

# HEALTH

*Junior*

messenger



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## E d i t o r i a l

Most of you already went to the hospital, for a simple consultation because you were sick and needed to see a doctor, or for an hospitalization if you needed more care.

The hospital looks familiar, you know there are nurses and medics, you know that you can get medicines there. This is the visible part. We would like to bring you backstage, and present you what people usually do not see. You know you can get medicines, we will show you the pharmacy, and explain the history of the tablets. We will present you the different people that make the hospital work, the medics and nurses of course, but also the director, the midwives, the lab technicians, the cooks, the logisticians... You will discover in this magazine the Umpiem Hospital, with its specificities. However, most of it will be the same in the other camps, and outside as well, for example with the Maetao clinic. This overview of the hospital-world will also help you understand which services you can

access: the dental or the eye care, the mental health, the HIV counseling. You will also understand why sometimes, you may be sent to another hospital, outside of the camp.

Let's go for a day in hospital, and enjoy the discovery.



# (+) UMPIEM HOSPITAL + အုန်းပြင်မဆေးရုံ

## SUPPORT

- 14 Pharmacy
- 15 Administration
- 16 Polyvalent Consultation
- 17 Kitchen
- 18 Dining Room
- 19 Logistics Room
- 20 Stock



## O.P.D.

- 21 Lab
- 22 HIV Counseling
- 23 OPD Consultation Room
- 24 Mental Health Counseling
- 25 Dressing Room
- 26 Waiting Room

