacer un diagnóstico temprano (a nivel comunitario, CESARES, CESAMOS, Nivel Regional, Nivel Central); y si hay algún tipo de formación la falta de educación no nos permite coordinar en forma adecuada y aprovechar la infraestructura del sistema de salud.

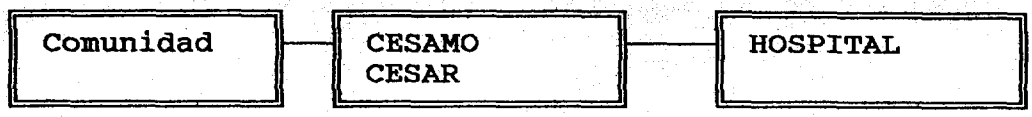
5. Limitantes económicas y burocráticas.

6. Alrededor de un 60 % de la consulta externa atendida a nivel hospitalario perfectamente pudo haber sido atendida por el médico general sin tener que utilizar el servicio especializado a nivel hospitalario.

7. Tambien se reciben referencias de otras instituciones como : Proyecto Victoria, Junta Nacional de Bienestar Social, sin embargo la cantidad de las remisiones no siempre es adecuada, ya que el médico general no recibe una formación adecuada en éste campo.

8. A nivel de sistemas de salud y algunas instituciones privadas como algunas OPD si existe un sistema pero no sigue los canales correspondientes aunque muchas veces se conoce el sistema.

9. No existe ningún sistema estandarizado de referencias de pacientes desde su captación en la comunidad hasta un tercer nivel.



10. Existen algunas limitantes para que la población no tenga acceso a los servicios oftalmológicos:

    - Económicos
    - educativos
    - centralización de los servicios oftalmológicas en San Pedro Sula y Tegucigalpa.
    - falta de recursos humanos capacitados
    - falta de medicamentos, equipo.
    - falta de Centros hospitalarios especializados y capacitados.
    - Las emergencias se resuelven en un máximo de 48 horas
    - Las cirugías de pacientes electivas (El tiempo en lista de espera oscila entre 30 días y 3 meses)

11. La atención de cataratas por año en el Hospital General San Felipe es alrededor de 2000 por año y de ésta se esta operando el 50% . Hay un excedente de cataratas, unas que están en proceso de evolución y otras que no se operan sino que se les da su cita para después.

12. El costo de la cirugía de catarata a nivel público es aproximadamente de cero para el paciente que no puede pagar y de L 200.00 para el que puede pagar. El costo es simbólico para el gasto que se hace en materiales y recurso humano. Independientemente de que pueda o no pueda pagar una cirugía de catarata un paciente, el Hospital San Felipe lo opera.

    A nivel privado se cobra de L 3,00.00 a 4,000 .00

14. No puede establecer este grupo que porcentaje de población atendida en la consulta externa de oftalmología atendida proviene del area rural y que porcentaje del área urbana.

15. El sistema de salud actual no ofrece alternativas para el paciente ciego o de baja visión para mejorar es su calidad de vida.

    El Hospital San Felipe ofrece algunas alternativas como La Escuela para Ciegos, Club de Leones, algunas ópticas que proporcionan lentes a bajo costo como la de los padres franciscanos, etc. Sin embargo resultan insuficientes. Pero a nivel de rehabilitación se hace en forma muy limitada y no esta llegando a todo el país.

16. No existen mas que intentos de coordinación pero no hay ningún sistema donde se involucre al psicólogo, trabajo social y

oftalmólogo para la evaluación y seguimiento de éste tipo de pacientes.

B. NECESIDADES DE CAPACITACION :

Se necesitan a todo nivel.

B. RESPECTO A LA ATENCION DE PACIENTE:

GUIA # 2

ATENCION DE PACIENTES

1. A su criterio: Cuáles son las limitantes que enfrenta la población hondureña para recibir atención oftalmológica.

2. Considera que los Hospitales Públicos que actualmente brindan atención oftamológica son suficientes para el número de pacientes que solicitan estos servicios?

3. Cuánto tiempo tiene que esperar un paciente quirúrgico desde su primera cita hasta el momento de la cirugía?

4. Cuál es la incidencia de cataratas por año?

5. Cuánto se cobra por una cirugía de catarata a nivel público?

6. Cuánto es el costo promedio de una cirugía de catarata a nivel privado?

7. Aproximadamente cuantas cirugías de catarata con y sin lentes intraoculares se hacen por año?

8. Aproximadamente, cuántas de esas cirugías son de personas del área rural y cuantas son del área urbana?

9. Que alternativas ofrecen las instituciones de salud a los pacientes con baja visión?

10. Que alternativas ofrece el sistema de salud al paciente ciego tanto adultos como niños para mejorar su calidad de vida ?

11. Existe un trabajo coordinado entre psicólogo, trabajador social, educador y oftalmólogo en la evaluación de los de pacientes?

CAPACITACION DE PERSONAL

12. Que necesidades de capacitación detecta para brindar una atención integral (tanto en el área educativa, psicológica y social personas con problemas oculares ?

Respuestas del Grupo # 1 respecto a la Guía # 2

1. Dentro de las limitantes que enfrenta la población hondureña para recibir atención oftalmológica tenemos :
   - De tipo económico
   - Escasez de servicios estatales y privados.
   - Falta de información y educación.

2. Los hospitales públicos que actualmente brindan atención oftalmológica son insuficientes.

3. En el IHSS la emergencias oftalmológicas se resuelven inmediatamente. En el Hospital Catarino Rivas no hay médico de Guardia por la noche , entonces tienen que esperar el horario normal durante el día para ser atendidas.

   Los pacientes para cirugía electiva tienen que esperar hasta 6 meses.

4. La atención de cataratas por año en el IHSS es bien baja, ya que la población que se atiende es eminentemente productiva,la catarata esta aún incipiente. Sin embargo ahora que las personas jubiladas están teniendo acceso a la atención hospitalaria.

   En el IHSS se operan aproximadamente 50 - 60 cataratas por año.

   En el Hospital Catarino Rivas se operan aproximadamente 500 por año.

5. El costo de cirugía de Catarata en el IHSS: Para el asegurado no representa ningún costo adicional mas que el de su cuota que paga mensualmente como asegurado. En el Hospital Mario Catarino Rivas es de L 250.00.

6. A nivel privado el costo de una cirugía de catarata en San Pedro Sula es alrededor de L 5000.00.

7. En el IHSS de San Pedro Sula no se colocan lentes intraoculares. En el Hospital Catarino Rivas de las 500 cirugías atendidas, el 50 % tienen lente intraocular.

8. El 75% de las atenciones de pacientes proviene de la zona rural.

9. En los Hospitales de Salud de San Pedro Sula no se ofrece ninguna alternativa para el paciente con baja visión.

10. No existen alternativas para mejorar la calidad de vida del paciente ciego.

11. No existe un trabajo coordinado entre el psicólogo, trabajador social, educador y oftalmólogo en la evaluación del paciente.

C. **NECESIDADES DE CAPACITACION :**

a. Educación a los maestros (incluir en su curriculum salud ocular)

b. Educación a médicos generales y de otras especialidades como: pediatras, etc.

c. Necesidad de capacitación en detección y atención primaria ocular.

d. Orientación sobre las referencias a los servicios existentes.

e. Sensibilización del personal de salid y educación

f. Educación de la familia y líderes comunitarios.

g. Motivación de las autoridades de educación y de salud

Respuestas del Grupo # 2 respecto a la Guía # 2

1. Dentro de las limitantes que enfrenta la población hondureña para recibir atención oftalmológica tenemos :

a. falta de oftalmólogos
b. falta de vías de acceso y de comunicación
c. falta de cultura
d. no existe un programa específico de prevención de la ceguera por parte del Ministerio de Salud.
e. No existe una distribución geográfica equitativa de los servicios oftalmológicos en el país.
f. Factores socioeconómicos.

2. Los Hospitales públicos que actualmente brindan servicios oftalmológicos no son suficientes para atender la gran demanda de pacientes de todo el país.

3. Un paciente quirúrgico tiene que esperar aproximadamente dos meses desde su primera cita hasta la resolución de su problema

4. El Hospital San Felipe atiende aproximadamente 6000 cataratas por año. Pacientes que llegan con catarata incipiente,

catarata en formación, esto es en base al promedio de los 30,00 pacientes, es decir un 20% de los paciente que atiende San Felipe.

5. A nivel público una cirugía de catarata le cuesta al paciente aproximadamente L 200.00 sin contar costos de transporte, hospedaje y alimentación que el paciente hace para movilizarse desde su área geográfica al hospital. A nivel privado aproximadamente L 5000.00.

7. En el Hospital San Felipe se realizan aproximadamente 700 cirugías de catarata con lentes intraoculares y 50 sin lentes intraoculares. Las cataratas incipientes no se operan.

8. El 50% de esas cirugías son del área rural y el 50% del área urbana.

9. Actualmente nuestro sistema de salud no ofrece al paciente con baja visión ninguna alternativa para su problema.

10. Tampoco existen alternativas para mejorar la calidad de vida del paciente no vidente.

11. No existe ningún trabajo coordinado entre psicólogos, trabajadores sociales, educadores y médicos de otras especialidades y oftalmólogos para la evaluación de pacientes con patología ocular.

Respuestas del Grupo # 3 respecto a la Guía # 2

B: OPINION RESPECTO A LA ATENCION DE PACIENTES :

Este grupo considera que uno de los aspecto mas importantes para la atención de pacientes es la capacitación del personal multidisciplinario.

En general comparten la opinión que el grupo número 2 expresó como respuestas para la guía dos.

C. NECESIDADES DE CAPACITACION DE PERSONAL

DISCIPLINAS	NECESIDAD DE CAPACITACION
1. Médicos 2. Enfermeras Profesionales	- Técnicas de Ayuda Visual - Lenguaje Braille - Contraste - Uso del Bastón - Ayudas ópticas especiales (lupas, telelupas, microscopio, etc)
3. Educadores Especiales 4. Maestros	- Material didáctico en macrotipos. - Orientación Psicológica - Uso del bastón
5. Personal Comunitario	- Detección temprana - Prevención - Orientación e información a la comunidad
6. Psicólogos	- Técnicas de ayuda visual - Orientación al paciente - Uso del bastón
7. Trabajadora Social	- Detección temprana de casos en la comunidad - Orientación a la población

CONCLUSIONES DE LOS DIFERENTES GRUPOS DE TRABAJO SOBRE LAS ACTIVIDADES QUE PUEDEN REALIZARSE EN RELACION A LOS PROBLEMAS IDENTIFICADOS

2. ALTERNATIVAS DE SOLUCION A ESTA PROBLEMATICA (GUIA # 3)

Se utilizó la Guía de preguntas siguiente:

Guía # 3

1. Que puede hacerse en relación a los problemas identificados

en la sesión previa ?

2. Desde el punto de vista organizativo, cuál cree usted que podría ser el mecanismo adecuado para trabajar en la solución de los problemas arriba mencionados ?
3. En caso de una reunión de éste tipo, en 3 ó 4 meses. Qué agenda propondría ? Cuál sería el tipo de reunión preferible ?

GRUPO # 1

Este grupo respondió dando algunas sugerencias al problema como:

Algunas Soluciones al Problema de Salud Ocular:

1. Rescatar la información existente para planificar estrategias adecuadas y efectivas de intervenciones basadas en necesidades reales.

2. Promover un sistema de recolección de información de los servicios públicos y privados para poder implementar y justificar la existencia de un programa de atención ocular ante las autoridades de el Ministerio de Salud, Ministerio de Educación y Organizaciones Internacionales.

3. Incentivar a la Asociación de Oftalmología y afines.

4. Desarrollar políticas para abastecimiento de equipo y medios de ayuda óptica, medicamentos.

5. Capacitación sistemática en Salud Ocular a personal perimidas, pediatras, médicos generales, enfermeras, maestros y líderes comunitarios.

6. Incluir dentro del curriculum de los maestros, enfermeras y otros algunos aspectos básicos sobre salud ocular.

7. Incentivar los recursos humanos disponibles a través de la Asociación Oftalmológica; el desarrollo de brigadas hacia las comunidades según el mapa epidemiológico (IPTVN,1993).

8. Formación de grupos de trabajo con un directorio.

9. Planificación en base a las prioridades de atención definidas por los involucrados. (Es importante considerar las zonas no atendidas).

