REPORT OF

OCULOPLASTIC AND RECONSTRUCTIVE SURGERY MISSION

At Oudomxay Provincial Hospital, Lao PDR.

9-13 January 2017

Oudomxay Provincial Hospital
In Cooperation with:


And

Lao Rehabilitation Foundation (LRF), USA.
Visual disability and blindness are critical public health problems. These conditions create significant pain, irreversible damage and innumerable hardships for the concerned persons, both physically and mentally. Poor healthcare contributes to the stagnation of economic development and social affairs of the country. This is especially true in the northern provinces of Laos, such as Oudomxay province.

The main cause of blindness is cataract, however eyelid damages caused by trauma, traffic accidents, animal bites, ptosis, ectropion and tractional scars are other causes of visual disability that eventually also bring blindness. There are a lot of unattended cases especially in remote areas among poor families that cannot afford to travel to Vientiane capital or abroad for treatment. Eye specialists are few in Laos particularly oculoplastic surgeons. With no government funding allocated to develop skills of Lao ophthalmologists, patients have to rely on volunteers from abroad for treatment.

Beginning in 2008, cooperation between Lao Rehabilitation Foundation (LRF) and Mettapracharak Hospital of Thailand was established to assist a young man from LuangNamtha (Northern of Laos) with severe burns caused by lightning to perform eyelid reconstruction.

Cooperation continued in 2011 and 2013 to provide oculoplastic and reconstructive surgery missions at Ouomxay provincial hospital, this time with the participation of Bumrungrad and Nakornrajsema hospitals. The outcome of these missions has been highly successful, so far providing oculoplastic surgery to over 30 patients who otherwise could not have afforded such treatment in these remote provinces. Unfortunately many patients are still waiting for surgery.

This mission was the third oculoplastic surgery and DCR mission at Oudomxay Provincial Hospital and the first time dacryocustorhinostomy was performed by Endo DCR in Laos. The mission was funded by several doctors from Bumrungrad, Mettapracharak, Nakornrajsema, Bhumibol Adulyadej, Rutnin Eye Hospitals of Thailand in association with Lao Rehabilitation Foundation from USA.

I. OBJECTIVE
- To save and rehabilitate vision for a better quality of life.
- To develop the skills of Lao medical personnel by a cooperation between Oudomxay Provincial Hospital, Bumrungrad, Mettapracharak Maharaj Nakornrajsema, Bhumibol Adulyadej, Rutnin Eye hospitals and Lao Rehabilitation Foundation.

II. LOCATION AND DURATION
This mission took 5 days including transportation (January 9-13, 2017) at Oudomxay Provincial Hospital, Oudomxay province, Lao PDR.

III. TEAM WORK
There were 25 team members:

1. OUDOMXAY PROVINCIAL HOSPITAL (11):
   - Ophthalmologist 2
   - Anesthesiologists 2
   - Nurse Assistants 3
   - Ophthalmic Nurses 4
2. **THAI TEAM** (12):
   - Oculoplastic Surgeons 3
   - Oculoplastic surgeon Fellow 1
   - Glaucoma, Cataract Specialist 1
   - Pediatric Ophthalmologist 1
   - Ophthalmologist 1
   - General Medicine Doctor 1
   - Medical Volunteer 1
   - Nurse Practitioners 2
   - Technician 1

3. **LAO REHABILITATION FOUNDATION** (2):
   - President of LRF 1
   - Coordinator 1

**IV. MEDICAL EQUIPMENT**

This mission was performed with the use of quality automated equipment (Endo DCR machine):
1. Surgery equipment and medicine were imported from Thailand
2. Medicine and equipment for anesthesia was provided by Oudomxay Provincial Hospital with the support of LRF

**V. RESPONSIBLE UNIT**

1. **OUDOMXAY PROVINCIAL HOSPITAL**
   - Secured official agreements and approvals (LRF, MoH, MoFA).
   - Provided leadership to register patients and make appointments.
   - Provided location to examine and operate patients.