27 Tuberculosis Ward

28 Morgue



## I.P.D.

1 Polyvalent Consultation

2 Diarrhoea Ward

3 Chronic Ward

4 Pediatric Ward

5 Pregnant Women Ward

6 Delivery Room

7 Nurse Rest Room

8 IPD Pharmacy

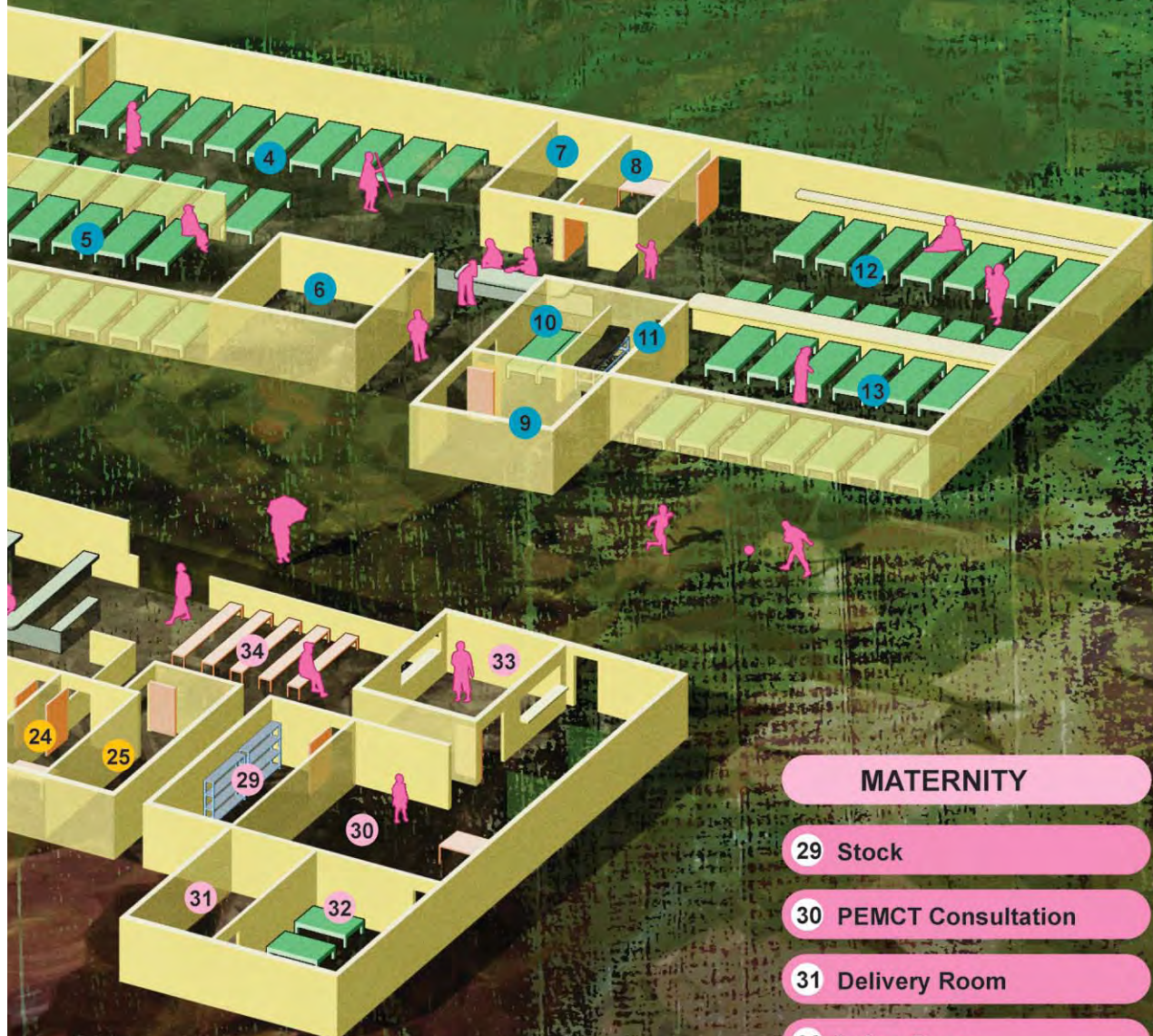
9 Emergency Room

10 Medics Resting Room

11 Dressing Room

12 Male Ward

13 Female Ward



## MATERNITY

29 Stock

30 PEMCT Consultation

31 Delivery Room

32 Labor Room

33 Pharmacy

34 Waiting Room



# သီဟ- Umpiem Hospital Director Thi Htoo, ဒုတိယ:ပြန်ဆေးရုံဒါရိုက်တာ

When she walks in the streets of Umpiem, everybody knows who she is, and she receives many greetings: "Hello, do you remember me, you cured me last year?". But she sees so many patients everyday that she cannot remember all of them.

Thi Htoo chose the medical field when she was 16, and was later trained by Aide Medicale Internationale in the Karen State. She has been a medic for nearly 20 years now.

She remembers the beginning, at the end of the eighties. "It was a small project at the time. Medicines were directly brought from France and we did not have much stock".

After leaving Burma, she worked with MSF for a decade, in Mawker camp. "It takes time to become a good medic. Time and guidelines!"

What she prefers is the deliveries, and the visits to the hospitalized patients. But she doesn't have much time for this. In 2001, she was appointed hospital director in Umpiem, and she now shares her time between her work as a medic and the management of the hospital.

"Many patients want to see me, because they believe I can help them better, but I do the same as the other medics.

My tasks include the staff management, which is a pleasure, but I also have to attend different meetings, and that's what I like less.

I hope that if one day we can go back to our homeland, all the medics that were trained here will be able to bring their knowledge and contribution to our community."





# မင်းသိချီး • အနာဂတ်ရုံဆေးရုံ

## Drawings • the Hospital of Tomorrow

TUNKYI, 13



Tunkyi, 13

TA PRER, 14



4 standard, Hsa Thoo Lei

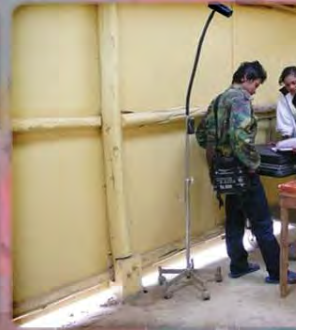
LAH PWAI DOH, 15



8 standard, Hsa Thoo Lei



# ဆေးရုံတိုင်းရက်စင်ရက်စင် 30 DAY



01

Beginning of the day  
at the consultation

02

The patients receive  
their medication

03

Medication  
a consultation



06

Pre-natal  
consultations

07

The midwives team

08

Pre-natal  
recording



11

The lab technician  
takes a blood drop...

12

... and makes a  
test for anemia

13

Direct  
the patient



# Y IN THE HOSPITAL



edics discussing  
ase

04

Visit of the hospital-  
ized patients

05

Checking of  
the pulse



gnant women  
eive medication

09

The material is  
sterilized...

10

... and then used  
for the dressing



ner time for  
patients

14

Last ward-round for  
the nurses

15

End of the day, the  
hospital is quite





# the LAB TECHNICIAN

The laboratory technician performs the different biological tests that the medics need in order to make their diagnosis or their treatment. He uses machines, such as the microscope, and various products to make the tests.

