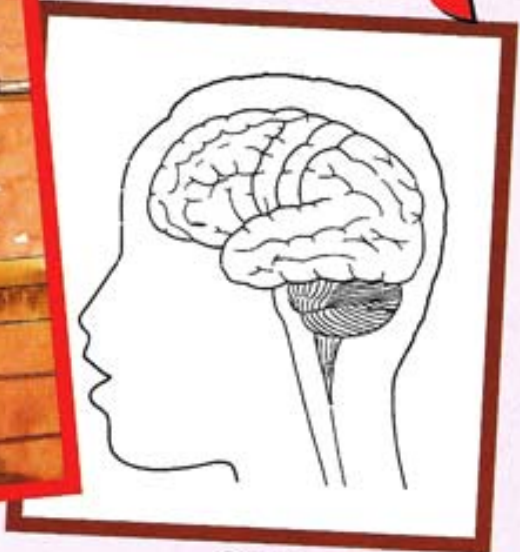


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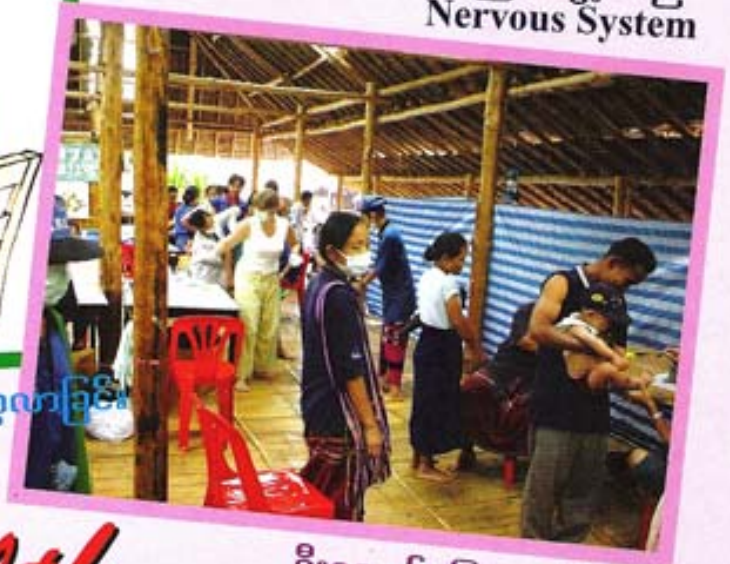
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နစ်ကြောအဖွဲ့အစည်း
Nervous System



အရေးပေါ်သန္ဓေတားမှုဖြစ်ရပ်လေ့လာခြင်း
Case Study on Emergency
Contraceptive



ဦးနှောက်မြှေးရောင်ရောဂါ
Meningitis

Health Messenger

ISSUE 21
BURMESE EDITION
SEPTEMBER 2003

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ISSUE 21, SEPTEMBER, 2003

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The views expressed herein, in no way reflect the official opinion of IRC/USAID.

The procedure, explanations and treatment given in this publication are based on research and consultation with medical and nursing authorities. They all reflect accepted medical practices. Nevertheless they cannot be considered absolute and universal recommendations. The authors, the editor and the publisher disclaim responsibility for any adverse effects resulting directly or indirectly from the suggested procedures, from any undetected errors, or from the reader's misunderstanding of the text.

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Editorial

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Dear readers,

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a q m i f y g r s n ; u l l w i j y x m ; y g o n ?

In this issue, our Health Messenger team introduces the anatomy of the nervous system in order to help you to understand the causes of meningitis. As an epidemic of meningitis hit the refugees of Nu Poh Camp in the early months of 2003, we have devoted several articles of this issue to this disease.

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We have also included a case study on emergency contraception, as well as an article about child abuse to help teachers and community members to cope with this social problem that can have serious health consequences.

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In this present issue, we also invite you, our readers to participate in a drawing contest to design the cover of the December issue, an article-writing contest and our annual test. This year, we will include more participatory activities to acknowledge your talents and also to develop our magazine through active participation.

& s l v e f p h z w & E l l i u y g p

Enjoying your reading!

a v ; p m ; p h i z i h
a ' g u l v m o e f
t , f D v m

Best Regards,
Dr. Than
Editor

Health Messenger Magazine Programme

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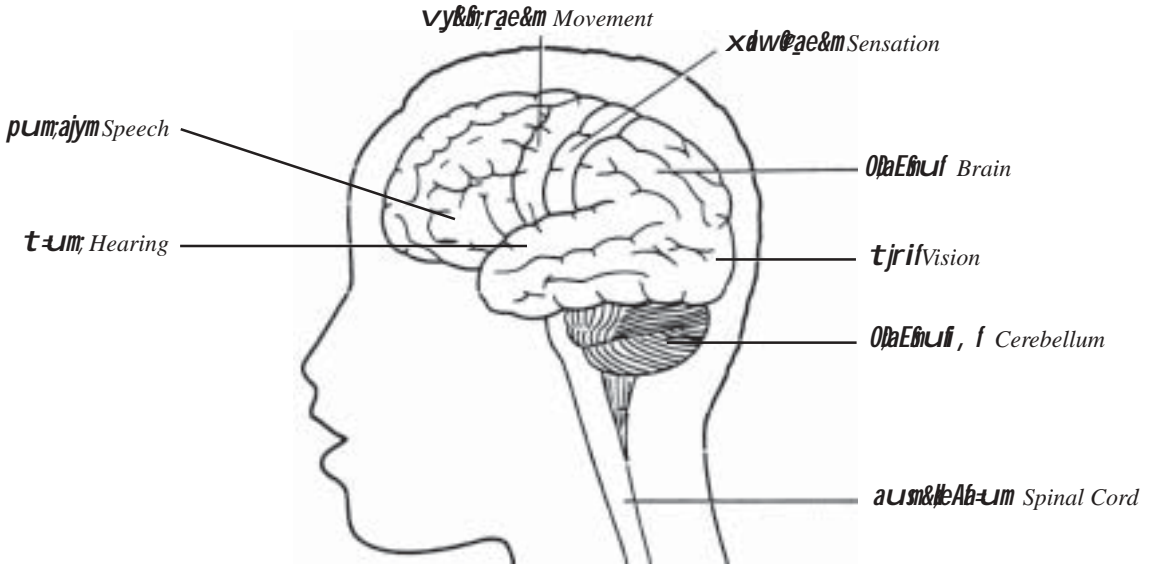
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r&if- Source: TALC, 1999.