PROPUESTA DE UN PLAN DE TRABAJO A CORTO PLAZO:

1. Llevar a cabo una reunión de seguimiento de las conclusiones de éste taller, con sede en la ciudad de San Pedro Sula.

2. Toma de posesión de un directorio permanente

3. Presentación de proyectos

4. Búsqueda de alternativas de obtención de recursos económicos ante la presencia de representantes del Ministerio de Salud, Educación, Empresa Privada y organismos Internacionales.

Respuestas del Grupo # 2 a la guía # 3

Soluciones Propuestas por éste grupo con respecto a esta problemática de salud ocular:

1. Fortalecer la formación médica en el área oftalmológica.

2. Promover cursos para personal de salud

3. Promover educación a través de medio de comunicación masiva.

4. Mejorar niveles primarios y secundarios de atención

5. Interesar al Ministerio de Educación a capacitar a los maestros.

6. Interesar al Ministerio de Salud a crear el Programa de la Prevención de la Ceguera.

7. Fortalecer la red de captación

8. Mejorar la oferta de servicios.

Propuesta de un Plan de Accion a Corto Plazo:

1. Crear un Comité interinstitucional como el Comité de Prevención de la Ceguera.

2. Realizar actividades de organización y promoción

3. Llevar a cabo una reunión que involucre a:

   - Personal del Ministerio de Salud con poder de decisión
   - Personal del Ministerio de Educación con poder de decisión
   - Representantes de organismos privados del país
   - Representantes de organismos filantrópicos del país.
   - Voluntarios laborando en éste campo.
   - Comunicadores sociales (periodistas, médicos con programas radiales).
   - Establecer en la reunión como punto único de agenda la formación de un Comité de Prevención de la Ceguera.

Soluciones a la Problemática de Salud Propuestas por el Grupo # 3 tomando como base la guía # 3:

1. Organizar y formar un grupo para hacer un planteamiento claro y conciso a las autoridades de salud y gobernantes acerca del problema de salud ocular en Honduras y la necesidad de desarrollar programas de capacitación a nivel de los CESAMOS y hospitales regionales; Reforzar los planes de estudio de medicina e incluir conceptos básicos de salud ocular en los planes de estudio de enfermería, trabajo social y psicología.

2. Comprometernos el día de hoy a la formación de un grupo interdisciplinario (Sede y Subsede en Tegucigalpa y San Pedro Sula) en Pro de la Salud Ocular.

3. Coordinar con instituciones no gubernamentales (FIO,INFRACNOVI, Servicios Médicos Voluntarios) las actividades.

4. Buscar financiamiento con la empresa privada y actividades como telemaratones.

5. Programar una reunión de seguimiento de ésta reunión con metas concretas.

PLAN DE ACCION PROPUESTO POR ESTE GRUPO:

ACTIVIDADES	PERSONA CONTACTO	COMO ?
1. Captación de personal de diferentes disciplinas.	- Trabajo Social - abogados - médicos - psicólogos - Empresa Privada etc.	Programar una sesión de trabajo para in - volucrarlos dentro del Comité de Prevención de la Ceguera.
2. Discutir en una sesión de trabajo los aspectos legales, estatutos del comité	- Abogados interesados en la problemática de salud ocular	Idem (en la misma agenda de sesión arriba mencionada)
3. Conocer las experiencias de otros países respecto a la formación de Comité de Prevención de la Ceguera.	- Invitar personas de Guatemala y Colombia como: Licda. Rosa Amalia de Vásquez (Prociegos) y el Dr. Juan Carlos Silva (OPS)	Idem.

Posteriormente se llevó a cabo una plenaria en la que participaron como expositores:

- Dr. Denis Espinal
- Dra. Marylena Arita
- Dr. Luís Boquín
- Dr. Edgardo Navarrete
- Dra. Denia de Argueta

V. RESULTADOS

Reunión Plenaria:

En horas de la tarde se llevó a cabo una discusión entre los participantes para llegar a un acuerdo:

En ésta discusión, la Sra. Berklin resaltó la necesidad de que Tegucigalpa y San Pedro Sula trabajen unidos.

Algunos participantes expresaron que se debería buscar ayudas a diferentes organismos internacionales. El Dr. Raúl Gómez manifestó que eso es importante pero tambien debemos buscar alternativas locales ya que las ayudas internacionales no son

permanentes.

Tambien se planteó que se debería empezar a trabajar de inmediato y planificar a mas tardar la próxima reunión en el mes de octubre, involucrando a personas clave del Ministerio de Salud y tambien del Ministerio de Educación.

Finalmente:

1. Quedó formado un grupo de trabajo con todos los participantes.

2. Se nombró como coordinador para Tegucigalpa al Dr. Denis Espinal

3. Se nombró como coordinador para San Pedro Sula a la Dra. Denia Arguta

4. El día 14 de octubre del presente año se hará una reunión de seguimiento en la ciudad de San Pedro Sula, con el propósito de consolidar el grupo.

5. Las actividades inmediatas a realizar, previas a la próxima reunión son:

   a. Invitar a personas clave del Ministerio de Salud y de otras disciplinas interesadas.

   b. Hacer gestiones para invitar a la Licda. Rosa Amalia de Vásquez del Comité Prociegos de Ciudad Guatemala para conocer su experiencia en pro de la salud ocular e intercambiar opiniones.

   c. Enviar el directorio a los coordinadores.

VI. CLAUSURA

La jornada de trabajo se concluyó a las 4:40 p.m. con las palabras del Dr. Raúl Gómez, Director de FIO, expresando su satisfacción a los participantes por los resultados obtenidos en el taller, agradeciéndoles su participación y espíritu de servicio.

V. APENDICE

DIRECTORIO DE PARTICIPANTES

LUGAR: **Hotel Alameda, Salón Presidente, Tegucigalpa MDC.**

FECHA: **2 de septiembre, 1994**

HORA: **9:00 am**

1. Dr. Edgardo Navarrete
   Hospital San Felipe
   Tegucigalpa
   Tel. 36-8489

2. Dr. Denis Espinal
   Hospital San Felipe
   Tegucigalpa
   Tel. 36-8489

3. Lic. Hadizabel Burgos
   LUMEN XXI
   Tegucigalpa
   Tel. 37-3318
   37-2719

4. Dr. Francisco Erhler
   FIO/ Hospital San Felipe
   Tegucigalpa
   Tel. 36-8489

5. Prof. José Danilo Núñez
   Centro Luis Bradley
   San Pedro Sula
   Tel. 57-3609

6. Dra. Denia Argueta
   IHSS
   San Pedro Sula
   Tel. 53-4685

7. Sra. Ruth de Berklin
   Berklin Industrial
   San Pedro Sula
   Tel. 53-1244
   Fax. 53-1868

8. Dr. Ricardo Rivera
   Centro Oftalmologico Santa Lucía
   San Pedro Sula

Tel. 53-0844

9. Dr. Carlos González
Centro Oftalmologico Santa Lucía
Tegucigalpa
Tel. 36-8077
36-7523
Fax. 36-5319

10. Dr. Luis Alberto Boquín Rivas
Clinica de Ojos Magi
Hospital Catarino Rivas
Tel. 57-2944
57-2948

11. Diana Schwartz
IEF Bethesda
Tel. (301) 986-1830
Fax. (301) 986-1876

12. Dra. Marylena Arita
FIO
Tel/Fax 31-5539

14. Lic. Victoria Vivas de Alvarado
FIO
Tel/Fax 31-5539

15. Dr. Rolando Godoy
Representante
Tel/Fax 31-5199

ATTACHMENT V

PLAN OF ACTION OF THE NATIONAL COMMITTEE FOR THE PREVENTION OF BLINDNESS

PLAN DE ACCION DE ABRIL 1995 A ABRIL 1996
COMITE COORDINADOR NACIONAL PARA LA PREVENCION DE LA CEGUERA

OBJETIVOS ESPECIFICOS	META	ACTIVIDADES	RECURSOS	a	m	j	j	a	s	o	n	d	e	f	m
A. PREVENCION 1. Recopilar informacion estadistica a nivel nacional sobre la incidencia y prevalencia de las enfermedades que producen ceguera prevenible, como: ambliopia, catarata, glaucoma, lesiones oculares y retinopatia diabetica, mediante la formulacion de una estrategia que nos permita prevenir la ceguera.	100%	1. Redactar una solicitud formal al Dr. Danilo Velasquez para la obtencion de datos sobre incidencia y prevalencia. 2. Obtener informacion de diferentes fuentes como MSP, Facultad de Ciencias Medicas, IHSS y otros. 3. Presentacion de la informacion obtenida.	Archivos OPS, MSP MSP, IHSS, Fac. Medicina Hospitales FID, etc.		X	X		X							
2. CAPACITACION A. Capacitacion a: medicos en servicio social medicos generales medicos residentes de pediatria medicos pediatras de Tegucigalpa y SPS en toma de agudeza visual y examen de ojos, a fin de que puedan manejar y referir oportunamente a un nivel adecuado de atencion.	 150 200 100% 100%	Mini taller de actualizacion de tres horas de duracion Carta a la Asociacion Pediatrica Coordinacion con Facultad de Medicina Coordinar con la Facultad de Medicina y Enfermeria que enfaticen dentro del Curriculum los aspectos de Salud Ocular en la formacion de medicos y enfermeras para obtener personal con adecuado nivel de conocimientos sobre el tema	Medicos del Comite, y voluntarios							X	X				
3. Capacitar 166 maestros de educacion especial que laboran en aulas recursos a nivel nacional, a fin de que conozcan las enfermedades oculares mas comunes y la	166 (132 escuelas)	Taller en Comayagua Taller en Choluteca Taller en Catacamas Taller en San Pedro Sula Visitas de supervision	Medicos del Comite, FID y Tecnicos de Min. Educacion	X	X	X	X	X							

OBJETIVOS ESPECIFICOS	META	ACTIVIDADES	RECURSOS	A	M	J	J	A	S	O	N	D	E	F	M
		7. Solicitar informacion Dr. Silva, OPS sobre Proyecto de Taller Optico													
3. Actualizar y presentar al MSP el cuadro basico de medicamentos a nivel primario	100% Reg. Met., CESAMOS Reg 3 y Cholulteca	1. Gestion de medicamentos oftalmicos a nivel primario no incluidos prioritariamente en el cuadro basico de medicamentos 2. Elaborar y presentar listados	Cuadro Basico de Medicamentos Oftalmicos (Comite) MSP, casas farmaceuticas, emp. privada						X	X	X				
C. OTROS 1. Fortalecimiento del Comite como institucion con el fin de obtener credibilidad ante la comunidad	Personeria Juridica, Reglamento	1. Obtencion de la Personeria Juridica 2. Elaboracion de Reglamentos 3. Elaboracion de Manual Operativo de Funciones 4. Papeleria		X					X X	X X					
2. Acercamiento a organismos internacionales con el proposito de intercambiar experiencias en cuanto a funcionamiento de otros Comites de Prevencion de Ceguera	Intercambio	Cartas de solicitud de informacion a diferentes Comites para la Prevencion de la Ceguera	OPS, Comite pro Ciegos de Guatemala, Emb. Alemana, Club Rotario, FID, etc.			X					X				
3. Promocion de las actividades del Comite a la comunidad, a traves de medios de comunicacion masiva	6 visitas	Visitas a programas de radio, television y prensa	Comite, MSP y Club Rotario	X					X	X	X	X	X		
4. Evaluacion a medio termino														X	

	elaboren un plan de accion que puedan implementar con los alumnos de primer grado de sus escuelas																	
4. Gestionar la oficializacion de la toma de agudeza visual de todos los ninos ninos de primer grado a nivel nacional	1	1. Obtener un documento oficial a traves de una reunion con MSP y Ministerio de Educacion 2. Elaborar un Anteproyecto	Comite MSP M de Educacion						X	X	X X	X					
5. Gestion para la obtencion de becas para la formacion y/o perfeccionamiento de personal de salud, con el objeto de ampliar los servicios de salud ocular.	6	Gestion de becas a traves de notas a nivel nacional e internacional Seleccion de candidatos				X	X	X	X		X						
6. Para efectos de capacitacion, solicitar al MSP exigir a las brigadas medicas internacionales y/o regionales, incorporar un miembros de salud del area (medico, enfermera, voluntario, representante de la alcaldia, etc.)	1996	Enviar nota al Ministerio de Salud Publica									X							
B. TRATAMIENTO 1. Fortalecer la atencion de salud ocular en los CESAMOS de la Region Metropolitana y la Region Sanitaria No. 3 (SPS), a traves de la gestion de equipo y personal capacitado, con el proposito de proporcionar atencion adecuada al paciente.	15 CESAMOS Reg. Met. 48 CESAMOS SPS	a. Coordinar con autoridades de salud en cuanto a capacitacion de personal de los CESAMOS en cuanto al manejo de casos b. Disenar un plan de capacitacion para personal de salud en cuanto a atencion primaria c. Elaborar un inventario de recursos como equipo de diagnostico y cuadro basico de medicamentos	Sub Comite de Atencion, autoridades de salud, CESAMOS Coordinacion Oftalmologos, Optometristas Nac. e Intern. Organismos: ORBIS, FIO,				X	X									