Blood testing is one common examination that the lab technician is conducting. Blood can be observed through the microscope which magnifies up to X times

## Composition of the Blood:



**Plasma.** This liquid represents half of the blood volume, and consists mainly of water.

**White blood cells and Platelets**

**Red blood cells**

**Platelet.** They participate to the blood clotting, the mechanism of closing of the wounds.

**White Blood Cell.** They are our internal police, and defend our organism against infections.



**Blood vessel.** Elastic tube through which the blood circulates.

**Red Blood Cell.** They transport the oxygen to all the parts of our body.

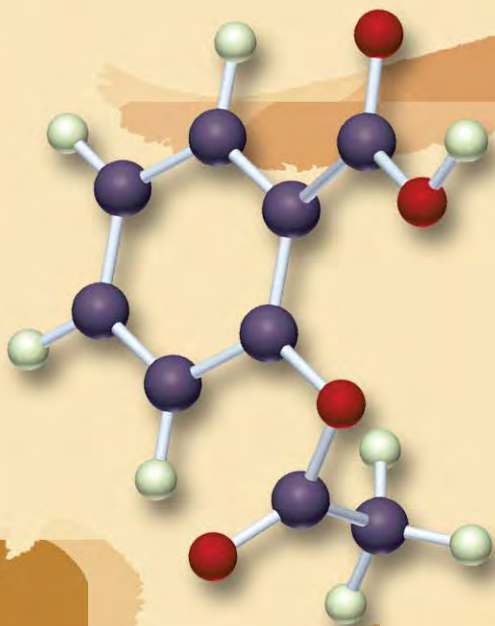


## ဆေးဝါးကျွမ်းကျင်သူ the PHARMACIST

Saw Augustin, the Umpiem pharmacist, manages a store of 200 different items: medicines, needles, disinfectant, bandages, scissors... Every week, he supplies more than 10,000 tablets of Paracetamol, 3000 tablets of Amoxicillin, 250 needles, and 2.5 litres of alcohol.

Nowadays, we have at our disposition a whole range of medicines, which generally come in the form of tablets, produced by pharmaceutical companies. But do you know how these medicines were created or discovered, do you know their story?

## ဆေးပြင်ဆင်သူ the Making of Drugs



The natural world is a vast chemical library. Each plant is like a small factory that produces some specific substance. People have discovered since ancient times that some of these substances possess healing properties. For example, infusion of bark from willow tree was prescribed more than two thousand years ago as a pain reliever. Modern researchers dip into this natural pharmacy and isolate the active molecules within the plant. The active substance of the willow was isolated in 1825, and called "Salicin". Researches are then conducted in order to synthesize these molecules artificially to allow producing them at an industrial level. Modern aspirin, created in 1999, is in fact acetylsalicylic acid, meaning the artificial reproduction of the active molecule contained in the bark of the willow tree.

Scientists now prospect for new plant species in the deep rainforests, as this is where the medicines of the future lie, awaiting their discovery.





## the canopy raft

High above the ground, within the crowns of the giant rainforest trees, is a world in which animals live out their whole lives without ever coming

down to the ground. To those with the skill and courage to reach it, this world, nature's last frontier, is revealing more about life than any other habitat on the planet.

Primary tropical rainforest is vertically divided into at least five layers: the overstory, canopy, understory, shrub layer and the forest floor.

Overstory of rainforest soars 20-100 feet above the canopy. The canopy is typically 10 meters thick, and intercepts around 95 percents of sunlight that provide shade or shelter and cover the forest's floor and protect it from strong winds and storms. Plants grow rapidly to reach the canopy,

but have no need to grow any taller after reaching the light.

The understory is the term for more widely spaced, smaller tree species and juvenile individuals that form a broken layer below the canopy. Each layer has its own unique plant and animal species interacting with the ecosystem around them.

An estimated 70-90 percent of life in the rainforest exists in the trees, above the shaded forest floor. 10 million plus species thought to exist on this planet, a mere 2 million are known to science. Others dwell in inaccessible locations—deep-sea vents or hard-to-reach tropical treetops. To collect the best information available to date on tropical forest insects and their habitats, researchers





use "canopy access techniques" to discover some unknown species in the very deep forest.

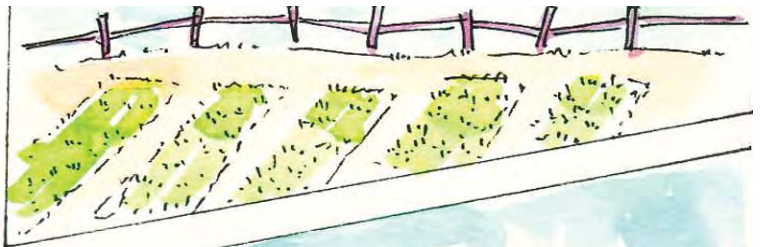
One of the techniques is a canopy raft. A canopy raft is the crane, hang sticky trap from the booms of a massive treetop raft covered with net, slide along through the trees suspended from a balloon and perch in a tree house. The canopy bubble consists of a seat harness suspended from a balloon that moves along the tree house. Since the researchers reached the tree, they can fog with insecticide, shake and hand pick the greenery and collect leaf litter and soil samples from the forest floor to understand the life of insects throughout the dark understory, striving subcanopy and emergent canopy. The abundance of plants in the world's tropical rainforests have provided many of

the chemicals that go into our medicines. Each day many lives are saved and illnesses cured because of the tropical rainforest plants.