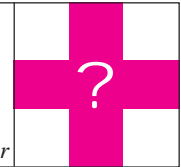
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The Nervous System

Health Messenger



The nervous system controls and commands the whole human body. Diseases affecting it are most of the time very dangerous. This article explains the way the nervous system works.

The nervous system consists of three parts:

1. The central nervous system: the brain and spinal cord
2. The peripheral nervous system
3. The organs of senses (organs of sight, hearing, smell, taste)

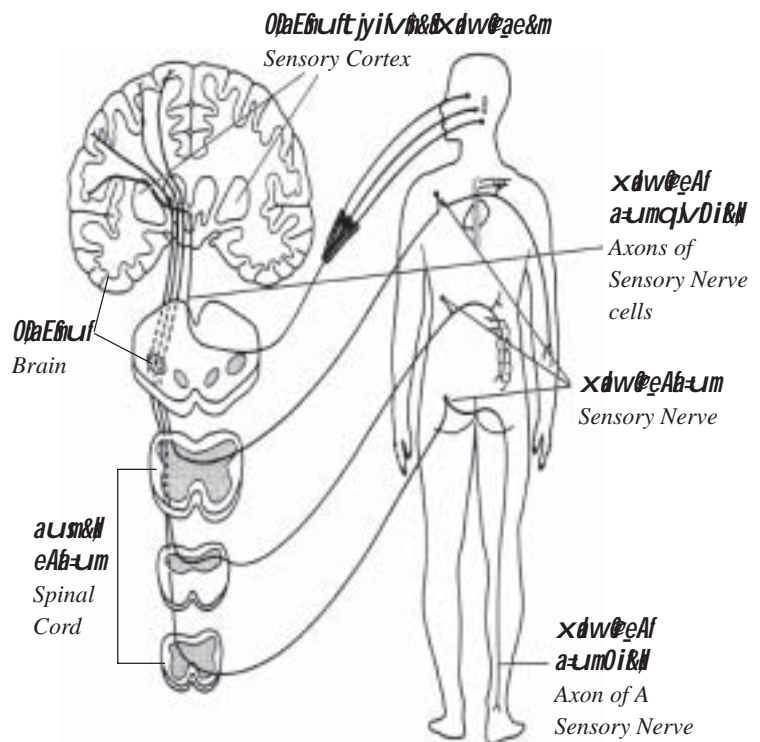
The nervous system is made up of nerve cells and some other cells which support and help the nerve cells. The nerve cells have a body, and some have very long extensions (like tails) called axons. These axons conduct (or carry) messages from one part of the nervous system to other parts of the nervous system or to other systems (in a way similar to the wires which carry electrical messages in a telephone system). Therefore, the nervous system can be compared to a communication system.

The nerve cells in the nervous system that have the same function are grouped together in one or more areas:

- In the brain, the bodies of the nerve cells which deal with speech, movement or sensation are grouped together in special areas on

the surface (or cortex) of the brain, and these areas are called the speech area, motor (for movement) area, sensory (for sensation) area.

- In the spinal cord, the bodies of the nerve cells which deal with movement are in the front part of the cord, and those which deal with sensation are in special extensions of the spinal cord (called dorsal root ganglia) attached to the back part of the cord
- The axons of the nerve cells which run from one part of the nervous system to



r&i/- Source : TALC, 1999.



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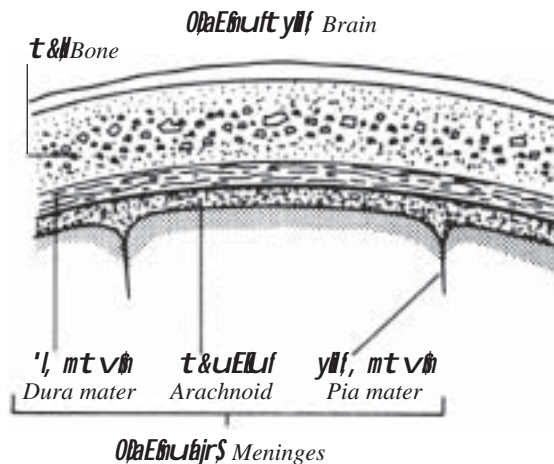
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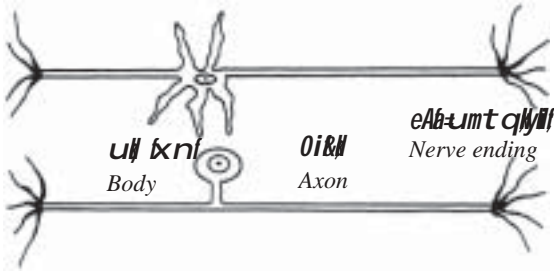
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r& if- Source : TALC, 1999.

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another are also grouped together (like the wires of a telephone system, which run in a cable). These groups of axons are called “tracts” if they are in the central nervous system. They are called nerves if they are in the peripheral nervous system.

The Central Nervous System:

The central nervous system consists of the brain and spinal cord.

The central nervous system is like a telephone exchange. Messages about sensation travel from many parts of the body through nerves (called sensory nerves) to the central nervous system. These messages are then sent to other parts of the central nervous system and/or to the nerves which go from the central nervous system to other parts of the body. The nerves that go from the central nervous system are called motor nerves because they carry messages to make parts of the body move.

