REPORT OF

HEALTH CARE FOR EAR-NOSE-THROAT SURGERY

At

Oudomxay Provincial Hospital
LAO, PDR

February 2-8, 2011

A Cooperation Between

Oudomxay Provincial Hospital,
Lao Rehabilitation Foundation (LRF)
Refer to the planning of Health Care Surgery for Ear-Nose-Throat of Oudomxay Provincial Hospital in 2011 document.
Refer to the agreement letter of Oudomxay Provincial Hospital and Provincial Public Health Department No. 011 of January 5th 2011.
Refer to the agreement letter of Oudomxay’s governor No. 423/G.UDX of January 6th 2011.
Refer to the agreement letter of minister of PoH no 087/ PoH of January 29th 2011.
Refer to the agreement letter of Head of Administration Office, Ministry of Foreign Affairs No. 171/MoFA of February 3rd 2011.

I. Background Information

1. Oudomxay Provincial Hospital

Oudomxay province is the centrally located province of the 4 Northern provinces of Laos. It borders Phongsaly, Lunag Namtha, Bokeo, Xayabury and Luang Praband provinces. High mountains cover 85% of the land. The population is 283,969 (2010) and many poor people live in remote areas. The economy is mainly agricultural and farming.

The public health care system includes 1 provincial hospital, 1 military hospital, 7 district hospitals and 41 health care centers.

Oudomxay Provincial Hospital: is the best government hospital of the northern provinces and is managed by the public health department. Health care services includes 4 main units: internal medicine, external medicine, gynaecology /obstetrics and pediatrics, with small dental, eye, ENT units. There are 85 beds with 130 staffs (87 F), which include:

- Specialist (postgraduate) 12 (2 anesthetists)
- Medical doctor (graduate) 28
- High level medicine (Training 4 years) 03
- Secondary level (Training 3 years) 46
- Primary level (training 1 year) 41

Health care services in 2010 provided care for 34,999 cases (OPD) that included:
- Oudomxay’s patients 32,846
- Other province’s patients 1,698
- Foreign patients 455

Health care services in 2010 provided care for 6,874 cases (ward).
The provincial hospital has an ENT department within the main hospital building where eye examinations and non-surgical treatment are administered. ENT surgery is undertaken in a shared operating theatre of the hospital and post-operative patients stay in the general medical ward. There is a plan to establish the Oudomxay Provincial Hospital as a Regional Hospital to expand service coverage to Luang Namtha, Bokeo and Phonsaly provinces. Human resources for ENT are 2 doctors, (one presently training in Vietnam for 3 years 2010-2012 and the other is currently on leave taking management training for 2 years 2010-2011.

ENT service is an important and necessary health care component of the provincial hospital; however it has limited functioning due to lack of specialist’s skills and surgical equipment. Often, patients must be referred to Mahosot hospital in Vientiane which most patients cannot afford.

In the past, the ENT team of ODX province and Lao Rehabilitation Foundation (LRF) organized mobile health care for ENT disease in remote area. Patients were treated with medicine as surgery could not be performed under general anesthesia outside of the hospital.

This mission is the first to service ENT patients at Oudomxay Provincial Hospital in cooperation with Lao Rehabilitation Foundation, USA.

II. Objective

1. General objective
   - To decrease the prevalence of ear-nose-throat disease.
   - Cooperation with US expert doctors for developing surgical skills of Lao medical personnel.

2. Specific objective
   - Improve the life of patients by surgical repair of cleft lip/cleft palate, thyroidectomy/tumor, myringotomy and tonsillectomy.
   - Teaching new technical and surgical skills to Oudomxay surgeons for cleft lip/palate, tonsillectomy, and myringotomy.

III. Location and Duration

This mission provided services at Oudomxay provincial hospital for 7 days from February 2-8, 2011.

IV. Team Work

There were 9 team members:

- Oudomxay Provincial Hospital (3):
  - E.N.T doctor 01
  - Nurse assistant 02
- **Setthathilat Hospital (Vientiane) (2):**
  - Thyroid surgeon 01
  - Anesthesiologist 01

- **USA Team (4):**
  - President of LRF 01
  - ENT surgeon 01
  - General surgeon 01
  - Coordinator 01

**V. INSTRUMENTS AND MEDICINE**

This mission was performed with the use of quality manual and automated equipment intended for mobile healthcare and effective medicines for treatment. It included:

1. Instruments and medicine for ENT service.
2. Instruments and medicine for ENT surgery
   (Detail on attaches files)

**VI. RESPONSIBLE UNIT**

1. **Oudomxay Provincial Hospital**
   - Secured official agreements (LRF, MoH, MoFA).
   - Provided information to appoint patients.
   - Provided operating room and invited Vientiane team.