OBJETIVOS ESPECIFICOS	META	ACTIVIDADES	RECURSOS	A	M	J	J	A	S	O	N	D	E	F
		existentes en cada uno de los CESAMOS blanco d. Escribir cartas de solicitud para equipo y medicamentos	Fund. Boch, World Vision, casas farmaceuticas, MSP, Caritas, Fund. de Apoyo a Hosp. Pub., Clubes Rotario, Leones, Emb. de Alemania											
2. Fortalecer la capacidad operativa de la Optica Luz y Amor del Hospital San Felipe a traves del nombramiento y/o capacitacion de personal (tecnico-administrativo) adecuado y a dotacion de material de trabajo a fin de aumentar la eficiencia de sus servicios y la auto-sostenibilidad.	Lentes p/4, 800 pacientes 2 tecnicos Auto-suficiencia de opticas	1. Coordinar con autoridades de San Felipe y Grupo Luz y Amor sobre el trabajo y expectativas de la optica 2. Solicitar informacion a OPS y otras instituciones sobre experiencias en otros paises, ej. Belice 3. Gestion para capacitacion SPS Y Tegucigalpa para personal encargado de optica 4. Desarrollo de capacitacion para personal tecnico-administrativo de la optica 5. Gestion de lentes dentro y fuera del pais 6. Evaluar la situacion actual de la optica (necesidades de equipo, personal y capacitacion para hacerla auto-financiable	OPS, Optica Luz y Amor Fund. para Servicios Medicos SPS Fund. para Servicios de Ayuda Hosp. Publicos, OPS, FID, Opt. Jose Almendarez Fortin, Club Rotario, Leones					X	X	X				

ATTACHMENT W

RESUMES OF NEW PROFESSIONAL STAFF

ELLEN M. PARIETTI

3220 Connecticut Ave NW#508
Washington, DC 20008
(202) 686-7374

EDUCATION

UNIVERSITY OF TEXAS AT HOUSTON HEALTH SCIENCE CENTER — El Paso, TX
Masters of Public Health — May 1995

EMORY UNIVERSITY — Atlanta, GA
Bachelor of Science — May 1990
Dual Major in Biological Anthropology and Human and Natural Ecology

EXPERIENCE

UNIVERSITY OF TEXAS AT AUSTIN — El Paso, TX
Research Supervisor — October 1994 - May 1995

Supervised seven subordinates gathering and evaluating data for the "Border Women's Maternal Health Survey".Corroborated the information gathered in interviews by researching clinical records.

UNIVERSITY OF TEXAS AT HOUSTON HEALTH SCIENCE CENTER — El Paso, TX
Held focus groups with pregnant Hispanic women to collect data on issues associated with motherhood and pregnancy. — October 1994-May 1995

UTEP School of Nursing — El Paso, TX
Research Assistant and Translator (Spanish-English) — Sept 1993 to August 1993

Recruited patients from public clinics for research study investigating lead levels in pregnant Hispanic women and their newborns. Used fluency in Spanish to obtain consent and administer questionnaires bilingually. Collected blood samples pre and post-delivery and obtained data from subjects' and infants' charts in-hospital.
Assisted Nurse Practitioners in medical history taking and conducting prenatal exams.

U.S. PEACE CORPS — Costa Rica
Peace Corps Volunteer — March 1991-June 1993
U.S. Agency for International Development (USAID)

Executed projects to build basic community infrastructure including schools, water systems, and health stations.
Supervised adherence to construction guidelines for anti-seismic structures, made site visits, completed application and approval processes for 20 projects.

Cruz Roja Costa Rican Red Cross

Child Survival Program - conducted sanitary surveys, made home visits. Interviewed mothers, weighed and measured infants, conducted informational workshops, and set up immunization clinics.

Dirreccion General Forestal

Reforestation project with the Costa Rican Agricultural Extension Service in Limon province.

Other Peace Corps Activities:

Organized a Women's Group, taught the mechanisms for setting up a small business; identified sources for loans,arranged speakers, and coordinated funding.
World Vision Health International - performed vision screening, served as translator during surgical treatment.

NEW YORK STATE POWER AUTHORITY — White Plains, NY
Summer Intern, Environmental Division — Summer 1989

Researched environmental problems associated with the generation of nuclear power.
Examined solutions to generation problems within the confines of state and federal regulations.
Zebra Mussel Bio-Fouling Project - collected data on problem of mussel accumulation in intake pumps and service systems of industries on the Great Lakes.

CENTERS FOR DISEASE CONTROL (CDC) — Atlanta, GA

Assisted epidemiologists and statisticians in surveillance of U.S. bacterial meningitis cases.1988 - 89

GARTH A. POLLOCK

P.O. Box 1266
Aptos, CA 95001
(408) 688-2798

Rr. Prokop Myzeqari 29/2
Tirana, Albania
Fax (355) 42-22039

PROFESSIONAL EXPERIENCE

Fourteen years of management and consultant experience in public health and community education programs, including seventeen years residency in Bolivia, working with private voluntary and government organizations in institutional strengthening, human resource development, training of trainers, program design and evaluation. Presently working in Albania as consultant to government agencies and emerging non-government organizations in strategic planning and program design, budgeting and funding.

CAPABILITIES AND SKILLS

Program Planning and Design. Needs assessments; proposal development; institutional strengthening; budgeting and funding; detailed implementation plans.

Curriculum and Training Design. Training needs assessment; training design and program development; evaluation.

Interpersonal Relations: Workshop & seminar design and facilitation, team building, training of trainers.

Language and Computer Skills. English and Spanish fluency; spoken Albanian, IBM and Apple Macintosh computers: *Word Processing*: WordPerfect, Microsoft Word; *Spreadsheets*: Lotus, Quattro Pro, Excel; *Graphics*: Correl Draw, Harvard Graphics.

EMPLOYMENT SUMMARY

Jan 95 - present **Country Representative**
Health for Humanity, Project Corrdinator for Soros Foundations funded Eye Project, Tirana, Albania

Sep 94 - present **Management Consultant**
International Import/Export firm, Tirana, Albania

Jul 92 - present **Director/Founder**
Association for Development Learning
Volunteer agency for organizational development and support of national NGOs and State Enterprises, Tirana, Albania

Mar 90 - Jun 92 **Country Director**
Esperança Inc., USAID Child Survival & Matching Grant
Santa Cruz, Bolivia

Oct 89 - Feb 90	**Administrator** Esperança Inc., USAID Child Survival & Matching Grant Santa Cruz, Bolivia
Mar 87 - Sep 89	**Executive Director** Foundation for the Integrated Development of Bolivia (FUNDESIB) Santa Cruz, Bolivia
Oct 86 - Aug 87	**Administrator, Instructor of Development Communication** University Nur Santa Cruz, Bolivia
May 81 - Oct 86	**Program Director, Project Coordinator** Radio Baha'i, UNICEF Radio Education Project Oruro, Bolivia

CONSULTANCY POSSIBILITIES

Available for consultancies for conference organizer/facilitator; trainer/facilitator for Training of trainers, workshops/seminars, curriculum design and materials development; proposal development.

Daily rate: $115.00
Per diem: Current institutional policies and rates

CURRICULUM VITAE

Name	Rosemary Elizabeth Lowdon [redacted])
Address	P O Box 898, Lilongwe, Malawi, Central Africa
Telephone **Fax**	+265-722549 +265-743905
Sex	Female
Marital Status	Married to Martin Lowdon
[redacted]	[redacted]
Nationality	British
[redacted]	[redacted]
Education (from age 11)	Cardiff High School, Llandennis Rd, Cardiff, U.K. from 1977-84, obtaining 12 'O'Levels in 1982 & 1983 and 3 'A'Levels in 1984. University of Wales, Cardiff, U.K. 1984-87, obtaining BSc(Hons) Bachelor of Science Degree in Ophthalmic Optics with grade II(i) honours.
Professional Qualifications	- M.B.C.O. Member of the British College of Optometrists No. M12311 - Registered Optician with The General Optical Council, Harley St, London, U.K. No. 01-13067 - Member of The Association of Optometrists, U.K., No. 0022665
Employment	Self-employed from November 1994 to date, during which period sessional work has been undertaken for: - A.C. Opticals Ltd, P O Box 151, Blantyre, Malawi - Vision Aid Overseas, P O Box 95, Blantyre, Malawi Feb '93 - Nov '94 Development Officer for the British charity Vision Aid Overseas, setting up and running their Optical Development Programme for Malawi. Based at Queen Elizabeth Central Hospital, Blantyre, this job included opening an optical workshop to produce low cost spectacles and training handicapped Malawians to run this workshop. In addition a nationwide distribution network for these spectacles was established via the Ophthalmic Medical Assistants at the district hospitals throughout the country. Regular visits were made to these hospitals to conduct large scale refraction clinics. Some lecturing and demonstrating was also provided to the ophthalmic students at the Lilongwe School for Health Sciences. During this period a research project was conducted with Dr Susan Lewallen into refractive error, the resulting paper, "A Population-based survey of the Prevalence of Refractive Error in Malawi" to be published. 1987-1993 in private practice in U.K. at: Cargills Optometrists, 122 Sandgate Rd, Folkestone, Kent, CT20 2BW 1989-1993 (part-time) Low Vision & Contact Lens Clinic at: Dept. of Ophthalmology, Kent & Canterbury Hospital, Ethelbert Rd, Canterbury, Kent, CT1 3NG, U.K. 1985 & 1986 Summer Vacation job at: Dolland & Aitchinson Ophthalmic Opticians, 31 Commercial St, Newport, Gwent, U.K.

Leisure Activities	Church involvement at Lilongwe Pentecostal Church Bird-watching Golf Needlecraft
References	Dr Susan Lewallen MD, 3720 Harrison St, Bellingham, WA 98226. Mr Nigel C Andrew FRCS, FCOphth, Consultant Ophthalmologist, Kent & Canterbury Hospital, Ethelbert Rd, Canterbury, Kent, CT1 3NG, U.K.

To: Ellen Parietti From: Martha de Piedrasanta 6-marzo-

Appendix 1

MARTHA LOUISE BURDICK de PIEDRASANTA

EDUCATION

University of North Carolina, Chapel Hill
Master of Public Health and Nutrition, 1989

University of Wheaton, Norton, Massachusetts
Bachelor of Science in Biopsychology, 1985

EXPERIENCE

Nutrition Institute of Central America & Panama, Totonicapan, Guatemala 3/93 - 6/94

- As Co-Coordinator of Research, designed and managed a study regarding the social and biological impact of potable water systems in six communities in Totonicapan, Guatemala.
- Designed KAP survey and nutrition observation instruments.
- Designed and implemented training of field staff.
- Supervised field staff of 10 interviewers.
- Promoted project among a variety of villages and selected six participating villages.
- Analyzed data and prepared final reports.

US Peace Corps, Totonicapan, Guatemala, 11/89 - 3/93

- As Nutritionist, trained government field workers in health and nutrition using adult learning principles.
- Promoted home gardens and the consumption of nutritious, local foods among rural villagers.
- Working with local agencies, promoted integrated nutrition projects. Implemented a dairy goat project in three rural communities.
- Trained new Peace Corps volunteers and Ministry of Agriculture counterparts in general nutrition, micronutrients & 24 hour recall methodology.
- Directed and supervised the Peace Corps/Ministry of Agriculture Altiplano baseline nutrition study.