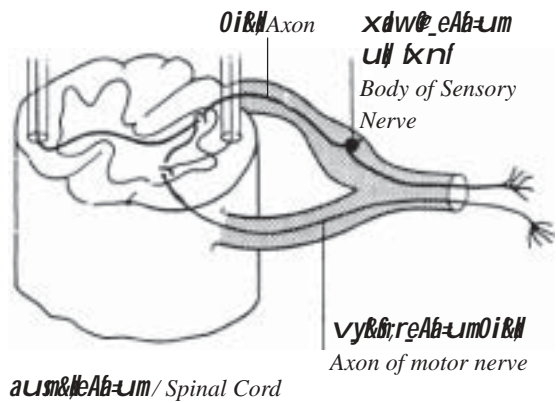
The Sensory System:

Sensory messages coming into the central nervous system can go to three different places:

Usually, when a sensory message comes into the central nervous system, it causes all these things as necessary:

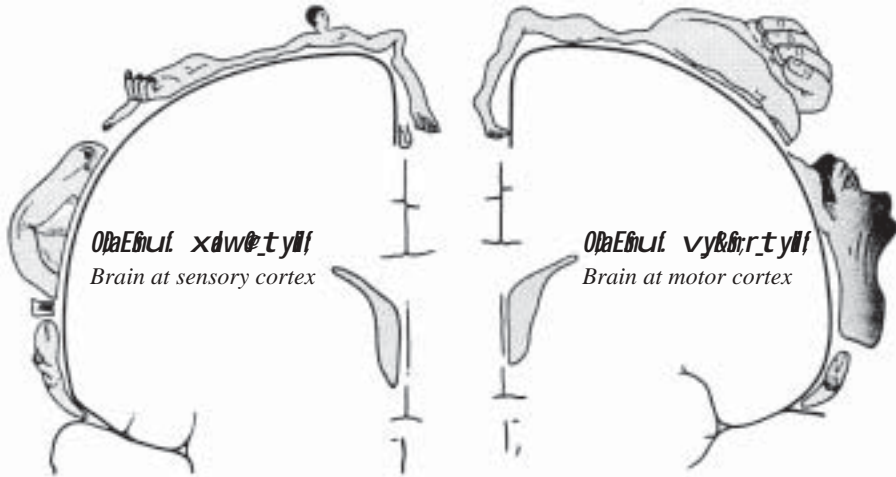
- reflex action
- control of movement by the cerebellum
- decision about action by the cerebral cortex

1. Sensory messages can go up the spinal cord to the cerebral cortex of the brain. The person then knows what is happening and can decide to do something or not.
2. Sensory messages from joints and muscles, about the position of limbs, can go to the part of the brain called cerebellum (see figure). The cerebellum then sends messages back to the muscles to help the person stand or move accordingly (the way he has decided in the cerebral cortex).



Source : TALC, 1999.

3. Sensory messages coming into the spinal cord do not all go up the spinal cord (to the cerebral cortex or cerebellum). Some go to other nerves in the spinal cord and may cause reflex action. For instance, if a sensory message comes into the cord that says the hand is being burned by fire, the message immediately goes to the correct nerve in the spinal cord to pull the hand away from the fire. This reflex action pulls the hand away without the person thinking.



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Section cut of brain through the level of the sensory and motor cortex.
It shows the responsibility of various parts of the body.

r&f- Source : TALC, 1999.

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The motor system:

The cerebral cortex controls movement through motor nerve cells whose fibres go from the cortex through the brain to the spinal cord. In the spinal cord, they join other motor nerves which go to muscles. Motor messages travel in tracts (in the brain) and nerves to the muscles in the same way that sensory nerve cells take sensations to the brain from the body.

Damage to the special motor or sensory parts of the cerebral cortex will cause loss of sensation or movement in the body.

Damage to the spinal cord will cause a loss of movement and loss of joint and touch sensation.

The Meninges:

The meninges surround the whole of the central nervous system. The meninges are three layers of membranes. In the middle layer, there is a mesh-work of fibres in which circulates a fluid called the cerebrospinal fluid (CSF). The meninges and the CSF protect and give food to the central nervous system.

The Peripheral Nervous System:

Nerves are the white cords which carry messages between parts of the body and the central nervous system. They go to and from the spinal cord and brain through gaps between the vertebrae of the spine or holes in the skull. They consist of many axons (thin fibres which are the tails of nerve cells which are in the spinal cord or in the ganglia, special groups of nerves cells attached to the spinal cord.)

Most nerves contain both sensory and motor fibres. Most nerves, therefore, carry sensation to the central nervous system and

carry motor messages back to parts of the body. The small nerves in the skin are called cutaneous nerves and only contain sensory nerve fibres.

Symptoms and signs of disease of the nervous system:

Symptoms:

- Headache
- Fits or convulsions
- Change or loss of sight, hearing, smell or taste
- Weakness or paralysis of arm(s) and/or leg(s)
- Weakness of the bladder
- the patient cannot pass urine, or the patient cannot stop the passing of urine.
- Change or loss of sensation
- Fever and general symptoms if there is an infection.

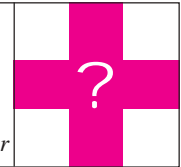
Signs:

- Change in the level of consciousness
- Confusion. Poor memory. Disorientation. Not thinking properly, sometimes with mixed up thoughts, hallucinations or delusions (organic psychosis).
- Meningitis irritation (see article Meningitis)
- Change or loss of sight, hearing, smell or taste
- Change or loss of speech
- Stiffness, weakness or paralysis of eye(s) and/or face, and/or arm(s), and/or leg(s)
- Paralysis of the bladder
- Change or loss of sensation of the face, and/or arm(s), and/or leg(s), and/or trunk.
- Shaking or clumsiness.
- Abnormal reflexes
- High temperature, fast pulse, etc... if there is an infection

Source: Common Medical Problems in The Tropics, C R Schull, TALC

Meningitis

Health Messenger



Meningitis is a very serious infection of the brain coverings, which often causes death. This year in February and March, a meningitis epidemic hit villages in the Southern part of Tak province as well as the Nu Poh Refugee Camp.

What is meningitis?

Meningitis is an infection of the membranes covering the brain, which are called the meninges. Meningitis is a very contagious disease. It is usually a disease of children; but anyone can be infected by droplets spread by infected persons, and then develop the infection (although most do not). Young adults recently crowded together (e.g., army recruits or children in boarding schools) are commonly affected. Patients are most of the time contagious until 24 hours after the beginning of effective antibiotic treatment. The incubation period is variable, 2-10 days, but usually 3-4 days. In Southeast Asia, meningitis is very common during the dry season.

The meninges

The meninges surround the whole of the central nervous system. The meninges are three layers of membranes. In the middle layer, there is a mesh-work of fibres in which circulates a fluid called the cerebrospinal fluid. The meninges and the cerebrospinal fluid protect and give food to the central nervous system.