2. **Lao Rehabilitation Foundation**
   - Provided fund for the medical instruments and medicine for the mission.
   - Provided expenses to include a per diem, and transportation and accommodations for the Lao team.

**VII. TECHNICAL ACTIVITY**

1. **Preparing**
   - 3 months to prepare (Nov 2010 to Jan 2011). Lao Rehabilitation, Lao coordinator and ENT doctor at Oudomxay hospital to inform the purpose, plan activities and get agreement from the Provincial hospital, Provincial PoH, governor, MoH and Administrative office of MoFA.
   - Register patients.
   - Prepare equipment, supplies, medicines, budget and teamwork with USA.

2. **Activities performed**

Providing service to all registered patients, the team used manual and automated equipment to examine and treat the patients.

Specialized surgeons from US, anesthesiologist and surgeon from Setthathilat hospital and Oudomxay ENT doctor join to:
- Check and prepare pre-surgery cases.

*ENT examined using flexible Laryngoscope
By Dr. Kyle Keojampa*
- Operated cleft lip/cleft palate repair, myringotomy, tonsillectomy and skin cancer.
- Taught new surgical techniques to Oudomxay Hospital's surgeon for cleft lip/cleft palate repair, myringotomy and tonsillectomy.

2.4 Other activities

- Lao Rehabilitation Foundation donated the ENT surgical microscope and medical equipment to Oudomxay Provincial Hospital.
VIII. RESULT

This mission examined all registered patients, with no regard to gender, age, ethnicity and religion free of charge with a total of 224 patients (179 females) – 7 surgeries were performed as follows:

**Examined:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Disease</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Otitis</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Tonsil (Amygdalitis)</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Hyperthyroid</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Nodule-goitre</td>
<td>57</td>
</tr>
<tr>
<td>5</td>
<td>Cleft lip/palate</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>ENT diseases other</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>224</strong></td>
</tr>
</tbody>
</table>

**Surgeries performed:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Treatment (Surgery)</th>
<th>Target</th>
<th>Treated (operated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Myringotomy</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Cleft lip/palate</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Tonsillectomy</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Thyroidectomy/Tumor</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Mastoid (Cholesteatumm)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

**BEFORE**

*Case cleft lip*

**AFTER**

*Case tumor (skin cancer)*

The same patient one day after surgery
IX. DISCUSSION

Expectedly, the patients were to be screened prior to the arrival of the surgical team. Lots of unregistered patient needed to be examined or re-examined which required two extra days.

Oudomxay hospital has 2 anesthesiologists; unfortunately one of them had been attending a meeting in Thailand for 45 days during the mission. We therefore invited an anesthesiologist from Sethathilat hospital in Vientiane to join the team. We also invited the thyroid surgeon from Sethathilat to join this mission as over 20 thyroid cases had registered to be examined. Unfortunately, the blood testing machine (T3, T4 and TSH) at the hospital malfunctioned resulting in the cancellation of surgeries of all hyperthyroid or nodule-goiter cases. Given the significant number of hyperthyroid and nodule-goiter (73 cases), we are planning another surgical mission for February 2012.

The number of surgeries performed is below target, because of the above mentioned problems.

X. CONCLUSION

This mission is the first ENT surgical mission at Oudomxay provincial hospital in cooperation with Lao Rehabilitation Foundation.

For the purpose of this mission, LRF has also provided medical equipment, medicine and supplies for the diagnosis and treatment of E.N.T diseases.

One of the most important aspects of this mission was to provide health care for the poor people while providing local medical staff with an opportunity to learn new techniques for examination, diagnosis and surgery for E.N.T related diseases through cooperation with foreign experts, while accumulating record data of hyperthyroid and nodule-goiter cases for the planning of the next mission.

XI. EXPENDITURE

The total expenditure of $24,863 USD (twenty four thousand eight hundred and sixty three USD) includes:

- Instruments and equipment from USA $15,500
- Transport medical equipment and medicine $1,413
- Transport and accommodation of US and Lao team $6,861
- Medicine (drugs) for patient $491
- Other $598

(Detail on attach files)
XII. RECOMMENDATIONS

- Oudomxay provincial public health and hospital should find a solution to take care of ENT patients during the absence of local ENT doctors for the next 2 years.
- LRF Inc. should continue cooperation and support with funds, medicine and equipment for hyperthyroid and nodule-goiter cases during the next mission at Oudomxay hospital.

Director of Oudomxay Provincial Hospital

Reporter

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