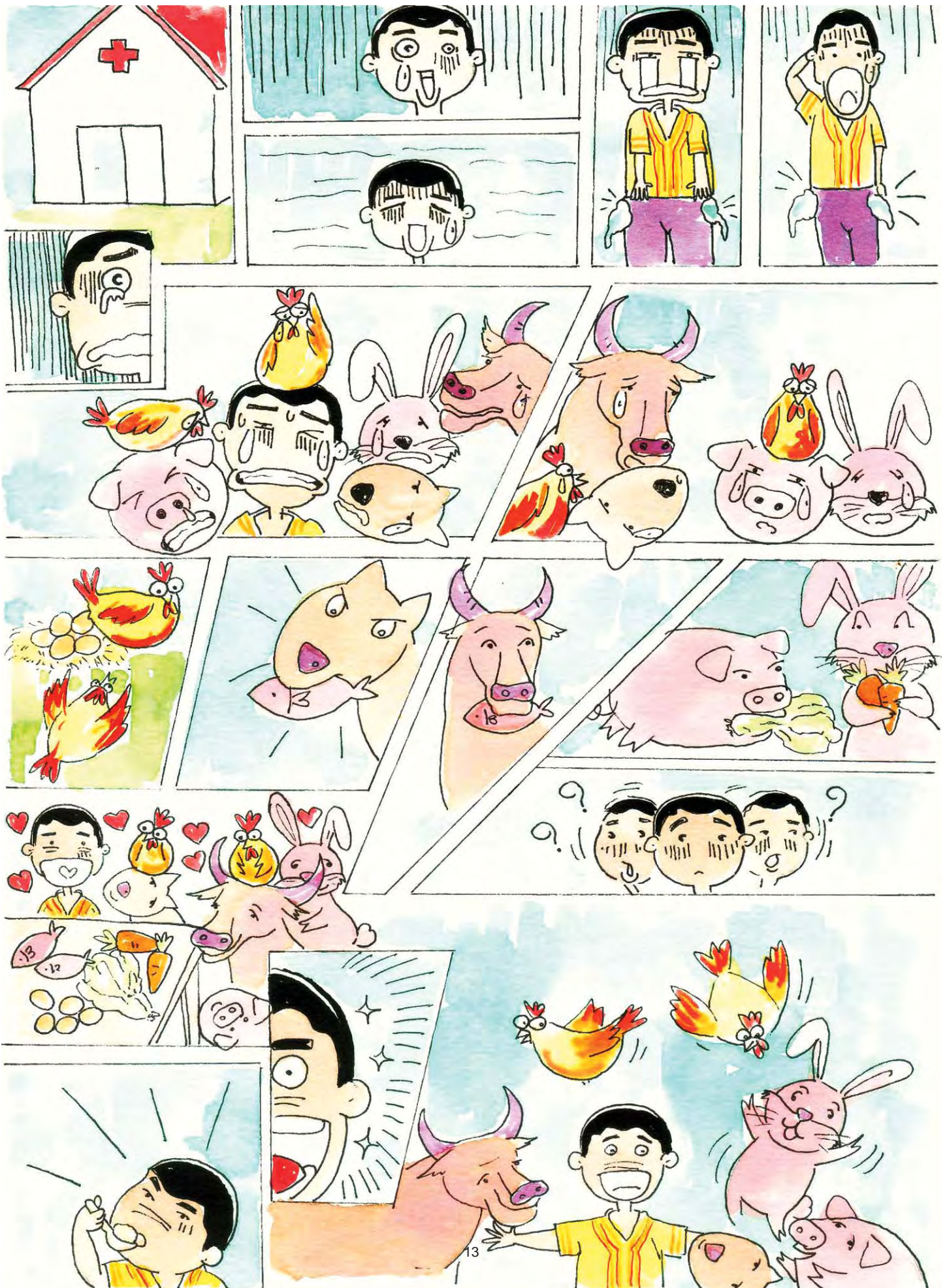
Many of the mystery herb medicines are used around the world but still many secret and untold treasure plants for medicines remain undiscovered.