Nutrition Division, Department of Public Health, State of Massachusetts, 5/89 - 8/89

- As a nutrition intern collected and tabulated data in relation to severe pediatric malnutrition in the Boston City Hospital.

School of Public Health, University of North Carolina, 8/87 - 5/89

- As a research assistant, developed summaries of recent research in developing countries regarding nutrition and maternal child health.
- Tabulated and analyzed nutrition consumption data from Cebú, Philippines.

Orange County Health Department, North Carolina, 8/87 - 5/89

- As a nutrition intern completed a community nutrition assessment.
- Designed the County's program plan for nutrition services.
- Provided technical assistance to health centers and health agencies such as the American Cancer Society and the American Heart Association.

Pediatric Pulmonary Laboratory, Massachusetts General Hospital, Boston, MA, 10/85 - 8/97

- As a research technician, worked with sleep studies of children with respiratory problems.
- Collected and analyzed physiological data related to pulmonary function.

Department of Biopsychology, University of Wheaton, Norton, MA, 2/82 - 5/85

- As a Research Assistant, investigated and designed experiments regarding hormone levels and sexual behavior of fish.
- Collected, tabulated and analyzed data; Developed scientific papers.
- Supervised laboratory personnel.

Worcester Foundation for Experimental Biology, Shrewsbury, MA, 6/83 - 9/83

- As an investigator selected under a summer scholarship competition, designed and implemented studies regarding smell in hamsters.

PUBLICATIONS

Villars, T.A. and M. Burdick, (1982). "Rapid Decline of the Behavioral Response to Prostaglandin in Paradise Fish, Macropodus opercularis. American Zoologist, 22 (4): 948.

Burdick, M. et al. "Manual para realizar Encuestas Familiares de Consumo de Alimentos," Proyecto de Nutrición DIGESA-Cuerpo de Paz, Guatemala, July 1992.

OTHER SKILLS

Fluent in Spanish. Computer experience with Epiinfo, Word Perfect and Harvard Graphics.

Ellen,

Sorry, but I don't have time to update my resume -

International Eye Foundation, Vitamin A for Child Survival Project, Cobán, Guatemala 7/94 - present

- As Project Manager

International Eye Foundation, Guatemala 10/95 - present

- As National Director

These are the dates of my positions w/ IEF.

Martha

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ATTACHMENT X

BUDGET PIPELINE ANALYSIS

TABLE B: Country Budget For All Countries INTERNATIONAL EYE FOUNDATION

Matching Grant

FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	39	0	7.5	2	31.5	-2	11
b.) Fringe Benefits	0	0	0	1	0	-1	0
c.) Travel, Transportation & Per Diem	74	0	24.5	1	49.5	-1	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	190	0	38.5	1	151.5	-1	60
SUBTOTAL	303	0	70.5	5	232.5	-5	89
II. PROCUREMENT							
a.) Consultations	121	48	37	0	84	48	38
b.) Supplies	0	1720	0	159.5	0	1560.5	0
SUBTOTAL	121	1768	37	159.5	84	1608.5	38
III. INDIRECT COSTS							
SUBTOTAL	76	326	14.5	0	61.5	326	24
TOTAL PROGRAM COSTS	500	2094	122	164.5	378	1929.5	151

TABLE B: Country Budget For GUATEMALA INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	10	0	3.5	0	6.5	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	18	0	9	1	9	-1	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	40	0	22	0	18	0	60
SUBTOTAL	68	0	34.5	1	33.5	-1	89
II. PROCUREMENT							
a.) Consultations	20	6	8	0	12	6	38
b.) Supplies	0	275	0	77	0	198	0
SUBTOTAL	20	281	8	77	12	204	38
III. INDIRECT COSTS							
SUBTOTAL	16	52	7	0	9	52	24
TOTAL PROGRAM COSTS	104	333	49.5	78	54.5	255	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For HONDURAS INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	6	0	0	0	6	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	15	0	6	0	9	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	30	0	10	0	20	0	60
SUBTOTAL	51	0	16	0	35	0	89
II. PROCUREMENT							
a.) Consultations	20	6	7	0	13	6	38
b.) Supplies	0	275	0	38	0	237	0
SUBTOTAL	20	281	7	38	13	243	38
III. INDIRECT COSTS							
SUBTOTAL	13	52	4	0	9	52	24
TOTAL PROGRAM COSTS	84	333	27	38	57	295	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For ECUADOR INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	5	0	0	0	5	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	10	0	0	0	10	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	20	0	0.5	0	19.5	0	60
SUBTOTAL	35	0	0.5	0	34.5	0	89
II. PROCUREMENT							
a.) Consultations	15	6	0	0	15	6	38
b.) Supplies	0	275	0	11	0	264	0
SUBTOTAL	15	281	0	11	15	270	38
III. INDIRECT COSTS							
SUBTOTAL	9	52	0	0	9	52	24
TOTAL PROGRAM COSTS	59	333	0.5	11	58.5	322	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For EL SALVADOR INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	3	0	0	0	3	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	5	0	0	0	5	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	20	0	0	0	20	0	60
SUBTOTAL	28	0	0	0	28	0	89
II. PROCUREMENT							
a.) Consultations	20	6	0	0	20	6	38
b.) Supplies	0	275	0	0	0	275	0
SUBTOTAL	20	281	0	0	20	281	38
III. INDIRECT COSTS							
SUBTOTAL	8	52	0	0	8	52	24
TOTAL PROGRAM COSTS	56	333	0	0	56	333	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For ALBANIA — INTERNATIONAL EYE FOUNDATION

Matching Grant — Expenses through 12/31/95

FY 93 DIP Guidelines

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	3	0	0	2	3	-2	11
b.) Fringe Benefits	0	0	0	1	0	-1	0
c.) Travel, Transportation & Per Diem	7	0	3.5	0	3.5	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	23	0	4.5	1	18.5	-1	60
SUBTOTAL	33	0	8	4	25	-4	89
II. PROCUREMENT							
a.) Consultations	9	6	5	0	4	6	38
b.) Supplies	0	155	0	33.5	0	121.5	0
SUBTOTAL	9	161	5	33.5	4	127.5	38
III. INDIRECT COSTS							
SUBTOTAL	7	31	1	0	6	31	24
TOTAL PROGRAM COSTS	49	192	14	37.5	35	154.5	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For BULGARIA INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	3	0	1	0	2	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	6	0	5	0	1	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	19	0	0	0	19	0	60
SUBTOTAL	28	0	6	0	22	0	89
II. PROCUREMENT							
a.) Consultations	11	6	8	0	3	6	38
b.) Supplies	0	155	0	0	0	155	0
SUBTOTAL	11	161	8	0	3	161	38
III. INDIRECT COSTS							
SUBTOTAL	7	28	1	0	6	28	24
TOTAL PROGRAM COSTS	46	189	15	0	31	189	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For ERITREA — INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	3	0	0	0	3	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	7	0	0.5	0	6.5	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	19	0	0	0	19	0	60
SUBTOTAL	29	0	0.5	0	28.5	0	89
II. PROCUREMENT							
a.) Consultations	11	6	3	0	8	6	38
b.) Supplies	0	155	0	0	0	155	0
SUBTOTAL	11	161	3	0	8	161	38
III. INDIRECT COSTS							
SUBTOTAL	7	31	0.5	0	6.5	31	24
TOTAL PROGRAM COSTS	47	192	4	0	43	192	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE B: Country Budget For MALAWI — INTERNATIONAL EYE FOUNDATION

Matching Grant — Expenses through 12/31/95

FY 93 DIP Guidelines

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM ELEMENTS							
a.) Salaries	6	0	3	0	3	0	11
b.) Fringe Benefits	0	0	0	0	0	0	0
c.) Travel, Transportation & Per Diem	6	0	0.5	0	5.5	0	18
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	19	0	1.5	0	17.5	0	60
SUBTOTAL	31	0	5	0	26	0	89
II. PROCUREMENT							
a.) Consultations	15	6	6	0	9	6	38
b.) Supplies	0	155	0	0	0	155	0
SUBTOTAL	15	161	6	0	9	161	38
III. INDIRECT COSTS							
SUBTOTAL	9	28	1	0	8	28	24
TOTAL PROGRAM COSTS	55	189	12	0	43	189	151

SUPPORT WITH BUDGET NARRATIVE - CASH $ IN THOUSANDS

TABLE C: Headquarters (Regional) Budget INTERNATIONAL EYE FOUNDATION

Matching Grant
FY 93 DIP Guidelines

Expenses through 12/31/95

	BUDGET		ACTUALS		BALANCE		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. PROGRAM MGMT							
a.) Salaries	67	11	52	40	15	-29	-14
b.) Fringe Benefits	18	3	18	13	0	-10	18
c.) Travel, Transportation & Per Diem	34.5	18	26	11.5	8.5	6.5	34.5
d.) Subcontracts	0	0	0	0	0	0	0
e.) Other Direct Costs	22.5	12	14.5	10	8	2	22.5
SUBTOTAL	142	44	110.5	74.5	31.5	-30.5	142
II. PROCUREMENT							
a.) Consultations	23	2	2	0	21	2	23
b.) Supplies	4	1	0.5	1	3.5	0	4
SUBTOTAL	27	3	2.5	1	24.5	2	27
III. INDIRECT COSTS							
SUBTOTAL	31	9	19	4	12	5	31
TOTAL HEADQUARTERS COSTS	200	56	132	79.5	68	-23.5	200

ATTACHMENT Y

MIDTERM EVALUATIONS: GUATEMALA, HONDURAS, MALAWI, ERITREA

MIDTERM EVALUATION
SIGHTREACH: AN EYE CARE PROGRAM
FOR THE UNDERSERVED AND CHILDREN IN BULGARIA

Donald W. MacCorquodale, MD, MSPH
Diplomate, American Board of Preventive Medicine

I. INTRODUCTION

Bularia has a population of approximately 8,950,000 people. About 85% of its people are ethnic Bulgarians, 9% are Turkish, and the remainder represent a number of small minority groups, Greeks, Armenians, etc. The capital city, Sofia, has a population of approximately 1.1 million people. Two other largest cities, Plovdidv and Varna, have populations of 380,000 and 310,000 inhabitants respectively. Income per capita is about US 3,000 annually.

II. METHODOLOGY

This evaluation was conducted be means of document reviews, including the Detailed Implementation Plan of March 1994, the report of Drs. Marylin T. Miller and Susan Day dated September 8, 1995, and the report of Dr. Susan Lewallen (undated); interviews, and visits to various Bulgarian institutions.

The following individuals were interviewed:

Mr. John Babylon, Program Officer, USAID Mission to Bulgaria

Dr. Tchavdar Balabanov, Ophthalmologist, Plenvin University Hospital

Dr. Emil Filipov, Ophthalmologist and geneticist, Stara Zagora

Dr. Nicolai Kostantinov, Opthalmologist, St. Ana Hospital

Dr. Rossitsa, Lolova, Ophthalmologist, St. Ana Hospital

Ms. Ludmila Mincheva, Program Specialist, USAID Mission to Bulgaria

Dr. Sergei Resnikoff, WHO Consultant for the Prevention of Blindness, Geneva

Dr. Tanya Tcholakova, Vice-Minister of Public Health, Sofia

Dr. Ludmil Yankov, Pediatric ophthalmologist, Sofia University Hospital

Dr. Petya Vassilova, Ophthalmologist, St. Ana Hospital and Director of the Pashev Center for Sight, Sofia

Dr. Yatkova, Director of Clinical Services, Maternal and Child Health, Ministry of Public Health, Sofia

III. PROJECT DESIGN

This project was designed to provide assistance to blind and visually impaired children, particularly by identifying children whose vision might be restored or improved through surgical procedures. This goal was to be achieved through the following activites:

A. Conducting surveys of the children in the schools for the blind in Sofia and Varna to determine the major causes of childhood blindness and to identify children who might be helped by surgical operations.

B. Providing training for nurses, general physicians, and pediatricians, at four different sites in Bulgaria. This would consist of training in primary eye care with emphasis on screening techniques, basic treatment, and referrral.

C. Providing training for ophthalmologists to improve the quality of pediatric ophthalmologic care, particularly surgical, through periodic visits of volunteer pediatric ophthalmologists from the United States.