Meningitis can be caused by:

- a bacteria: Bacterial Meningitis
- a virus: Viral Meningitis



Obtaining cerebrospinal fluid - Sign of meningitis.

- tuberculosis organism: Tuberculous Meningitis
- fungi, especially in people with poor immunity

Only a laboratory examination of the cerebrospinal fluid, after a lumbar puncture, or a blood culture can differentiate between different causes.

Lumbar puncture

This procedure is used for obtaining samples of cerebrospinal fluid by puncturing the lumbar meninges with a long hollow needle inserted between the spines of two lumbar vertebrae.

What are the signs and symptoms of meningitis?

Children < 1 year:

- Fever (38.5°C or more), feeling unwell, drowsiness, not sucking well, vomiting, sometimes convulsions or unusual movements, coma. It may come as a complication of measles, mumps, or another serious illness.



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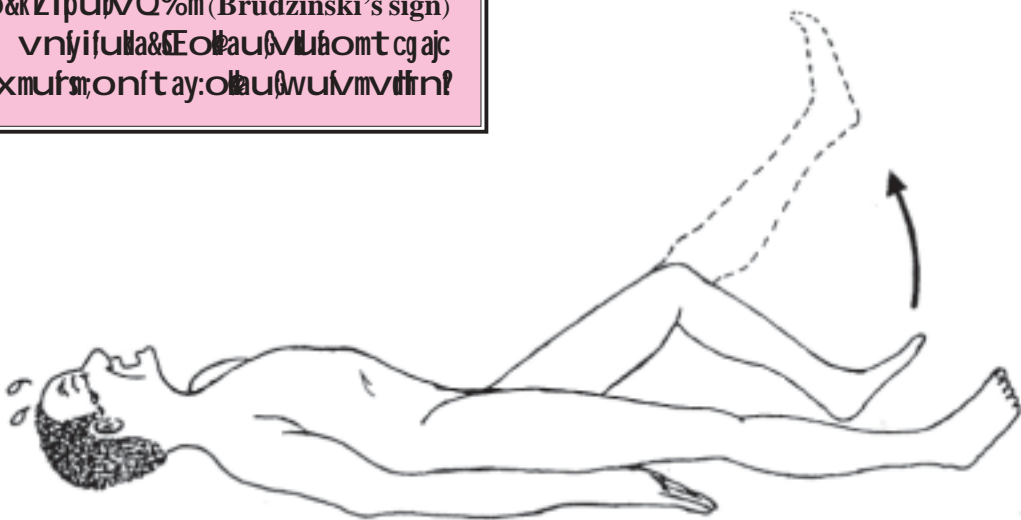
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- Swollen and/or bulging of the fontanel (diamond shape soft part of top of skull)
- Usually no neck stiffness
- In babies and young children, early meningitis may be hard to recognize. The child may cry in a strange way (the “meningitis cry”), even when the mother puts the child on her breast. Or the child may become very sleepy.

Older children and adults:

- Fever (38.5°C or more), headache, vomiting
- Light hurts the eyes (photophobia)
- ***Kernig’s and/ or Brudzinski’s sign positive***

Kernig’s Sign:
The hip is flexed to 90° with the knee bent; the patient feels pain if you attempt to straighten her/his leg.

Brudzinski’s sign:
Flexion of the neck, which causes the legs to be drawn up.



Brudzinski’s sign.

- Stiff neck and stiff back, often the patient lies with his head and neck bent backward
- Convulsions and coma

Tuberculous meningitis:

- The history is often longer (days or weeks, not hours).
- The patient is often not as “sick “ at first.
- Evidence of tuberculous infection is sometimes present in other parts of the body.
- Proper antibacterial treatment causes no improvement in 2 days, no loss of fever in 1 week and no cure in 2 weeks.
- Children of mothers who have tuberculosis sometimes get tuberculous meningitis in the first few months of life.

Viral meningitis:

- Most cases get better with no treatment. Antibiotics do not help.

Always think of meningitis in febrile patients with severe headache or coma. Check if the neck is stiff.

Note: Malaria and Meningitis can occur together in the same patient at the same time: Do a malaria smear!

➡ IF POSSIBLE IN YOUR SITUATION, YOU MUST HAVE A LUMBAR PUNCTURE DONE ON EVERY PERSON WHO HAS SIGNS AND SYMPTOMS WHICH COULD BE CAUSED BY MENINGITIS. SEND THE FLUID TO THE LABORATORY!

How to manage a meningitis case?

- Admit the case to the In-Patient Department



- Give Antibiotics (works for bacterial meningitis)

Do not delay starting antibiotics to wait for a senior medic to do a lumbar puncture. **Delay in starting antibiotics can mean death of the patient.** If lumbar puncture cannot be done as soon as patient is admitted: start antibiotics.

1. Children > 2 months and Adults:

Chloramphenicol IV/IM 25 mg/kg QID

When conditions have improved and fever is down:

Change to oral and half the dose (12.5 mg/kg QID) for total 10 days

2. Children < 2 months:

Ampicillin IV/IM 50 mg/kg QID AND **Gentamicin** im 6-7 mg/kg OD for 5-7 days

When conditions have improved and fever is down:

Change to oral Amoxicillin 25mg/kg TID for a total of 10 days

3. Pregnant Women:

Ampicillin IV 2 g QID

When conditions have improved and fever is down:

Change to oral Amoxicillin 500 mg TID for a total of 10 days

1,2 and 3 can also be treated with Ceftriaxone IV/IM 50-100mg/kg/day OD for 7 days

- Treat the fever with Paracetamol
- Treat the convulsions with Diazepam

- Give special nursing care if the patient is in coma

4. Tuberculous Meningitis:

- If the patient has a high risk of TB (family contacts, slow evolution of symptoms, signs of TB elsewhere), it is particularly important to get a lumbar puncture in order to avoid a delay in starting full TB treatment (rather than giving a course of antibiotics first).
- Refer to hospital and treatment should be started without delay.

5. Viral Meningitis:

- Even very ill patients may recover completely. The mortality rate varies with the cause and variation of virus. Younger children show more improvement than adults with similar infections.
- Give supportive treatment as for acute bacterial meningitis.