Tropical rainforest supports millions of plant, animal and insect species - a virtual library of chemical invention. In these archives, drugs like quinine, muscle relaxants, steroids and cancer drugs are found. More importantly, are the new drugs still awaiting discovery - drugs for AIDS, cancer, diabetes and arthritis.











19

medics

work in Umpiem hospital. They are responsible for the treatment of the patients.

When arriving in the morning, the medics first start by checking the evolution of the patients, to verify that they get better thanks to their treatment. Then, they visit the new patients to diagnose their disease and decide which treatment they need.

Becoming a good medic takes time. After the training, at least two years of practice are necessary to really become familiar with the different techniques, diseases, and medicines.

## ၆၁၂၂ the MEDIC



## the NURSE ၇၇၇၇

The 34 nurses of Umpiem continuously look after the patients. Throughout the day, the nurses monitor the condition of the patients and give the medicines prescribed by the medic. Whenever a patient needs help or advice, they are here to take care of him.

### Thoo Leipaw - Nurse

*I like the contact with the patients. I regularly verify that they are fine by checking their temperature or blood pressure.*



## the MIDWIFE ၈၈၈၈

Midwives take care of pregnant women and babies. Their tasks are various: nutrition, immunization, home visiting, counseling and performing delivery.

### Naw Paw Hsee - Midwife

*I was a medic, but I changed for midwife in 2001, and I like it. We deliver 30 women each month. Sometimes it is a hard work, because deliveries can be very long.*



### **Saw Lay Thu - Psychocaregiver**

*I like my work because I feel like I really help people who feel sad, lonely or afraid. Sometimes, I have to go to their homes to support them. They are happy because somebody takes care of them and they can speak freely with me.*



## **စိတ်ပိုင်းဆိုင်ရာ the PSYCHO CARE GIVER ကျန်းမာရေးပြုစုစောင့်ရှောက်သူ**

Patients usually go to the hospital because of pains. But some of them suffer because they face too many problems and get tired in trying to solve them without being successful. They are not

always able to recognize what happens to them. That is why they discuss with psychocaregivers, who help them understand the situation and take the good decisions to get better.



The "VCT" is the service where you can receive free information about HIV and sexually transmissible diseases. The 6 counselors are here to answer the questions about HIV/AIDS transmission, and provide information about prevention and condom using. They can propose free and anonymous testing for HIV, together with pre and post-test counselling.

### **True Tender Toll - Counsellor**

*I joined the HIV counselling team 5 years ago, after finishing school. I answer to peoples' questions, and thanks to my experience I can provide advices.*

*More and more people are coming for a test. This is good: my aim is to decrease the transmission of HIV/AIDS and STDs. Regularly I visit people at their home, and sometimes we gather two or three families, to share the experiences.*



## **ကျွန်ုပ်တို့နှင့်အတူရှိနေသူများ the VCT COUNSELOR ကျန်းမာရေးပြုစုစောင့်ရှောက်သူ**



## the COOK ထမင်းချက်



Preparing rice, curry and soup for X persons everyday, it's like working for a big restaurant!

### Saw Dee Dee - Cook

*I feel proud because I can help the people. Whenever the patients cannot come to get the food at the dining room, I love to go and give them.*

*I use charcoal, and staying besides the stove all day can be very hot!*

Each person who comes to the IPD for treatment is registered. With X patients daily, there is enough to fill a big book! The responsible for this record-keeping is the administrator.

## the LOGISTICIAN ထောက်ပံ့ပို့ဆောင်ရေးမှူး

The logisticians maintain the building and do all the constructions. They can make beds, build a new room, or fix the electricity. They need to know carpentry, mechanic, and water systems.

## the ADMINISTRATOR အုပ်ချုပ်ရေးမှူး

### Nay Tha Poe

*After finishing my post-ten degree, I got employed as administrator. Now I am the younger of the team.*

The 6 cleaners keep the IPD nice and clean. They sweep the floor, clean the spider webs, water the plants, wipe the wall, wash the clothes and mosquito net for patients and pick the rubbish...

## သန့်ရှင်းရေးအလုပ်သမား the CLEANER

### Naw Paw Hsee, experienced cleaner.

*There is a lot to do but I like it: I contribute to the community. When patients smell the clean and fresh air, they feel better. But sometimes I get angry when the patient spit on the walls instead of using the pots!*





# CHILDREN'S RIGHTS ကလေးတို့ရဲ့ပိုင်ခွင့်

Humm...