IV. PROGRESSS TO DATE

A. Surveys of children in the blind schools

A total of 140 children in the blind school in Sofia and 107 children n the blind school in Varna were examined by Dr. Susan Lewallen. She was assisted in Sofia by Dr. Lolova and in Varna by Drs. Boneva and Kusnetsov.

Slightly more than 10% of these children had normal vision. They were older children who had reamined in the blind schools for social reasons. About 18% were visually impaired, and an additional 18% suffered severe visual impairment. Fifty-three percent (53%) of the children examined were blind, that is, they had no light perception.

Hereditary diseases, including retinal dystrophies and glaucoma, were the most common cause of blindness and severe visual impairment, and they were ersponsible for about 30% of all cases of blindness and severe visual impairment

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among children in the two schools. Perinatal factors, primarily retinopathy of prematurity, were the second leading cause of blindness and severe visual impairment, and they were responsible for 24% of such cases.

B. Training

Dr. Marilyn T. Miller and Dr. Susan Day, pediatric ophthalmologists gave a series of lectures on pediatric ophthalmology in Plovdiv, Stara Zagora, and Varna, and Dr. Day performed surgical procedures in Plovdiv and Stara Zagora. Drs. Miler and Day examined patients with the local ophthalmology staffs in Sofia, Plovdiv, Stara Zagora, and Varna.

A course for pediatricians on screening and referral of newborn infants was given in Plevin, and it was very well received.

MID-TERM EVALUATION, PRELIMINARY REPORT

IEF MATCHING GRANT SIGHTREACH PROGRAM IN HONDURAS

Donald W. MacCorquodale, MD, MSPH, FACPM

July 24, 1995

EXECUTIVE SUMMARY

The SightReach Program in Honduras was initiated on August 15, 1993. It has made substantial progress toward it goals of assisting ophthalmologists to provide care in underserved areas by providing them with basic equipment at reasonable cost, enhancing the identification and referral of children with visual problems,

Six ophthalmologists have been provided with basic equipment, and four of them are presently providing eye care in underserved areas. Two have not as yet opened their clinics, but they will do in the near future. Four additional candidates have been identified who hope to purchase equipment later this year

A total of 242 school teachers and 250 general physicians have been trained identify children with visual problems and to refer them appropriately. The school teachers have been very active and most enthusiastic in performing this new task.

A National Committee for the Prevention of Blindness has been formed. Its members are clearly dedicated to their work, but they are still struggling to define their role and establish priorities.

* * * * *

INTRODUCTION

DESCRIPTION OF THE PROGRAM: The SightReach program in Honduras consists of two components: ResPack, which provides basic ophthalmologic equipment to ophthalmologists, who have recently

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finished their residencies and have agreed to practice part time or full time in underserved areas. The second component is ChildSight, which has trained ~~185~~ 242 ~~first~~ grade school teachers and ~~some~~ ten auxiliary and 250 general physicians nurses in evaluating the visual acuity of children and referring those with visual problems for evaluation and care. The program was initiated in Honduras on August 15, 1993.

OBJECTIVES AND GOALS: The objectives of the ResPack program are three fold: 1) to provide 3 to 5 ophthalmologists per year with basic ophthalmological equipment to enable them to serve in underserved areas, 2) to provide these ophthalmologists with training in the financial management of their practices and the maintenance and care of ophthalmologic equipment, and lastly 3) to increase outreach of eye care services to underserved areas through community eye care services. The goal of the program is to expand the availability of and access to eye care services by facilitating young ophthalmologists to establish practices in underserved areas.

The objectives of the ChildSight program are: 1) to conduct a survey of the children in the School for the Blind in Tegucigalpa, Honduras, 2) to conduct four workshops for school teachers, nurses, physicians, and others in the identification and referral of children with ocular problems, and 3) to strengthen the capacity to perform pediatric ophthalmology and surgery in two tertiary centers through the provision of training equipment, and supplies. The goals of the program are 1) to enhance the identification and referral of children who can be helped by ocular

surgery and 2) to upgrade the abilities of tertiary centers to conduct pediatric ophthalmology.

II. METHODOLOGY

The methodology employed in this evaluation included document reviews, particularly the Detailed Implementation Plan of SightReach for Honduras, the First Annual Progress Report for the period August 15, 1993 through August 31, 1994, Memoria: Capacitación a Maestros de Educación Especial Sobre Salud Ocular a Nivel Nacional de la Secretaria de Educación Pública, and the monthly reports of the Director of IEF, Honduras.

other document sent to evaluators should be consulted for next draft

The following personnel were also interviewed: three staff members of the International Eye Foundation/Honduras, including the Director, Dr. Raúl Gómez; six members of the National Committee for the Prevention of Blindness; five ophthalmologists, who are participants in the ResPack Program; one ophthalmology residency program director, Dr. Edgardo Navarrete; three ophthalmologists on the staffs of referral centers; two physicians who participated in teaching at workshops for the detection of ocular problems in children; ~~four members of the National Committee for the Prevention of Blindness~~, ten school teachers who attended such workshops, one member of the staff of the Instituto Franciscano para el No Vidente, and the Director of the Department of Special Education of the Ministry of Education, Lic. Betulia Cárcamo. It is worth noting that some of the above were interviewed twice. For example, one physician was interviewed as a participating ResPack physician and as a physician who participated in providing training in several

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ChildSight workshops. Interviews were conducted in Tegucigalpa, San Pedro Sula, Choluteca, Comayagua, and Danlí.

The names of the physicians interviewed, who were not identified above, include:

Dr. Hector Membreño, Clínica Magi, San Pedro Sula

Dr. Denia de Argueta, Honduran Social Security Institute, San Pedro Sula

Dr. Alberto Ehler, Hospital San Felipe, Tegucigalpa

Dr. Ricardo Rivera Reichmann, ResPack, San Pedro Sula

Dr. Sergio Zúñiga, ResPack, San Pedro Sula

Dr. Jorge Cisneros, ResPack, Choluteca

Dr. Denis Espinal, Respack, Danlí and

Dr. Doris Alvarado

III. FINDINGS

MEASURABLE INPUTS AND OUTPUTS, RESPACK: Packages of basic equipment have been purchased by six ophthalmologists. Five of the six were interviewed, and they all said they were pleased with the quality of the equipment provided them with the exception of one item. Three of the five who were interviewed expressed marked dissatisfaction with the lensometer.

Four of them have participated in the workshop for maintenance and repair of equipment, and five have participated in the workshop on financial management.

It is estimated that approximately 2,045 patients have been treated by the four ResPack physicians since they opened their offices. It is noteworthy that the range seen varies from a low of

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110 to a high of 1,540. Note: These estimates are almost certainly unreliable to a considerable degree since they were not based on clinic records.

It is impossible to provide a reasonable estimate of the number of patients seen by these physicians who were unable to pay for their services, and hence, they were treated without charge. One physician noted that "very few" of his patients were able to pay for his services while another said "the majority" were able to pay.

None of the ResPack physicians ~~have~~ has been able to perform major surgical procedures on their private patients, primarily because they do not have the appropriate equipment. Only one physician in practice has the equipment for performing minor surgical procedures, and he has performed a total of approximately 20 such procedures since he opened his office.

MEASURABLE INPUTS AND OUTPUTS, CHILDSIGHT: It is admirable that IEF has been able to train 242 school teachers, primarily ~~first grade~~ special education teachers, in the use of the Snellen chart and the detection of visual problems in children. Ten (10) nurses and 11 other professionals, including a physician, several psychologists, and several social workers have also been so trained.

It is not possible at this time to estimate the number of children who have been referred for attention to their visual problems, but one finding stands out: Every one of the five physicians working in referral centers were certain that the number of pediatric referrals had increased since the Childsight program

was initiated in Honduras. It is unfortunate that it is not known what proportion of children whose parents were advised of their need for care actually were seen by an oculist or an ophthalmologist.

RELEVANCE TO EYE CARE PROBLEMS, RESPACK: Of course, the focus of this program is overwhelmingly clinical. It nonetheless has a secondary prevention aspect (secondary prevention refers to the early detection and treatment of disorders to minimize damage to the individual). Patients with glaucoma, proliferative diabetic retinopathy, and cataract, which are all potential causes of blindness can be treated or referred, and this will assuredly prevent blindness.

The Childsight program obviously has great potential for the prevention of blindness since it can detect strabismus and other treatable disorders. The preventive impact of the program in Honduras is certainly going to be strongly influenced by whether or not the facilities for pediatric ophthalmological surgery can be expanded and improved.

EFFECTIVENESS: One of the most important objectives of the ResPack program is to improve access to ophthalmologic care, and this objective has clearly been achieved. Three of the ResPack physicians who were interviewed were providing services on a part-time basis in underserved areas, and one was working full-time in a city where there is no other ophthalmologist.

The ChildSight program is unquestionably doing an adequate job of screening children in the first grade. Unhappily, as noted

earlier, it is not known if all of the children who are supposed to be referred actually seen by an oculist or an ophthalmologist.

The main barrier to providing eye care services in underserved areas is the poverty of the population. One of the main barriers to improving the referral of pediatric patients is the lack of specialized services, which are only available in Tegucigalpa and San Pedro Sula. It is important to note that a number of teachers cited the ignorance of parents as an obstacle to improved eye care for children, and this seems very likely to be true.

DESIGN AND IMPLEMENTATION: The objectives set by IEF for the ResPack program are clearly measurable. This is equally true of the ChildSight program.

Data collection from the ResPack program has not been very successful. This appears in part to be due to the detailed reporting requirements regarding the monthly financial statements, which are expected to be submitted by the participating ophthalmologists. While it is true that physicians are notorious for their aversion to "paper work," many would almost certainly regard the requirement for financial reporting as onerous.

Reporting on the part of schools is much more satisfactory. There were carefully compiled reports available at every school I visited. I was only able to interview ten teachers, but if their performance is representative of all the teachers trained, reporting from the schools is of very high quality.

As noted earlier, only one physician is performing minor surgery, and none are doing major surgical procedures on the private patients for lack of appropriate equipment.

The fees charged by the ResPack physicians are minimal by almost any standards. While this cannot be quantified, it is clear that all of them are providing a lot of care free or at a minimum charge. The ResPack physicians interviewed were uniformly enthusiastic about attending the workshops on the administrative and financial management of an ophthalmologic practice, but it appear that none of them are actually using those concepts and procedures to manage their practices.

All of the ResPack physicians have been involved in community projects. All of them have given one or more lectures on eye care. Three are working part-time in Ministry of Health Hospitals, which is unmistakably a community service. All of them agreed that giving talks to the local community has resulted in an increase in the number of patients who come to their offices. Three of the four ResPack physicians are using radio to advertise their practices. They are agreed that this is an effective means to get new patients, but they are equally agreed that it is also expensive.

HUMAN RESOURCES: Three individuals in the IEF office in Honduras, including the Director, devote between ~~10%~~ 15% and ~~25%~~ 30% of their time to activities related to the Matching Grant program. The Director feels that the size of the staff is adequate to meet the technical and operational needs of the program.

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The collaboration of IEF with the Ministry of Education in implementing the portion of the program to detect ocular problems in school children has been outstanding, and the relationships that IEF has with various Ministry of Public Health Institutions, including the San Felipe Hospital and the Magi Eye Clinic in San Pedro Sula are friendly and beneficial to all parties concerned.

QUALITY: The IEF staff has the knowledge and skills to carry out both programs. This is demonstrated by the accomplishments to date.

SUPERVISION AND MONITORING: The Director has adequately monitored the ResPack program. Happily, much of the monitoring of the ChildSight program is carried out by personnel of the Special Education Division of the Ministry of Education, which frees the Director to devote more attention to other pressing duties.

USE OF CENTRAL FUNDING: The frequency and timing of visits to IEF by the central IEF staff has been entirely appropriate. Constraints on further assistance are almost certainly related to the current level of funding.

USE OF TECHNICAL SUPPORT: Most of the technical assistance provided to date to IEF has been given by el Grupo Lumen, a multidisciplinary voluntary group interested in the provision of eye care. This group has provided assistance in the design of the courses to train school teachers in identifying children with visual problems, ~~and in the analysis of the data generated by the~~ survey of the children in the School for the Blind. The personnel of IEF feel that this technical assistance has been most useful.