IF:

- The patient is still unconscious after 24 hours of full treatment.
- The patient is not improving after 2 days of full treatment.
- The patient has a fever after one week of full treatment.
- The patient is not cured after 2 weeks of full treatment.
- Any complications which you cannot manage in the health centre.

TRANSFER URGENTLY TO HOSPITAL!



Zutllcif- Neck stiffness

PREVENTION: WHAT TO DO IN CASE OF A BACTERIAL MENINGITIS EPIDEMIC?

An epidemic is an abnormal increase in the number of cases, compared with the number normally observed in the same period of the year in the same region.

- In an epidemic at an institution (boarding school, military barrack, etc.), avoid overcrowding and separate people in eating, and especially sleeping quarters as much as possible and ventilate the rooms as well as possible.
- If there is a confirmed outbreak of bacterial meningococcal (this is the name of the bacteria involved) meningitis of A or C type of this bacteria, then immunisation with the correct (A or C

type) meningoccal vaccine will be very effective in controlling the epidemic.



If you have an outbreak of meningitis, alert the concerned authorities and ask about immunisation! To be effective, the immunisation campaign must be done with the utmost urgency. The objective is the vaccination of 100% of the target population.

If there has been a large epidemic in one area, the same area has a low risk of facing a new one before 5 years.

- **Give prophylactic (= preventive) antibiotic treatment to other members of the family who live in the same house as the patient, or who live in a closed community with them (e.g. boarding school, military barrack, etc.), as well as to staff who have close personal contact with untreated patients.** **Be careful:** this preventive treatment, although very efficient, is often not recommended. So discuss it with the concerned authorities.



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Can be raised to the sitting position by lifting the head in meningitis

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Neck stiffness (Younger Children)

r&lf- Source : Helping Health Workers Learn.



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WHEN TO DECLARE AN EPIDEMIC?

- *Among a population of more than 30,000 people:*
 - When there are more than 15 **confirmed** cases of meningococcal meningitis in 1 to 2 week(s)
 - or When there is an attack rate of 6 cases for 10,000 people in 1 week
 - or When there is an incidence rate of 10/100 000 in one week time

To calculate:
$$\frac{\text{Number of new cases during this week} \times 100\,000}{\text{Population}}$$

- *Among a population of less than 30,000 people:*
 - When the number of cases doubles from one week to the next one during three weeks.
 - (Example: Week 1: 1 case; Week 2: 2 cases; Week 3: 4 cases)
 - or When there are at least 5 cases in one week

Preventive treatment:

	Drug	Dosage	Quantity	Duration
Adult	Rifampicine	600 mg	2 doses	2 days
Child < 1 month	Rifampicine	5 mg/kg/dose	2 doses	2 days
Child > 1 month	Rifampicine	10 mg/kg/dose	2 doses	2 days
For all contraindication to Rifampicine or people unable to take tablets				
Child < 15 years	Ceftriaxone	125 mg IM injection	1 dose	1 Day
Adults (> 15 years)	Ceftriaxone	250 mg IM injection	1 dose	1 day

*Rifampicine should not be given to pregnant women.
Ceftriaxone can be used for pregnant women.

A Meningitis Epidemic in Nu Poh Camp

Health Messenger Magazine Team in Collaboration with AMI Thailand



An epidemic of bacterial meningitis affected some villages of the Southern part of Tak Province, as well as the Nu Poh refugee camp in March this year. This article tells the story of this epidemic, which killed four persons in the Nu Poh Camp, and how the response to it had been organised.



AMI clinic at Nu Poh camp.

THE EPIDEMIC

At the beginning of February, 2003 the AMI office in Mae Sot received information from the field medical doctor of the Umphang base about suspected cases of meningitis in the Nu Poh Camp. AMI then informed the WHO and the Thai Public Health Authorities and gathered technical information.

The next weekend, the AMI team analysed the cases with the help of an epidemiologist from the Office of Epidemiology, Bangkok. The first laboratory examination confirmed the presence of *Neisseria Meningitidis A*. The area was facing an epidemic of bacterial meningitis.

AMI immediately launched an emergency plan and applied to the authorities for the permission to do an immunisation campaign in Nu Poh Camp and in the surrounding villages.

There had not been any deaths inside the camp until the 13th of March. But suddenly,

the death toll rose very quickly, as four people died within ten days between the 13th and the 23rd of March. These deaths were reported in the media, and this helped to obtain the authorisation to proceed with a massive vaccination campaign of the camp population.

THE IMMUNISATION CAMPAIGN

AMI prepared the immunisation campaign in cooperation with ARC, which is in charge of the preventive care in the camp.

Target Group:

- The entire camp population: 11,110 (census on March 1st done by ARC). 50 % of them were women and 15 % were children under 5 years.
- The newly-arrived persons in the camp until the start of the rainy season: 300 to 600 people were expected to arrive in the camp, according to the average arrival figures of the past 3 months.
- The staff of the Ministry of Interior and the Task Force working inside the camp, and the staff of the non-governmental organisation working regularly inside the camp. (about 30 people)



2 Days before immunisation	<ul style="list-style-type: none"> • ARC community health workers updated the population records • Coloured cards were distributed to each resident of the camp according to her/ his section
Day 0	<ul style="list-style-type: none"> • 2 vaccination stands ready to vaccinate 4000 persons/day • first 5 sections vaccinated
Day 1	<ul style="list-style-type: none"> • second 5 sections vaccinated
Day 2	<ul style="list-style-type: none"> • last 5 sections vaccinated
Day 3	<ul style="list-style-type: none"> • Recall of missing persons, newly arrived persons as well as NGO and Ministry of Interior staff

Meningitis Neisseria disappears.

Despite strong recommendations and constant warnings, it has not been possible to implement this preventive measure. Five hundred Karens and 1,000 Muslims from all over the region including Malaysia came to the camp for cultural and religious events later in April.

• Preventive treatment:

Several meetings were held at the Umphang Hospital to decide what preventive treatment should be used in that case. It was then decided to use ceftriaxone* for the treatment of suspected cases instead of the usual drug, chloramphenicol, which is prohibited in Thailand; and rifampicine and ceftriaxone for prophylactic (=preventive) treatment.

