MAYFLOWER MEDICAL OUTREACH

PROGRAM OVERVIEW
CGHH Annual Meeting 2015



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MAYFLOWER MEDICAL OUTREACH, INC.

Strengthening hearing health and deaf education in Nicaragua



NICARAGUA



- Second poorest country in the Western Hemisphere: 6 million people
- Very basic health care provided by the Ministry of Health (MINSA)
- 1 audiologist/2 speech therapists in Managua: private practice/MINSA
- 49 ENT doctors: concentrated in Managua





JINOTEGA, NICARAGUA

- Located 100 miles north of Managua
- Coffee growing region
- Population: approximately 123,000 (417,000 regional)
- Employment: coffee trade, agricultural
- Indigent but basic needs are provided for
- War-torn region during the Sandinista-Contra war
- 1 hospital (Victoria Motta)
- Prior to MMO: no access to otologic care
- Prior to MMO: no access to hearing aids



MAYFLOWER MEDICAL OUTREACH MISSION STATEMENT



Provide ENT and Audiology Services

Provide opportunities for deaf students

Strengthen training in the fields of ENT, medicine, audiology and deaf education

HISTORY



- Formed by the Mayflower Congregational Church in Oklahoma City, Oklahoma
- First trip to Nicaragua: 1998
- Concentrate resources in one location
- First medical mission trip to Jinotega: 1999
- ENT and audiology clinic housed in an Eye clinic adjacent to the Victoria Motta Hospital
- 2003: 2 room audiology sound booth suite constructed
- 501 (c) 3 charity formed: 2010

BOARDING SCHOOL FOR RURAL DEAF CHILDREN



- Albergue Mayflower 2007:
 25 students ages 7 and up
- Attend the Max Senqui school (NSL)
- Educational enrichment program
- Vocational training for teenagers
- Audiological protocol for testing/ hearing aid fittings/management

OTOLARYNGOLOGY SERVICES



- Provide medical care
- Dispense medications
- Provide surgical services
- Support ENT residency training
- Created a full-time position for a Nicaraguan ENT doctor supported by MINSA
- Ototoxic prevention program
- Genetic study

AUDIOLOGY PROGRAM





- Provide complete audiological evaluations
- 2 room audiology sound booth
- Audiometer, impedance equipment, SF/ COR
- donations, loans, discounts
- Hearing aid fittings
- School screenings
- Forms developed in Spanish

EQUIPMENT MAINTENANCE



- Daily biologic checks
- Compare tests from home
- Compare tests: portable and diagnostic audiometer
- Sound field speaker calibration
- Annual calibration: goal
- Availability of a "handyman" during trip

HEARING AID PROGRAM

- Fit Hearing Aids as per WHO guidelines
 - all ages
 - children: bilateral
 - adults: unilateral

WHO GUIDELINES FOR HEARING AID FITTINGS

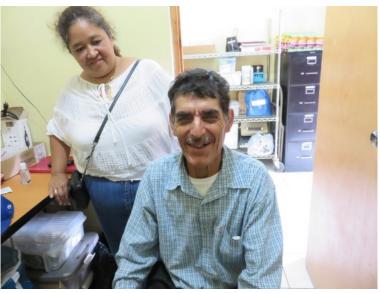
(Hearing loss in the better hearing ear)

- ✓ Children: (<15 years): 31dB or greater (31-80dB)
- ✓ Adults: 41dB or greater (41-80dB)
- ✓ Permanent Hearing Loss
- ✓ Unaided 4 frequency PTA: 500, 1k, 2k 4k Hz

HEARING AIDS







- New digital BTE models: trimpot adjustments
- Different models: mild to profound hearing loss
- Adjustments: gain, frequency response, MPO
- Volume controls/Telecoils