Ophthalmologists residents on staff of Hospital San Felipe helped evaluate children for the survey

modified Snellen chart for children

under the guidance of Dr. Federico Hermes, a consultant from Guatemala

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Technical assistance has also been provided by external consultants for the conduct of the two workshops for the ResPack physicians. As noted earlier, ~~all~~ four ResPack physicians who were interviewed were most enthusiastic about both workshops.

There is clearly a need for additional technical assistance, which will be addressed in the section entitled, "Recommendations." If there are major constraints, they are likely to be related to lack of funds.

ASSESSMENT OF COUNTERPART RELATIONS: The chief counterpart organization to IEF with regard to ResPack appears to be the San Felipe Hospital. The importance of the relationship between that hospital and IEF seems certain to increase in the future. I found it rather difficult to get a sense of how the Director of the Hospital regarded the relationship at this time.

Thus far, the most important counterpart organization for ChildSight has been the Special ~~Services~~ Division of the Ministry of Education. It provided excellent collaboration in training school teachers in the use of the Snellen chart and the identification of visual problems. This entity does have the technical and managerial skills necessary to assume the role of instructing teachers and others in the detection of ocular problems in young children.

Certainly, the potential importance of the National Committee for the Prevention of Blindness as a counterpart organization to IEF is enormous. The committee is still in the throes of defining its role and establishing priorities for attention. Hopefully, it

will ultimately play a critical role in the future for ophthalmologic care and the prevention of blindness in Honduras.

REFERRAL RELATIONSHIPS: There are obviously three very important referral sites for this program. One is the San Felipe Hospital in Tegucigalpa; one, the Clínica Magi in San Pedro Sula, and lastly, the Maternal-Child section of the Hospital Escuela, in Tegucigalpa. Other sources for referral are the Centro de Salud Las Crucitas and private ophthalmologists.

The ChildSight program has referred patients to both the San Felipe Hospital and the Clínica Magi. Thus far, it has not encountered a child in need of ophthalmologic surgery.

It is not at all clear that the ~~first~~ grade school teachers those who make most of the referrals in the ChildSight program, have a well defined idea of where children with visual problems should be referred. Some of them suggest that the parents should take the child in question to an oculist. Others suggest that the child should be taken to a center like the San Felipe Hospital. The referral system might be improved if the teachers had a clearly outlined approach for referral. This might include identifying a health center as the initial point of referral. If there are no health centers nearby, an oculist or an ophthalmologist could be suggested, etc.

NETWORKING: The most obvious example is the very useful relationship between IEF and the Special Education Section of the Ministry of Education.

BUDGET MANAGEMENT: Deferred.

SUSTAINABILITY: One can only speculate on this important aspect of the future of the program. It seems very likely that the Special Education Section of the Ministry of Education could assume to role of providing training for ~~first~~ school grade teachers in identifying ocular problems in children and referring them with a minimal addition to its budget. At this time, the present Director of the Section would be willing to do so if she had the appropriate financial support.

The ResPack physicians will continue to provide eye care with or without additional assistance. Whether or not all of them will be able to sustain (part-time) their practices in the under-served areas where they currently work is problematic.

One physician expressed grave concern about whether or not he will be able to repay the loan for his equipment, continue his practice in the community he has chosen, and indeed, whether or not he will be able to support his wife and family. He added that he was quite depressed over this, and his entire demeanor was clearly that of a depressed person.

One ophthalmologist, Dr. Denis Espinal of Danlí, will almost certainly be able to do so, and he intends to do so. It should be noted that some of his family live in that city.

The earning capacity of the participating ResPack physicians would certainly be enhanced if they were able to perform surgery. Obviously, none of them can afford to purchase surgical equipment at the moment, and whether or not they will be able to do so in the future is again problematic.

The National Committee for the Prevention of Blindness is capable of continuing to exist without any external assistance. It is still in the process of defining its role. If it does so successfully, i. e., finds a useful and satisfying role for itself, it will survive. If it does not, it will ultimately cease to exist as a functioning entity.

RECURRENT COSTS AND COST RECOVERY MECHANISMS: Deferred.

IV. GENERAL COMMENTS:

There were several aspects related to this program that I found very impressive. First, it was very clear that all four of the ResPack physicians I interviewed were providing services in under-served areas on either a full-time or a part-time basis. This is a very real accomplishment whether or not they will all be able to continue to do so. Persuading specialists in the United States to work in under-served areas is extremely difficult, and it is well know that it is also difficult in Latin America. At least, the first step has been taken in Honduras.

I was most impressed and pleased by the enormous enthusiasm the ~~first~~ grade school teachers, teachers who were specialists in special education, and school principals showed for the ChildSight program. They are obviously doing what they were trained to do and are most proud of their role in the program. A more imaginative person than I am could almost certainly utilize this find resource to serve other objectives of this program.

I was again delighted by my visit to the San Felipe Hospital in Tegucigalpa. In contrast to the experience I have had in other

hospitals and health centers in other countries in Latin America, I found all of the physicians hard at work. No one was having coffee or smoking cigarettes in the hall. It seemed to me that these ophthalmologists were treating their obviously economically deprived patients with a friendly but professional matter and with dignity. I found it moving.

I found the situation I encountered in San Pedro Sula very sad indeed. The Clínica Magi has a lovely physical plant, and it is very well equipped. It has but one full-time ophthalmologist. The ophthalmology section of the out-patient clinic of the Social Security Institute in San Pedro Sula has three full-time ophthalmologists, but the equipment in the clinic is woefully inadequate. Surely, there most be a way for Hondurans of good will to find a solution to this tragic situation for the benefit of all the citizens of San Pedro Sula.

I have the profound impression that the Ministry of Public Health has not recognized the enormous importance of ophthalmology and its potential for the prevention of disease, primary and secondary. In the field of public health, the name of the game is prevention, and the ultimate criterion for undertaking any program for the prevention of disease is cost-effectiveness.

Blindness is extremely costly, and preventing blindness is highly cost effective. The first health program the World Bank financed was a huge undertaking to eradicate river blindness in West Africa. Today, some twenty years later, this program which was very costly initially, is about to conclude successfully. The

hard-nosed economists of the Bank, who are rarely concerned with humanitarian desiderata, have conducted a cost-benefit analysis of the program, and they have reported that the savings to the area (after subtracting the costs) have been enormous. They amount to tens of billions of dollars.

V. RECOMMENDATIONS

RECOMMENDATIONS FOR IEF, BETHESDA:

1. Replace the lensometers provided under the ResPack element of the program if there is sufficient funding for doing so.

2. After consultation with the Director of Honduras, consider sending the President or Principle Officer of a successful National Committee for the Prevention of Blindness in another Latin American country to meet with the National Committee for the Prevention of Blindness in Honduras to assist them in defining their role and establishing priorities. [note that PAHO's director of prevention of blindness has been involved in the formation of the committee]

3. Abolish the requirements for ResPack participants to submit monthly financial statements if this is agreeable to USAID and reduce other reporting requirements to the greatest extent consistent with sound monitoring practices.

4. Consider sending an outstanding American ophthalmologist to Honduras once or twice per year to offer seminars on current developments in their specialty to all Honduran ophthalmologists.

5. Make every possible effort to provide ResPack physicians with copies of ophthalmology journals.

RECOMMENDATIONS TO IEF, TEGUCIGALPA

1. Use your good offices to institute an epidemiologic study of eye injuries in the workplace in San Pedro Sula to identify the nature and extent of the problem, the characteristics of those affected, and the places where these injuries are taking place. This could be undertaken through record reviews of the Clínica Magi and the ophthalmology section of the Honduran Social Security Institute eye clinics by the Chief of the Preventive Medicine Section of the latter at little or no cost.

2. Increase the number of contacts between your office and the Director of the San Felipe Hospital, the Ministry of Public Health, and the Coordinators of the National Committee for the Prevention of Blindness to the extent that this is readily feasible.

3. Consider enlisting the help of the Statistical Section of the Ministry of Public Health or the Division of Epidemiology and Public Health of the School of Medicine of the University of Honduras or the Specialist in Preventive Medicine in the Social Security Institute of San Pedro Sula in conducting a follow-up study of a randomly selected sample of first grade children identified with ocular problems by the ChildSight program. The objective of the study should be to determine 1) whether or not the child was indeed taken to a referral center, an oculist, or an ophthalmologist and 2) if appropriate treatment was provided to those children who were taken to a health care provider.

VI. ACKNOWLEDGEMENTS

I am deeply indebted to all of the Hondurans I have met while conducting this evaluation for their unfailing courtesy, their kindness in responding so pleasantly to my questions, and their unfailing good humor. I am particularly indebted to Dr. Raúl Gómez, the Director of IEF/Honduras, for his thoughtfulness and his invaluable assistance throughout my stay in his country.

I would also like to express my sincere gratitude to Ms. Diana Schwartz for gracious assistance at every step taken during this evaluation as well as her most helpful suggestions and guidance.

MIDTERM EVALUATION
SIGHTREACH: AN EYE CARE PROGRAM
FOR THE UNDERSERVED AND CHILDREN IN MALAWI

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I. INTRODUCTION

Malawi is a sub-Saharan African country with an area of 118,000 square kilometers and a population of slightly more than 10,000 inhabitants. The population is overwhelmingly rural, and it is distributed in widely dispersed, small villages. Subsistence agriculture is the usual source of income. Malawi is one of the poorest of the sub-Saharan countries with GDP per capita of US $153.

II. METHODOLOGY

This evaluation was conducted through document reviews, including the Detailed Implementation Plan for Malawi, the First Annual Progress Report of the SightReach Program dated October 1994, and the report by Dr. Clare Gilbert to the International Eye Foundation (IEF), "Childhood Blindness and Eye Disease in Malawi," March 1994.

Interviews and field visits also formed an integral part of the evaluation. The following individuals were interviewed:

Mr. Joseph S. Canner, IEF, Malawi

Dr. Moses Chirambo, Ophthalmologist, Sight First, Malawi

Mr. Deighton Davila, Ophthalmologic Medical Assistant

Mr. Steve Kanjoloti, Ophthalmologic Medical Assistant

Mr. D. Kalitsiro, Headmaster, Chilanga School for the Blind

Dr. Rosemary Lowdon, Contract optometrist, IEF, Malawi

Mr. T. B. Maladza, Headmaster, Montfort College, Limbe

Mr. Chris McDermott, USAID Health and Population Officer

Ms. Karen Van Dijk, Christoffel Blindenmission

Field visits included the IEF headquarters in Blantyre; Montfort College, Limbe; the town of Chikawa and two nearby villages, and the School for the Blind in Chilanga.

III. Project Design

This project was targeted to serve blind and visually impaired children in Malawi, particularly to identify children who may benefit for surgery and to assist in the provision of surgical services for such children. This goal is to be accomplished by carrying out the following activities:

A. Conducting a survey in various schools for the blind and other schools in which blind or visually impaired children have been integrated into the study body. This survey will provide additional insight into the causes of blindness and visual impairment of children.

B. Providing training to various paramedical personnel and school teachers in primary eye care, screening techniques for assessing visual acuity, and the prevention of eye disease, particularly that associated with vitamin A deficiency.

C. Make available the services of consultants in pediatric ophthalmologic surgery.

IV. Progress to date

A. Survey of Blind Children

Dr. Clare Gilbert examined a total of 260 children in 12 schools in March 1995. The data generated by this survey have been tabulated and analyzed, and a report has been prepared.

Dr. Gilbert reported that 218 (84%) of those children examined had acuity in the better eye of less than 20/200. The main causes of blindness were corneal scarring and phthisis bulbi. These two disorders accounted for 56% of all cases of blindness. Most of these children had a history of visual loss following measles. It is noteworthy that half of these children had been treated with traditional eye remedies. Dr. Gilbert suggested that vitamin A deficiency is likely to be a major factor in the etiology of these cases of blindness. She added that other possible causes of corneal scarring were ophthalmia neonatorum and herpes simplex keratitis.

A number of those children who were found to suffer from low visual acuity, rather than blindness, have been refracted. Ms. Karen Van Dijk of the Christoffel-Blindenmission is following up on those children, who are in need of surgery.

B Training

Training in screening for visual acuity and evaluating the eyes for gross evidence of disease was delayed when the only ophthalmologist in southern Malawi left the country. The Director of the IEF program in Malawi decided very rationally that there was little point in identifying children who could benefit from ophthalmologic surgery if the services of an ophthalmologist were not available.