Prophylactic (=preventive) treatment was then provided to all persons living in houses close to the one of the suspected cases of meningitis (in a circle of three houses around the house of the patient), as well as to the newly-arrived persons until the effectiveness of their immunisation and to people wanting to go outside or to visit the camp.

About 2,000 persons have received preventive treatment since February.

• The future:

One medic of Nu Poh Camp and two from Umpiem Mai Camp have been trained in the Mae Tao Clinic to perform lumbar punctures and a kit to analyse cerebrospinal fluid was sent to Nu Poh Camp.

CONCLUSION

Forty-three persons have been hospitalized in Umphang for suspected meningitis. The age repartition was: 11 children under 5 years old, 7 from 5 to 15 years old and 25 adults above 15 years old. For 11 of those cases, a laboratory examination confirmed the diagnosis of Neisseria meningitidis A. Four people died.

After the 24th of March, no new case had been confirmed inside the Nu Poh Camp, but 7 suspected cases were reported until 23rd of April, 2003. No new case has been reported since then.

This year, fortunately, the rainy season began early. On the 24th of May, 2003, AMI informed its partner ARC and the Thai authorities that the spread risk for meningitis was over.

* *Penicillin G is the drug of choice for meningococcal meningitis in most countries.*

Interviews at Nu Poh Camp

Health Messenger

This article is based on the interviews with a medic and two community health education workers from Nu Poh Refugee Camp. They share their experience on the meningitis epidemic that occurred from February to March, 2003.

Naw Eh Wah

**Medic Incharge, AMI (Aide Medicale Internationale) Clinic
Nu Poh Refugee Camp**

Naw Eh Wah, medic incharge of the AMI Clinic, has been living in the Nu Poh Refugee Camp for more than 7 years. Although she had seen some regular occurrence of meningitis in her camp, the meningitis epidemic in Nu Poh Camp in 2003 was the first one that required her to deal with such a great challenge. We asked some questions about the epidemic and her work in the camp.

How did the meningitis happen in the camp?

First, the cases of meningitis came from the Thai-Karen villages near the camp. We gave them treatment and almost all of the patients were cured at first. But later on, more

and more cases were admitted to our clinic. So, we sent some specimens to the Umphang Hospital. The laboratory results from the hospital showed the presence of meningococcus (*Neisseria meningitidis* group A). During outbreak, there were four cases of death most likely due to meningitis.

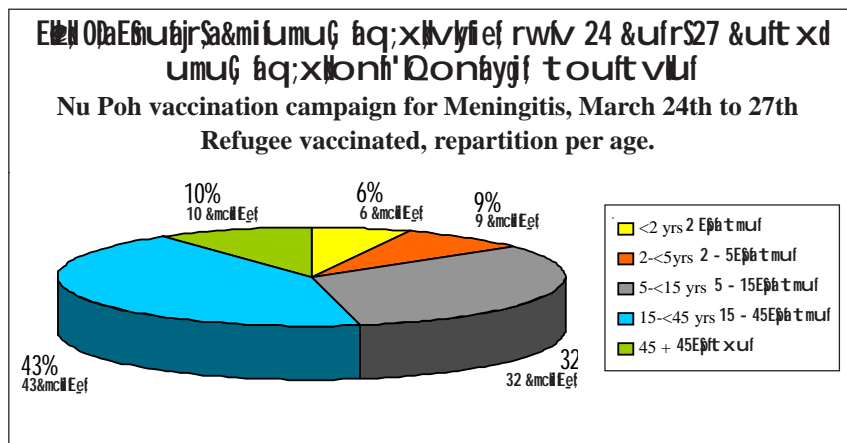
When did the first case come to your clinic and how were there?

The first case came to my clinic during the month of January, 2003 and the last case in April, 2003. Altogether, there were more than 30 cases in our clinic.

What kind of problems did you face during the attack phase of the meningitis?

Well, one of the main problems was movement of the people. Many people moved

in and out of Nu Poh Camp spreading the disease by carrying the germs, which cause meningitis. Therefore, inability to control those people was the main problem for us in controlling the meningitis outbreak.



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Ellpcef&epnfa0;cefr- Meeting room at Nu Poh Camp.

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What are your suggestions on a meningitis outbreak?

I have never encountered epidemic outbreak of meningitis before and this was the very first time for me to deal with such a problem. The patients often died abruptly, therefore, I was very scared and I had to take care of myself by taking preventive drugs. So, be prepared to take preventive drugs if necessary to protect yourself from the disease. Another suggestion for our medics about meningitis is that we should first exclude cerebral malaria in this kind of situation because the signs and symptoms are very similar, therefore too difficult to differentiate from one to the other. These signs and symptoms are like fever, stiffness of neck, mental confusion leading to loss of consciousness and shock. In cases like these, the medics should first do a malaria smear.



Ms. Isabella Tun
CHE (Community Health Education)
Supervisor
ARC (American Refugee Committee)
International
Nu Po Camp

Ms. Isabella Tun, Community Health Education supervisor of ARC International, has extensive experience working on

preventive health care with refugees in Nu Poh Camp. She was a dedicated teacher for five years before joining the health profession.

How did you help your community during the time of the epidemic outbreak?

We did many home visits to look for people with signs and symptoms of meningitis. We suggested to these suspected cases that they go to the hospital immediately. When they refused, we escorted them.

We held meetings every day with other agencies and also with camp administrators so as to help the community efficiently and effectively in combating the meningitis epidemic in our camp.

Did you receive assistance from other organisations?

Of course, I would say yes. The public health personnel from Umphang and the AMI staff helped us a lot and we worked in cooperation and collaboration to end the epidemic in a short time. We helped to organise the vaccination campaign for all refugees in the camp and to give preventive drugs to people in contact with the suspected cases.

What problems did you face during the epidemic?

There were many problems during that time, as some did not follow our suggestions and instructions given through health education sessions. We requested that they not go outside of the camp in the meantime and some did not listen and kept on going outside of the camp to work. Some people did not want to have vaccination because they were afraid of its side effects. So we had to



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explain a lot to them in order to get them to accept being vaccinated.

What kind of lessons did you learn from it?