Hey Doc, you find me nice?

Pfff... appearance is nothing.

Importance is inside. Have that!

Stunning!

Children have the right to education.



# မဆေးဝါးမယူဘဲသက်သာစေရန် Medicine without drugs

Drugs are powerful substance that can help the healing of your body. But throughout time and continents, men have developed other kind of treatments, not based on drugs. Aspirin or antibiotics can help you, but human contact and words are also effective.

## Acupuncture

China has developed a system of medicine which sits on different grounds than the western medicine. Illness is considered to be caused by disruptions of the body's energies. If we manage to re-equilibrate these energies, the well balanced body will then get back its strength and heal itself. According to Chinese medicine, the flows of energy circulate throughout the body along meridians. Acupuncture is a technique that consists in inserting metal needles at specific points along the meridians. This restores the balance of the energy flows.





## Mental Health

When you hear about "mental health", you usually think about "crazy" people, hearing things that don't exist and having strange behaviors.

But these are only extreme distur-

bances. Anybody can develop a mental health problem, after having faced a very difficult event or because of too many problems.

There are many signs to see that somebody is suffering: the person is restless, irritable, has sleep and eat problems, feels sad or angry most of the time, thinks too much about his problems, or doesn't enjoy normal activities anymore... Many people express mental health problems through body pains: chest pain, difficulties to breath, dizziness and headaches are common among people suffering from stress because as they are very nervous, their body is tensed.

It is possible to cure these problems through relaxation exercises, creative activities, counseling, and sometimes medication. The mental health helper is here to assist people that would like counseling.

## Massages

Another technique developed to assist in bringing back balance to the flows of energy is the massage. There are various styles of massage. Chinese, Thai or Burmese massage are different, but all have a therapeutic effect.

Massages have their limitation, and it is dangerous to rely on them in lieu of proper medical attention. But they can stimulate the body's natural healing process, and thus can be an invaluable adjunct to any other form of treatment.



## Dr. Cynthia's Clinic / ရခါကိတာဝင်သိယာမာမာဆေးခန်း



Each camp has a hospital. Outside of the camps, the Mae Tao Clinic provides the same services to the migrants.

The Mae Tao clinic was established 18 years ago in Maesot by Dr. Cynthia. Nowadays, 2000 patients come each week for consultation or hospitalization.

One hundred medical staff are needed to run the clinic, with the support from another one hundred administrative and logistic staff.

In addition to general health consultations and hospitalization, the clinic proposes eye and dental consultations.

The prosthetic workshop has the capacity to make legs for disabled people.

Women can come to deliver safely and receive pre and post-natal counselling.

The laboratory tests for malaria, so if you have any doubt, do not hesitate to come for a rapid check.



The doors of the voluntary counselling and testing service are also opened for everybody.

Note that the normal consultations (when there is no emergency) are opened from Monday to Saturday, X am to X pm.



In the camp hospitals, most of the medical services are available. However, some specific interventions, such as X-rays or surgery, require specialized equipment that is only found in major hospitals. When patients need these interventions, they are sent (we say "referred") to hospitals of cities such as Maesot or Chiang Mai).

**the REFERRAL**  
**လွှဲပြောင်းပို့ဆောင်**



At the airport, to ensure the safety, the police uses X-Rays to look inside the luggage without having to open them.

**လိုက်ဖန်**  
**the X-ray**

Doctors do the same. Sometimes they need to look inside your body, but of course they don't want to open it. They also use X-Rays.

### What are x-rays?

X-rays are of the same nature as the rays of light that we can see with the naked eye: both types are made up of electromagnetic waves. The only difference is in the energy level, or strength, of the rays; x-rays hold more energy than light rays so they can penetrate through certain materials.

### How do x-ray machines work?

A type of camera records the pattern of x-ray waves that passes through the patient's body. Since bone, fat and muscle absorb x-rays at different levels, the image on the film lets you see the different structures inside the body, such as the bones, because of the different levels of exposure on the film.





Maybe you have seen an operating room on television or you know someone who's had an operation in one. It sounds mysterious and interesting. But what's it really all about?

The operating room (OR), sometime called surgery center, is where surgery takes place in a hospital. Having surgery is also called having an operation. When someone has surgery, a special doctor called a surgeon works on or inside the body to fix something that is wrong.

There are lots of common surgeries. Some need surgery to repair something they've been born with, such as a cleft palate, which is a gap or opening in the roof of the mouth. Less often, people might need surgery to be done right a way if they have appendicitis or broke a bone that couldn't be fixed with just a cast.