Two ophthalmologists have been identified who are coming to work in the southern region, and the Director decided to concentrate the training of personnel in the Chikwawa District in the south.

Three members of the local IEF staff in Chikwawa have been trained as trainers. The latter in turn have trained ten (10) Health Surveillance Assistants (HSA) as well as four Health Assistants. The latter have had considerably more training in health care than the HSAs. HSAs constitute the lowest level workers in the ministry of Health, and the conduct immunization clinics, inspect local sanitary conditions, and provide oral rehydration for children suffering from diarrhea. This list of duties is not all inclusive. These para-professionals do not have regular access to transportation. There are 120 of them in Chikwawa.

The IEF Director in Malawi has decided to concentrate training in those areas where there is a the greatest likelihood of appropriate follow-up of children and adults with visual and eye problems. There is an Ophthalmologic Medical Assistant in Chikwawa. I had the opportunity to interview him, and he impressed me as both capable and dedicated.

C. Upgrading pediatric ophthalmologic surgery

This project originally contemplated providing consultants in pediatric ophthalmologic surgery, i. e., visiting volunteers, to work one to two weeks a year with the staff of the Queen Elizabeth Central Hospital in Blantyre. This has not been feasible since the ophthalmologist, who was on the staff of that hospital, has left the country and has not been replace.

One pediatric ophthalmology consultant visited Malawi with the support of IEF, Bethesda. This individual reportedly said there was little point in continuing this aspect of the program since almost any ophthalmologist on the staff of the Queen Elizabeth Central Hospital would be capable of providing the kinds of surgical services required in this area of Malawi.

V. Monitoring and evaluation

Monitoring and evaluation are related in that both involve assessing various outcome measures. IEF is fortunate in counting on the services of the present Director of IEF, Malawi, Mr. Joseph S. Canner. He has an excellent background in computer science, survey methodology, statistical inference, and demography, and he has had extensive experience in these fields both domestically and abroad. His education and experience make him an ideal person for conducting on-going monitoring and evaluation of this project.

VI. Additional observations

My interviews with Ms. Karen van Dijk, Mr. Canner, and Mrs. Steve Kanjoloti, the Ophthalmologic Medical Assistant in Chikawa as well as Dr. Clare Gilbert's report suggested that traditional healers constitute a serious problem with regard to the prevention of blindness. It seems clear that these individuals regularly put corrosive substances on the cornea, which almost certainly aggravates the pre-existing disorder and in all likelihood leads to corneal scarring and all too often, blindness. Some efforts have been made to train traditional healers to limit their interventions to measures that will not cause harm. Training

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all of the traditional healers in Malawi would obviously be a formidable undertaking.

Dr. Gilbert's report also suggested that corneal scarring may in a number of instances be due to untreated or inappropriately treated ophthalmia neonatorum. The latter, of course, is a completely preventable condition. Dr. Moses Chirambo, Malawi's highly respected ophthalmologist, felt that it was likely that few if any cases of ophthalmia neonatorum occurred in Malawi. He pointed out that there is some kind of medical supervision of most deliveries in Malawi, and he thought that the prophylactic use of antibiotic eye drops in the newborn was all but universal. It would be most helpful to know whether or not the disorder is a cause of blindness in the newborn. If indeed it is, there are, of course, measures that could be taken to prevent the disease.

Tetracycline ointment is widely used in the treatment of conjunctivitis in the Chikawa District by both the Ophthalmologic Medical Assistants and the Health Surveillance Assistants, and apparently, this generally gives good results at least in the hands of the Ophthalmologic Medical Assistants. Whether or not the ointment is used for sufficient periods of time in most cases to assure optimal results is not however clear.

VII. Recommendations, IEF Malawi

A. **Consider carrying out a simple investigation regarding the nature and extent of the adverse consequences of interventions by traditional healers.** Of course, resources are finite, and they are limited in Malawi. Nonetheless, it might be feasible to ask both hose doing screening in the villages to always inquire about any previous treatment for a condition of the eyes, the individual who provided the treatment, and the outcome and to forward the information to IEF headquarters in Chikawa. Clearly, this may not be possible in view of the

limitation of resources, but it would surely be worth trying on a limited scope initially.

B. **Consider instituting continual surveillance regarding the incidence of ophthalmia neonatorum in selected rural maternity centers.** If the extent of the problem can be quantified with a reasonably reliable estimate, it might be possible to get additional resources to prevent this disease.

C. **Periodically evaluate the quality of the screening performed by Health Surveillance Assistants.** Individuals with even advanced training can become negligent in the performance of routine tasks with the passage of time. It is important to know this has happened in the event that it should occur.

D. **Consider providing additional training to Ophthalmologic Medical Assistants in the Chikawa District utilizing IEF consultants who are sent to Malawi for whatever reasons.**

VIII. Recommendations, IEF, Bethesda, Maryland

A. **Make every effort to send IEF, Bethesda, personnel to Malawi as frequently as possible.** Blantyre is singularly isolated, and improved communications on the part of IEF's local and central staff would almost certainly result in improved implementation of the SightReach Program. Perhaps IEF staff and some of its consultants on route to Europe or Asia could stop over in Malawi at little additional cost.

B. **Consider sending a second pediatric ophthalmologist to Malawi for a second opinion regarding the utility of sending pediatric ophthalmologist to Malawi on a regular basis.**

C. **Consider using Dr. Joseph S. Canner, IEF Staff, Malawi, as a statistical consultant for research efforts related to other IEF programs in African countries and for evaluations requiring survey research.** Mr. Conner's

unique qualifications in statistics and demography should be utilized to a greater extent if that is feasible.

IX. Acknowledgments

I am deeply grateful for the unfailingly courteous and warm receptions afforded me by all of the Malawians I met, particularly Mr. D. Kalitsiro and Mrs. T. B. Maladza. Mrs. Karen Dijk, Dr. Rosemary Lowden, and Mr. Joseph S. Canner gave very generously of their time in an effort to provide me with greater insights in this program.

DRAFT

MIDTERM EVALUATION, FINAL REPORT
INTERNATIONAL EYE FOUNDATION MATCHING GRANT
SIGHTREACH PROGRAM IN GUATEMALA

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July 24, 1995

EXECUTIVE SUMMARY

The SightReach Program was initiated in Guatemala in August 1993. Four ophthalmologists have received their basic equipment from the ResPack Program, and two have also received the equipment necessary for both minor and major surgery. All of these ophthalmologists are providing eye care in underserved areas. Although the circumstances that make it possible are rather unique, one ophthalmologist has performed several hundred cataract operations in addition to providing other services.

Sixty-one (61) individuals including physicians, nurses, and auxiliary health personnel have received instruction in primary eye care., i. e., the detection of visual problems, particularly diminished visual acuity children. All of them have attempted to refer individuals with visual problems to appropriate centers for care. Unhappily, it seems doubtful that the individuals so referred were actually evaluated by an ophthalmologist.

One Guatemalan ophthalmologist is currently receiving extensive training in pediatric ophthalmology in India, and it appears that she will be able to provide specialized care in this field at the "Dr. Rodolfo Robles" Eye and Ear Hospital in Guatemala City.

A survey of the children in the School for the Blind in Guatemala City has been conducted, but the data have not as yet been analyzed nor the report completed.

I. INTRODUCTION

DESCRIPTION OF PROGRAM: The SightReach program in Guatemala has two components: ResPack, which provides ophthalmologic equipment to ophthalmologists, who have just started to practice and have agreed to offer their services part time in underserved areas. The other component, ChildSight, trains health personnel in evaluating visual acuity, especially in children, and referring those with visual problems for diagnosis and treatment. The SightReach program was initiated in Guatemala in August 1993.

OBJECTIVES AND GOALS: The goal of the ResPack program is to increase access to ophthalmologic care by helping young ophthalmologists in establishing practices in underserved areas by providing them with the basic equipment needed to do so. The program plans to provide such equipment to three to five ophthalmologists a year for a period of three years. It also contemplates providing such participants with training in the maintenance and repair of equipment as well as in the financial management of an ophthalmologic practice.

The goals of the ChildSight program are 1) to enhance the system for the identification, treatment and referral of children whose vision can be improved by ocular surgery and 2) to upgrade the abilities of tertiary centers to provide pediatric ophthalmologic care.

The objectives of the program include 1) conducting a survey of the children in the School for the Blind, and undertaking four workshops for nurses and physicians for the detection of visual problems in children and their appropriate referral.

II. METHODOLOGY

The methodology employed for this evaluation included document reviews, especially the Detailed Implementation Plan for Guatemala, March 1994; the First Annual Progress Report for the Period of August 15, 1993 - August 31, 1994; and

the monthly reports for the period of September - December 1994 and January 1995 submitted by Dr. Edgar Orlando Oliva de Leon, one of the Coordinators of the Guatemalan Matching Grant Program.

The other feature of the methodology consisted of interviewing the following:

Dr. Fernando Beltranena J.,* Director, "Dr. Rodolfo Robles" Eye and Ear Hospital, Guatemala City,

Dr. Miguel Escobar, Administrative Director, "Dr. Rodolfo Robles" Eye and Ear Hospital, Guatemala City,

Dr. Arturo Roberto Quevedo, Director of the Ophthalmology Residency Program, Roosevelt Hospital, Guatemala City,

Dr. Edmundo Alvarez, Coordinator, International Eye Foundation, Guatemala City,

Dr. Edgar Orlando Oliva de Leon, Coordinator International Eye Foundation, Guatemala City, and ResPack physician, Zacapa,

Dr. Antonio Hernandez Gallardo,* ResPack physician, Jutiapa

Dr. Gonzalo Cruz Dias,* ResPack physician, Huehuetenango,

Dr. Sidney Morales, ResPack Physician, Morales, Izabal,

Dra. Marisol Batres,* Regional Center for the Prevention of Blindness, Zaragoza,

Sra. Josefina Castro de Ajsivinac,* Nurse, Regional Center for the Prevention of Blindness, Zaragoza,

Srta. Antonia Valle,* Social Worker, Regional Center for the Prevention of Blindness, Zaragoza,

Sra. Rosa Amalia de Velasquez, Social Worker, "Dr. Rodolfo Robles" Eye and Ear Hospital, Guatemala City,

Dr. Julio Rosales Gomez, Medical Director, Health Center, Coban,

Sra. Ana del Carmen de Lopez, Nurse, Health Center, Coban,

Sra. Silvia de Oxom, Social Worker, Regional Center for the Prevention of Blindness, Coban,

Dr. Lucio Herrera,* Association of Community Health Services, Zaragoza,

and Sixteen physicians, dentists, nurses, and auxiliary health personnel,** participants, in ChildSight workshops

* Interviewed by Dr. Manuel de Leon, a private consultant, IEF/Guatemala

** Interviewed by Ms. Diana Schwarz, IEF/Bethesda, Md., Dr. Manual de Leon, and the author

It should be noted that some of the individuals listed above were interviewed twice. For example, Dr. Edgar Orlando Oliva de Leon was interviewed once in his capacity as a Coordinator of the International Eye Foundation/Guatemala, and also as a ResPack physician.

III. FINDINGS

MEASURABLE INPUTS AND OUTPUTS, RESPACK: Sets of basic ophthalmologic equipment have been purchased by four ophthalmologists in Guatemala. One of them had not opened his office at the time of these interviews. Of the three ophthalmologists who were using their equipment, two stated they were satisfied with its quality. One ophthalmologist said that the lensometer did not function well, and he also complained of a dim light in the keratometer.

Four of the five physicians interviewed had attended the workshop on the maintenance and repair of equipment as well as the one on the administration of an ophthalmologic practice. All four expressed their satisfaction with the quality of both courses. One physician only attended the workshop of the management of an ophthalmologic practice, and he was very satisfied with it.

The three ResPack physicians currently in practice have treated approximately 1,800 patients since they opened their offices. This estimate is not

based on clinic records, and therefore, it is almost certainly only roughly reliable. Since only one of these three physicians practices in a community where there is another ophthalmologist, it is clear however that most of these patients would not have received attention for their visual problems were it not for the ResPack physicians.

Any attempt to develop an estimate regarding the number of patients that were treated without charge by the ResPack physicians is certain to be wildly inaccurate, but it is clear that many were.