Well, we have learnt many lessons from that event. Collective effort among organizations (i.e., ARC International, AMI, communities, camp leaders and authorities) was the key factor for the successful control of the meningitis epidemic in the Nu Poh Camp.

Ms. Win Win Yi CHE Worker (ARC International) Nu Poh Camp

Ms. Win Win Yi, a community health worker of Nu Poh Camp, was a teacher and she has received various health training from the NGOs (Non Government Organisations) working along the Thai-Burma border. She has five years experience working with ARC International in the preventive and social sectors. She is one of the devoted writers of Health Messenger Magazine.

How did you help your community during outbreak of meningitis in Nu Poh Camp?

Well, I have many things to say about my job as a community health worker in our camp. My main and regular activity is to give health education to my fellow refugees and help them understand and practice a healthy lifestyle in their day-to-day activities.

During the epidemic, I worked with AMI, the Umphang Public Health Team and the camp committee to educate people, give preventive drugs and perform immunisation.

Could you explain some of your field activities in Nu Poh Camp?

Certainly, I will let you know my field activities in my camp. If a confirmed case of meningitis had been identified, I had to trace the people in contact with the patient, who lived, worked, ate and traveled together with her/him. After identification of those persons, they were given preventive drugs; Rifampicin for adults and Ceftriaxone for pregnant women and children. We also took throat swabs, specimens from the throat of the person to identify the organism causing meningitis and send them to the laboratory.

We also organized things needed for the vaccination campaign including food and transport of the staff, arranging people, vaccination sites and health education sessions, etc.

What did you learn from the epidemic?

Well, timeliness was very important during the epidemic. We had to learn to do things very fast. We could not wait for office hours to perform our duties. Even after office hours, we had to visit the houses of patients and people in contact with them to do preventive work. We were very, very tired during the epidemic. We needed much rest and relaxation after the outbreak!

What advice would you like to give to other health workers?

Meningitis is an infectious and dangerous disease, which usually occurs during the period of seasonal change. It is common in congested living conditions like refugee camps. We should try very hard to provide active case detection and prompt treatment at all times for meningitis. The last thing but not the least for health workers is to know the signs and symptoms of meningitis: FEVER, HEADACHE, STIFF NECK AND VOMITING.

A Case Study on Emergency Contraceptive

Health Provider, Reproductive Health Project, CARE/ Raks Thai Foundation.



This article tells a story that shows how emergency contraceptive pills can prevent socio-economic problems, which are the consequences of unwanted pregnancy for working women.

Samut Sakhon is a province 40km from Bangkok where many Burmese workers work as seafood processing workers & seafarers. Some of them followed their parents, siblings or spouses and some came with their friends. Most of the workers came from rural areas and they stay together in a community as a migrant group. They share small rooms to save money. Because of their status, lack of knowledge and unable to communicate in Thai fluently, they have difficulty in accessing health services including reproductive health care.

Hla Hla is one of the Burmese workers working in a seafood processing factory in

Samut Sakhon. She stays with her friend, Mya Mya. Hla Hla's boyfriend Ko Oo is also a seafood-processing worker in a factory. They have been dating each other during their free time for several months. One evening, while they were talking in a quiet place, their feelings for each other were so strong that they unintentionally had sex. That night, Hla Hla couldn't sleep well because she was worried and wondered whether she would get pregnant due to the event in the evening. She was very worried and did not know what to do. So, she wept quietly on her bed. Mya Mya was woken up by her crying and asked Hla Hla what had happened. Hla Hla told a bout her relationship



aq;cefolbtry Go to the Health Center.



with Ko Oo and also her worries about pregnancy. She said it is not possible for both of them to get married and have a baby now because they have to work and earn money to support their families.

Mya Mya told Hla Hla not to worry and promised that she would try to help as much as she can. She told Hla Hla about a clinic called Raks Thai Clinic, which provides family planning advice and services. She used to attend small group health education sessions conducted by health educators and peer supervisors in the community. She encouraged Hla Hla to go and see the health provider at CARE/ Raks Thai Clinic near the shrimp market. At first, Hla Hla did not want to go and ask advice from others about such a sensitive subject. Later, she agreed after Mya Mya explained that the project focuses on the migrant population to help increase access to reproductive health services and information. She also said that the services were for anyone who needed them and she would be able to communicate with the health provider in her own language.

Next morning, both of them went to see the health provider. The health provider welcomed them warmly. At first, Hla Hla felt ashamed to tell her story to the health provider. But later, she felt free to tell everything because the health provider encouraged her to talk openly and assured her that the conversation would be confidential. She told

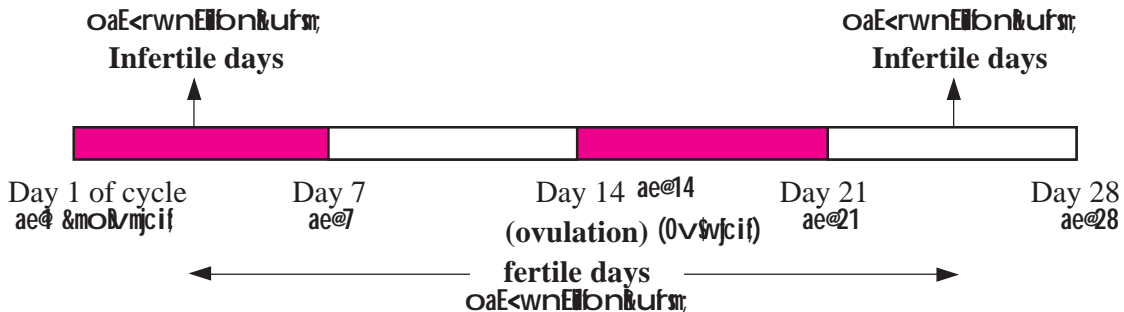
about the event that happened unexpectedly the evening before and explained that it was the first time she had had sexual intercourse. The health provider asked Hla Hla when her last menstrual period was. She had had her period two weeks before. The health provider explained the menstrual cycle, fertile days and infertile days during a menstrual cycle and ovulation (release of egg or ovum from the ovary) as follows:

After she knew that ovulation occurs 2 weeks after the first day of menstruation and fertile days are from day 8 to day 21 for a woman who has a regular cycle, she realized that she was on her fertile days and could get pregnant. So, she asked the health provider for help because she did not want to get pregnant before getting married. She also told the health provider that she did not know much about family planning methods as her parents and teachers had never mentioned FP and both of them had not used a condom.