INTERNATIONAL HUMANITARIAN HEARING AID PURCHASING PROGRAM

- High quality low cost hearing aids available in low-resource countries
- In existence: since 1995 (different parent organizations)
- Prices range from \$59-\$83
- Administered by Mayflower Medical Outreach
- Supported by the Coalition for Global Hearing Health



www.ihhapp.org

HEARING AID FITTINGS







- Hearing aid batteries: one year supply
 - replenished annually
- Earmolds: temporary, custom, pre-made
- Makeshift dri-aid kit: 20 kernels of rice
- Written materials
- Counseling
- Record keeping
- Donations

HEARING AID VERIFICATION AND VALIDATION



- Real ear measurements
- Soundfield testing
- Ling 6 sounds



COCHLEAR IMPLANT AND BAHA PROGRAM







- Not covered by the public health system
- Cochlear Implants
 - nascent program
 - 16 recipients
 - programming and therapy services: Managua
 - multiple challenges
- Baha
 - surgical and soft band
 - 8 recipients

MISSION TRIPS



- Twice yearly group trips/9 days each
- Focus: training, hearing aids
- Audiologists nationwide
 - website, word of mouth
 - participant's handbook, teleconferencing
 - core group: new volunteers welcome
- Hearing aids, equipment and supplies
 - hand carried, suitcases, container

PATIENT PROFILE



- Seen through MINSA
- Wide geographic reach
 - Centered in the northern region of the country
- Learn about the mission:
 - radio, word of mouth, our local partners/local staff
 - other NGO's
 - established presence
- Travel by bus and by foot
- overnight stay
- Long clinic waits

FORMING ALLIANCES











- Partner with professionals
 - otolaryngologists
 - audiologist (day of free testing)
 - speech therapists
- Partner with organizations
 - MINSA/SILAIS
 - Todos Con Voz
 - Ministry of Education
 - Los Pipitos
 - ANSNIC
 - Casa Materna
 - Rotary Club
 - Other NGO's

Asociación de Padres de Familia con Hijos Discapacitados



MAYFLOWER MEDICAL OUTREACH STAFF

- In country operations manager
 - advances the program
 - day to day operations
- In country Nicaragua medical director (ENT physician)
 - advances the program
 - administrative support
- Audiometric technician
- Albergue Mayflower staff
- U.S. based office administrator

SUSTAINABILITY OF THE AUDIOLOGY PROGRAM BETWEEN TRIPS

- Audiometric technician year-round
- Audiological evaluations
- Custom earmolds are fitted and made
- Hearing aid troubleshooting
- Batteries dispensed
- Patient statistics maintained
- Communication with Mayflower audiologist to coordinate and plan care
- In-country staff helps to plan mission trips

SUSTAINING THE AUDIOLOGY PROGRAM ON ITS OWN



- Key concept in international development
- Strengthen clinical skills
- Provide hearing aid fittings year round
- Clinic expansion to different regions of the country
 - 1 new ENT/audiology clinic completed in Esteli
 - 1 new clinic pending in Leon
- Formalized audiometric technician training program
 - inaugural class: 7 students
- Provide ongoing support and oversight

AUDIOMETRIC TECHNICIAN TRAINING PROGRAM





- Academic course work
 - in-country lectures for one week
 - workbook provided
 - textbook and otoscope
- AICME: www.aicme.com
 - International Hearing Care Technician program
- Clinical training
 - direct supervision: 2 months
 - independent: 6 months
- Written and clinical exams
- Certificate granted by MINSA
 - employed by MINSA

FINANCIAL SUPPORT





- Fundraising events: car raffles, rummage sale
- Grants
- Financial donations: individuals, corporate, church
- Sponsorships for the students in the Albergue Mayflower
- Equipment/supplies: donations, discounts
- Create local businesses to support programs

FUTURE GOALS

- Continued clinic expansion
- National first grade hearing screening program
- Strengthen speech therapy services
- Early hearing loss detection and intervention program
- Challenges
 - lack of resources



RECOMMENDATIONS



- Don't lose sight of the big picture
 - remain open-minded and resourceful
- Form relationships and network
 - key to program development and expansion
 - allows for collegial collaboration
- Learn something new on every trip
 - strengthen your program