Equipment such as suction apparatus and ventilators must be fitted with bacterial filters in order to prevent contamination of the machines. Used instruments should be counted, handled minimally, and then sent to the Theatre Sterile Services Unit (TSSU) for sterilization.







One good thing about surgery is that you usually get to sleep through it. You will be given medicine that helps you relax, fall asleep and stay asleep until the operation is over. The medicine also prevents you from feeling any pain while the operation is happening.

PACU stands for post -anesthesia care unit. So you can probably guess that the PACU is where you go after your operation is done. This is the "wake-up" room, and that's exactly what you'll be doing there - waking up!

A nurse will be there to see how you're doing as you wake up. Often, your parents will be there. Other times, they may have to wait a while, but you'll be able to see them soon.

Once you're fully awake, you'll either be moved to a hospital room (if you're staying

overnight) or to another PACU, where you can wait with your parents while the doctors or nurses see how you're doing.

Even if you feel great right after surgery, the nurses and doctors will tell you to take it easy. Rest is an important part of getting better. So rest up and feel better soon!

To keep the operation theatre germ free, the people who work there wear caps over their hair and masks over their mouths and noses to avoid spreading germs. They even wear gloves and booties over their shoes! They might all look alike, but everyone in the OR has a different job.

Having food - or even water in your stomach can make it dangerous to give you anesthesia. You'll be told ahead of time what you can and can't eat or drink. After the operation, your doctor will give you the green light to eat and drink again.





# the generator

## Electrical Generator

X liters of X per day, this is what the hospital requires to supply his lamps, computer and fridge...

The generator runs 24 hours a day, 7 days a week. We specially need the refrigerator, to keep medicines such as the vaccinations.

An engine-generator (usually called "generator") is made from a simple engine, like a car or a truck engine. Instead of spinning wheels, like in a car, the engine is used to spin a part of the generator, producing electricity.

## What is an electric current?

An electric current is a flow of charge particles (such as electrons) through a conductor (such as a wire). The energy made available by this flow can be used to run a motor.

## How does a generator work?

The generator works like an electric motor in reverse. Instead of applying electricity to it to make it spin, when you spin it, it makes electricity.

The engine spins an armature (a coil made of windings of wire) between the two poles of a magnet. Each time the armature crosses the magnetic field of the magnet, an electric current goes through the coil.

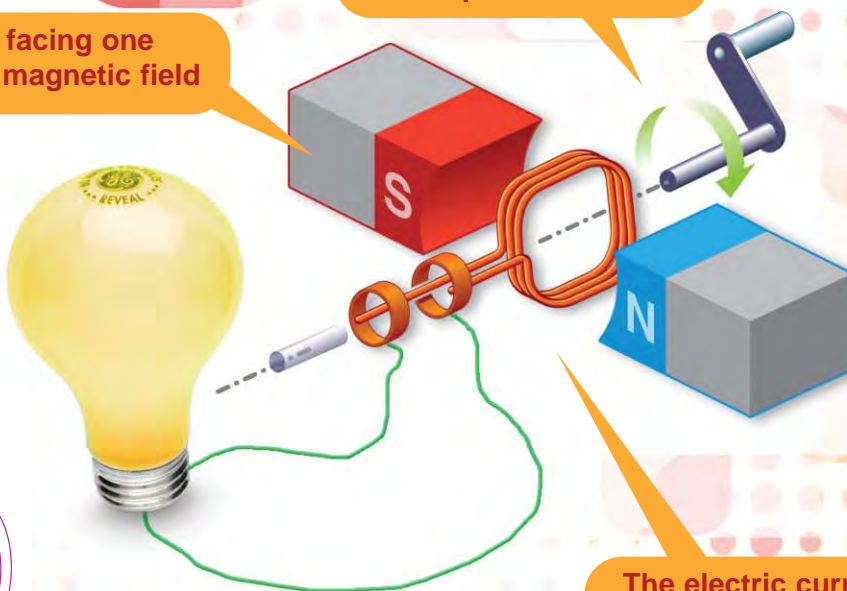
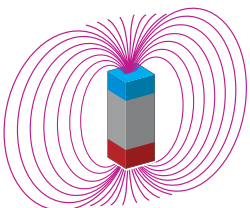
This current then travels through the wire to the electric devices of the hospital (lamps...)