2. **BUMRUNGRAD, METAPACHARAK, JAROENKRUNGCHARAK HOSPITALS, THAILAND**
   - Provided expert oculoplastic surgeons.
   - Provided instrument and some medicines for surgery

3. **LAO REHABILITATION FOUNDATION**
   - Provided funding for medical equipment, medicine needed for anesthesia and post-surgery medicine.
   - Provided funding for blood testing, ECG, CT scan, and pre-surgery.

**VI. METHODOLOGY**

1. 1 year to prepare the mission, to find and register patients and make necessary appointments for pre-surgery and surgery.
   - The Lao team and local staff from Oudomxay provincial hospital (ophthalmologist, anesthesiologists, assistant nurses) worked together with Thai experts, LRF team to treat patients with eyelid diseases, Nasolacrimal duct obstruction, and cyst/tumor. The team examined and recorded observations before surgery for all cases who had registered and some new cases as they arrived. Services were free of charge for all patients.
Examination and surgery was performed by Thai specialists and Lao ophthalmologists with manual and automated equipment.

Surgery cases were separated by general anesthesia and local anesthesia.

Treatment was provided with the best medicine available and proper operating procedures.
- Most nasolacrimal duct obstruction cases were performed by Endo DCR and few cases by external DCR techniques.
- Severe eyelid correction or reconstruction surgery as well as other cases were provided with proper operating procedure and quality medicine.
- A few cases with tumor/cyst were performed by excision with pathology.

Lao ophthalmologists were instructed through observation.

Post-surgery care was provided. Thai experts were informed of patient’s post surgery status and monitored their progress from abroad.

VII. RESULTS

A total of 41 patients registered, 39 patients were examined. Surgery was performed on 35 cases (female: 23) which included:
- 3 severe eyelid conditions
- 7 ptosis
- 9 mild eyelid conditions (dermatochalasis, scar traction eye lid)
- 11 nasolacrimal ducts obstruction
- 2 esotropia
- 3 cyst/tumor (1 of 3 is carcinoma)

All operations were successful and there were no complications.

VIII. EXPENDITURE

The total expenditure for this mission was 9,958 USD (nine thousand nine hundred and fifty eight dollar). Supported by:
1. Thai doctors from Bumrungrad, Mettapracharak MaharajNakornrajsema, BhumibolAdulyadej, Rutnin Eye hospitals of Thailand: $6,035
2. Lao Rehabilitation Foundation, Inc. $3,923

Costs included:
- Medical supplies $2,372
- Medicine pre-intra and post surgery $1,670
- Transportation of teamwork $2,942
- Hotel/guesthouse $1,025
- Food and drink $1,329
- Other $620

(Details on attached file)
IX. ACCOMPLISHMENTS, WEAKNESSES AND RECOMMENDATIONS

1. ACCOMPLISHMENTS
   - Good cooperation between Oudomxay Hospital, Bumrungrad, Mettapracharak, Maharaj Nakornrajsema, Bhumibol Adulyadej, Rutnin Eye hospitals of Thailand and Lao Rehabilitation Foundation, USA.
   - Large teamwork could help all patients who had registered as well as some late arrival cases.
   - Patients with severe eyelid conditions who otherwise would not have access to treatment in Laos have received treatment.
   - This mission was important for the treatment and prevention of blindness for Lao people, particularly for those living in poverty.
   - Thai experts provided education and hands-on experience to Lao doctors.

2. WEAKNESSES
   - It took too much time to transport the Thai team and equipment from Bangkok to Luang Prabang airport to Oudomxay and back to Bangkok (2 days).

3. RECOMMENDATIONS
   - Allow more time for activities.

X. NEXT MISSION PLANNING

1. ACTIVITIES:
   1.1 Oculoplastic surgery.
   1.2 Nasolacrimal duct obstruction surgery by Endo & External Dacryocystorhinostomy.
   1.3 Cataract surgery by Phacoemulsification.
   1.4 Provide education and hands-on experience to Lao ophthalmologists.

2. LOCATION:
   - At Oudomxay or Luang Prabang Eye Hospitals, Lao PDR.

3. DATES:
   - Repeat mission in 2018 is under consideration