Only two of the physicians are for performing surgery for cataract. One of them has performed seven operations for cataract, and the other has performed several hundred. It should be noted that the ophthalmologist who has such a large surgical practice enjoys many advantages that are unique to him. He received a great deal of financial aid in buying a large amount of surgical equipment, and he has a physician, who assists him at no charge when he operates.

MEASURABLE INPUTS AND OUTPUTS, CHILDSIGHT:

IEF/Guatemala has trained 61 individuals in primary attention for eye care. Eight were physicians, including five in Coban and three in Chimaltenango. Twenty-two (22) nurses in Coban were also trained as well as 28 auxiliary health personnel, 11 in Chimaltenango and 17 in Coban. A specialist in nutrition, a dentist, and a health technician were similarly trained.

Unhappily, it is impossible to develop a reasonable estimate regarding the number of children who have been found to have visual problems as a result of the above training. It is similarly impossible to estimate how many children detected with visual problems have been referred to appropriate centers for diagnosis and treatment.

Some of the auxiliary health personnel in the Zaragoza area who were interviewed by Dr. de Leon insisted they had indeed referred children for care to the Regional Center for the Prevention of Blindness in Zaragoza. This is in contrast with the information provided by the staff of the latter center, who told Dr. de Leon that they had never received a referral from any individual trained through the ChildSight program. Of course, it is possible that some children were referred and treated, but their parents may have neglected to bring the referral slips with them to the Regional Center.

Again, it is difficult to assess what has happened in the Alta Verapaz area. It seems quite clear that some of the auxiliary health personnel in that area identified children with visual problems and attempted to refer them to the Regional Center for the Prevention of Blindness in San Pedro Carcha.

Two of the four auxiliary nurses I interviewed told me that they had great difficulty when they tried to refer patients to the Regional Center. Outpatient clinics at the Regional Center are only held two days a week, and only ten patients are seen on each of those days. The auxiliary nurses told me that some of the families with children with visual problems had walked for several hours from distant villages only to find that their children could not be examined because the ten patients to be examined had already been selected. Not surprisingly, these families felt they had been cruelly deceived.

I was not able to interview the ophthalmologist at the Regional Center for the Prevention of Blindness in San Pedro Carcha, but I was granted an interview by the social worker of that institution. She was adamant in her insistence that no children had been referred to the Regional Center by individuals trained during the Childsight workshops.

RELEVANCE TO EYE CARE PROBLEMS, RESPACK: The emphasis of this program is, of course, overwhelmingly curative. It does have a secondary

prevention aspect (secondary prevention refers to the early detection and treatment of disease in order to minimize the adverse effects on the patient). Patients with glaucoma or proliferative diabetic retinopathy can be treated or referred, and that will certainly prevent blindness. Moreover, removing cataracts restores vision, and hence, that prevents blindness as well.

The ChildSight program has the potential to prevent blindness by identifying very young children with congenital cataracts, strabismus and corneal opacities and referring them for surgical management.

EFFECTIVENESS: The ResPack program has clearly had an impact in improving access to modern ophthalmologic care, including surgery. It seems entirely possible, perhaps even likely, that tow of the four ResPack physicians will ultimately practice full time in the communities outside of the capital where they are now working.

Whether or not the ChildSight program will ultimately achieve its objectives remains to be seen.

The main barrier to providing eye care for the people of underserved areas is obviously poverty. It should also be noted that the limited educational attainment of people of the rural areas, especially the Indians, is also a real impediment. Several auxiliary nurses in the Coban area pointed out to me that the rural people are fearful of seeking help from a physician for a child who has an obvious visual problem such as strabismus. The parents are fearful that the ophthalmologist will remove the affected eye.

DESIGN AND IMPLEMENTATION: The objectives established by IEF/Bethesda for the ResPack program area clearly measurable, and it is a relatively simple matter to obtain quantitative data in this regard from physicians' records. Unhappily, data collection from the ResPack physicians has not been very successful thus far. This is particularly true for the reporting requirements for

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the financial aspect of the physicians' practices. Several ResPack physicians have complained that the latter reporting requirement is onerous, and I am confident that, I, too, would find it so were I in practice. It is worth noting that physicians are well known for their aversion to "paper work."

Collecting data with regard to the number of referrals accomplished through the ChildSight project would be difficult. It could best be accomplished through randomly selecting a sample of physicians, nurses, and auxiliary health personnel, who have been trained in screening and referral. Then, one would have to randomly select individuals, who had been told to seek consultation, and to interview those in the sample to see whether or not the attempts at referral were successful. Of course, this would be time-consuming and costly.

The fees charged by the ResPack ophthalmologists are reasonable by almost any standard. It is clear that all of them currently in practice are providing services to the needy without charge.

As noted earlier, the ResPack physicians, who attended the workshops on maintenance and repair of equipment and the one on the management of an office practice were very enthusiastic about the quality of these two workshops. It was also clear however that none of them were utilizing the approach they were taught regarding financial control of their practices.

Two of the three physicians have participated in programs designed to be of service to their communities. One of them has taken part in 12 mass campaigns supported by the local Lions Clubs, an admirable record. The greatest obstacle to providing community service appeared to be the lack of time.

HUMAN RESOURCES: One Coordinator works for IEF/Guatemala eight hours per week, and he devotes all of his time to Matching Grant activities. The other Coordinator, also a physician, devotes about 15% of his time to them, and

the Administrator of IEF/Guatemala devotes about 30% of his time to Matching Grant Activities.

Both Coordinators were agreed that this is enough staff time to meet the needs of program implementation at this time. As the number of ResPack physicians increases, this will undoubtedly place a strain on the resources available.

QUALITY: The IEF/Guatemala staff certainly has the professional knowledge and administrative skills to implement the SightReach program in the judgment of this observer.

SUPERVISION AND MONITORING: The Coordinators are doing an able job in providing the supervision and monitoring for the SightReach program as it is presently constituted. As the ResPack program increases in size, i. e., when it has more physicians, additional personnel may be needed to carry out these functions adequately.

USE OF CENTRAL FUNDING: The frequency and timing of visits to IEF/Guatemala by the IEF/Bethesda staff have been entirely appropriate.

USE OF TECHNICAL SUPPORT: Technical support has consisted largely in the use of consultants to provide the workshops on the repair and maintenance of equipment and on the financial management of an office practice.

ASSESSMENT OF COUNTERPART RELATIONS: Two counterpart relationships stand out with regard to IEF/Guatemala. The Coordinators of the ResPack Program have excellent relationships with the Ophthalmology Residency Program staff at Roosevelt Hospital . The relationship of the staff of the "Dr. Rodolfo Robles" Eye and Ear Hospital are also of great importance, and while the relationship between the Coordinators and the leaders of the hospital appear to be cordial, I have the distinct impression that they are not as close as the association

of the Coordinators with the Director of the Ophthalmology Residency Program at Roosevelt Hospital.

Dr. de Leon was assured by the staff of the Regional Center for the Prevention of Blindness in Zaragoza that they were willing to collaborate in any way possible with the ChildSight Program.

This may not be the case with the Regional Center for the Prevention of Blindness in San Pedro Carcha. When Ms. Diana Schwarz, Dr. Orlando Oliva, and I arrived at the Center, the reception area was practically empty. There were certainly no more than three patients waiting to be seen. Dr. Orlando Oliva spoke to the ophthalmologist of the Center, and then, he told me that the latter said he was "very busy." Dr. Orlando Oliva said however that I could interview the social worker of the Regional Center and I did so.

To describe my reception as rather cool is to considerably understate the fact. During my eleven years in Latin America, I have been received with a comparable lack of warmth and courtesy, but such occasions have been rare. If the apparent indifference of the ophthalmologist of the Regional Center and the coolness of the social worker reflected their attitudes toward a foreigner, the incident was trivial in importance. If however their attitudes reflected their feelings toward IEF/Guatemala and referrals from ChildSight workers, this represents a serious problem.

REFERRAL RELATIONSHIPS: See the previous section, Assessment of Counterpart Relations and the section entitled, "Measurable Inputs and Outputs, Childsight."

NETWORKING: This program appears to have excellent and potentially useful relationships with the personnel of the Ministry of Public Health who work in the health centers of Coban, San Juan Chamelco, and San Pedro Carcha.

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BUDGET MANAGEMENT: Expenditures thus far have been less than those expected. This is due primarily to initial delays in implementing the program. Budget management has been responsible, and the program objectives can be achieved with the funds that remain. There is a possibility that the budget may be underspent at the end of the program.

SUSTAINABILITY: It seems very likely that the Residency Program in Ophthalmology at Roosevelt Hospital could continue the ResPack program if it could find the financial support needed to do so. It is also entirely possible that the Association for Community Health Services could provide the necessary support for the ChildSight program with a minimum amount of financial assistance.

The ResPack physicians now in practice will certainly continue to provide eye care, for that is their chosen profession. This is speculative, but it is possible that two of them may ultimately practice full time in communities outside of Guatemala City.

The earning capacity of ophthalmologists is increased notably if they have the equipment for major and minor surgery. Two ResPack physicians have such equipment. Whether or not the others will be able to acquire it is problematic.

RECURRENT COSTS AND RECOVERY MECHANISMS: Reducing costs is not a pressing concern at this moment since adequate funding is still available. The costs of administration of the program are minimal, and the costs of implementing the program are reasonable. It is not possible at this time to calculate the cost per beneficiary. The costs of monitoring the ResPack program are not likely to be sustainable.

The fees charged by the ResPack physicians compare very favorable with those charged by ophthalmologists in similar communities. It seems clear that the fees charged by those ophthalmologists, who are doing minor surgery and cataract

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extractions, will be sufficient to pay for their equipment. Donations of medications by IEF/Bethesda have been very helpful since these are given to patients with limited resources. As a result, such patients are more likely to be able to pay for their consultations.

IEF/Bethesda has not calculated the amount of money needed to provide cost-recovery mechanisms for eye care services provided by private institutions, and in my opinion, this should be the responsibility of the institutions themselves, not IEF/Bethesda.

IV. GENERAL COMMENTS

I was only able to interview two ResPack physicians, and I was very favorably impressed by both of them. Admittedly, one has a huge amount of equipment available, thanks to the help of a friend. One can only hope that both of them will continue to provide services in underserved areas where the need is so pressing.

I cannot help but be most concerned about the ChildSight program. I have no reason to suppose that the physicians, nurses, and auxiliary health personnel, who were trained by the program received anything other than excellent training. Indeed, it would come as a great surprise to me to learn this was not the case. My concern lies with the accessibility of services when patients, especially children, are referred. It appears that this is a serious problem, particularly in the Alta Verapaz area.

It should be noted that on of the cardinal principles of screening is that screening should <u>not</u> be undertaken if facilities for diagnosis and treatment are not readily available. There is little point in instituting a screening program for cancer of the uterine cervix, for example, even if diagnostic services are available if those who have the disease cannot be treated. Such a program would create enormous

anxiety and dread on the part of those with the disease, and hence, it should not be undertaken at all.

V. RECOMMENDATIONS

RECOMMENDATIONS, IEF/BETHESDA

1. If it is acceptable to USAID, abolish the requirements for ResPack physicians to submit monthly financial statements and reduce other reporting requirements to the greatest extent possible that is consistent with sound monitoring principles.

2. Ask two ophthalmologists in the Bethesda area to examine a lensometer of the type included in the ResPack basic package and determine if it functions sufficiently well to continue to order it for this purpose.

RECOMMENDATIONS, IEF/GUATEMALA

1. Discuss the difficulties that have been encountered in referring patients to the Regional Center for the Prevention of Blindness in Sand Pedro Carcha with the Director of the "Rodolfo Robles" Eye and Ear Hospital and his staff and ask their assistance in improving the referral process.

2. If it is apparent that the Executive Staff of the "Rodolfo Robles" Eye and Ear Hospital is unable or unwilling to improve the referral process in the Alta Verapaz area, seek other mechanisms to provide referrals such as mass campaigns *("jornadas")* with the assistance of Lions Clubs, Rotary Clubs, or other similar organizations.

3. If it is apparent that adequate mechanisms for referral of patients with visual problems is not feasible in the Alta Verapaz area, abandon the ChildSight program.

VI. ACKNOWLEDGMENTS

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