Two magnets facing one another create a magnetic field

The engine is used to spin the wire.

magnetic field between the poles of a magnet

The electric current generated goes through the wire





# the MICROSCOPIC WORLD

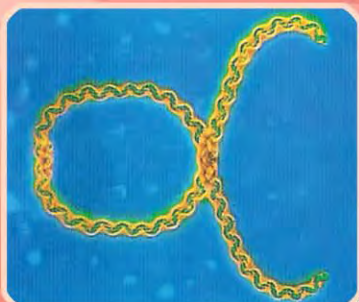


their way to the egg  
Sperm cells travelling on

Can you guess what these microscopic things are? find out the answer using a mirror.



the skin surface  
Closest photo onto



A Bacteria x 33,000



Two Plasmodium falciparum  
(Malaria) invading a red blood cell  
x 2,000

**READERS' MAIL** ★

Questions  
from Number 1 high school, Umpeim

**What is IPD?  
Day Nay Paw, 15**

IPD, "In-Patient Department" is the department where patients stay overnight. This is how medical staff call hospitalization. OPD, Out-Patient Department is the consultation.

**What does the delivery room do?  
Say K'paw Moo, 17**

In the delivery room, there is all the material and assistance for women to deliver in safe conditions.

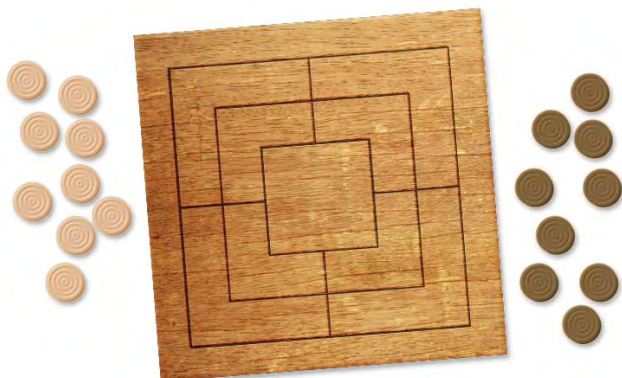
**Can the kids have the same disease as the dad or mum?  
Eh Khu Kaw, 16**

It depends on the disease. Measles is more common in Children. Cardiovascular diseases affect more the old people. And some like flu touch everybody equally.



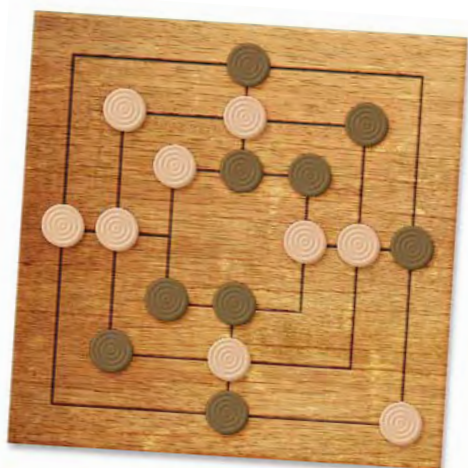
# လူကိုးယောက်တိုင်ဆက်ကပြီ Nine Men's Morris

Each player starts with nine pieces.



## 1st phase - Placing

Players take turns placing their pieces on empty intersections, until all pieces have been placed.

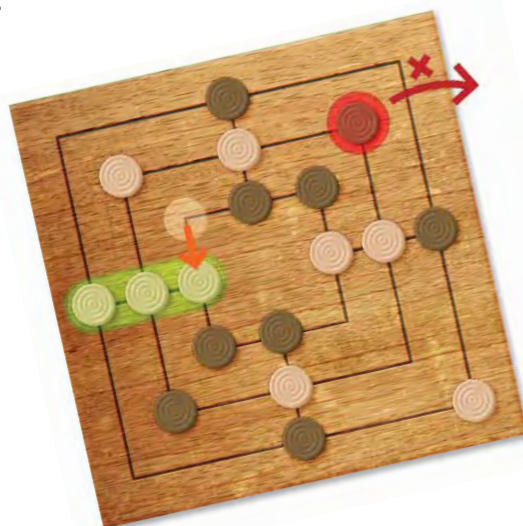


## 2nd phase - Moving

In a move, a player slides one of his pieces along a line to the next empty intersection.

## Capture

During both placing and moving, each time a player aligns 3 pieces in a row, he makes a "mill" and can remove the opponent's piece of his choice, but always choosing preferably one which does not belong to a mill.



## End

A player wins when:

- The opponent has only 2 pieces left
- The opponent cannot move

**NOT FOR SALE**

**Health Messenger Junior** is a quarterly publication of the French NGO *Aide Médicale Internationale*, realized in collaboration with UNICEF and ECHO. It aims at sensitizing children from school standards 6 to 10 living along the Thai-Myanmar border to major health issues, providing them with lifeskills and opening them up to other perspectives.

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