The health provider told Hla Hla that she could take emergency contraceptive pills to prevent pregnancy and explained how to take them and also answered their questions as follows:

What are emergency contraceptive pills (ECP)?

Emergency contraceptive pills are pills that a woman can take within 3 days of





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unprotected sex (meaning no contraceptives or pills used before). A packet of ECP contains two pills of levonorgestrel 0.75mg.

(On the market, you can find the brands such as Madonna or Ponstinor 2)

How to use them?

One pill should be taken as first dose within 3 days or 72 hours of unprotected sex. This should be followed by another pill 12 hours after taking the first pill.

(If the person has had unprotected sex at other times since her last period, a pregnancy test must be given.)

How it works in a woman's body?

It prevents ovulation or fertilization or implantation depending on the time it is used in a woman's menstrual cycle. It does not cause an abortion, which means that it cannot be used to interrupt an existing pregnancy.

If ECP packet is not available, can we use combined oral contraceptives as ECP?

Yes, you can use combined oral contraceptives as ECP.

- If you use low dose combined oral contraceptives, e.g., AnNa (pills containing 0.03 mg of ethinylestradiol & 0.15mg of levonorgestradiol), 4 hormonal pills (yellow pills) should be taken as first dose within 3 days or 72 hours of unprotected sex. This should be followed by another 4 hormonal pills 12 hours after taking the first pills.
- If you use high dose combined oral contraceptives, e.g., Marnon (pills containing 0.05 mg of ethinylestradiol & 0.5mg of levonorgestradiol), 2 hormonal pills (white pills) should be taken as first

dose within 3 days or 72 hours of unprotected sex. This should be followed by another 2 hormonal pills 12 hours after taking the first pills.

Is this method (taking pills after unprotected sex) effective?

It is effective. Failure rate is 1 to 2%. However, it is not as effective as using regular contraceptive pills or injection, which is why women should not use it as their regular form of birth control.

Are there any side effects when using ECP?

Yes. Possible side effects are: nausea or vomiting, headache and breast tenderness and early or late next menstrual cycle.

If vomiting occurs within 2 hours after taking ECP, take anti-emetic (anti-vomiting pill) and repeat dose of ECP.

Can I use this method frequently and regularly?

As mentioned above, ECPs are less effective than other contraceptives and may cause headache, vomiting and menstrual irregularities in some women. You can use other temporary methods like combined oral contraceptive pills, injection or condom regularly to prevent pregnancy.

Hla Hla was very excited to learn about ECP because she had never heard of it before. The health provider gave a packet of ECP that contained two pills. Now, she knew how to take these pills. She asked for a cup of water from the health provider and took a pill immediately. Then she noted the time and reminded herself that she had to take another pill in 12 hours; i.e., at 10:30pm.



The health provider then explained to her the different family planning methods that can be used. After their discussions, Hla Hla realized that she should use one of those family planning methods if she is not ready to have a baby now. The health provider asked her which method she would like to choose. But Hla Hla wanted to share what she had

The two workers said thanks and goodbye to the health provider and left the clinic. The health provider reminded Hla Hla not to forget to take another ECP pill at night. She promised her that she would take another pill at 10:30pm and would avoid unprotected sex until she had decided what family planning method to use.



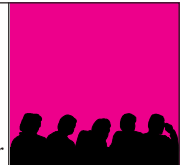
အချစ်အရေးမှီ Counselling session.

learned about family planning methods with Ko Oo and wanted to discuss with him before she decided. So, she asked the provider whether she could bring Ko Oo the next afternoon after he finished his work. The health provider said it was a good idea to bring Ko Oo there, so the provider could explain more about family planning to the couple, including how to use condoms. The provider was very proud of Hla Hla for acting so responsibly and hoped that the information would encourage Hla Hla and her boyfriend to have practice and healthy behavior.

On the way back to their place, Hla Hla felt relieved and happy because she knew how to prevent unwanted pregnancy and she learned a lot about family planning. She thought that she was lucky to have gone and talked with the health provider. She also thanked Mya Mya for bringing her to the clinic. She thought about how family planning helps everyone and hoped that all couples had similar opportunities to learn about it because she knew it would help them to lead healthier and happier lives.

Teachers, Protect your Pupils Against Child Abuse!

Health Messenger



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Tun Zan's behaviour during the lessons also changed completely. He used to be a diligent pupil, but he then lost his concentration and his grades fell rapidly.

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One day, as the children were changing their clothes to play football, Saw Hla Pru noticed that Tun Zan had bruises on his back.



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WHY?
WHAT HAPPENED?
WHAT CAN THE TEACHER DO?

Tun Zan's family had been facing great problems. Tun Zan's father lost his job, and because of the frustration and the helplessness, he started to beat his children.

CHILD ABUSE:

WHAT IS CHILD ABUSE?

Child abuse is the intentional infliction of injury on a child. In most cases, the person causing the abuse is a family member or care giver.



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WHAT ARE THE CAUSES?

Physical abuse is caused by a person's inability to control his/her anger or frustration.

Stressful situations such as war (displacement, etc.) economic problems (unemployment, poverty, etc.), personal problems (family problems, unwanted pregnancy, alcoholism or other drug addiction, etc.) all increase the risk of child abuse.

The loss of control is usually caused by reasons that have nothing to do with the child.

Child abuse is much more likely to occur in families where domestic violence occurs.

WHAT ARE THE SIGNS AND SYMPTOMS?

- Unexplained injuries such as bruises, burns, broken bones...
- Change in the child's behaviour, making the child withdrawn and distrustful, although most children will deny that anything is wrong.
- The behaviour can include: agitation, anger and rage, fears, fears when other children cry, avoiding social contact, aggressiveness, cries frequently, destroys or throws things, lies frequently, stealing, indicates a fear to go home, seems afraid of a parent or other adults, self-destructiveness. She/ he is tired often, has trouble to sleep.

WHAT ARE THE EFFECTS?

Over the long run, abused children are more likely to:

- use drugs
- have extremely passive or aggressive behaviour
- have difficulties in their social life
- perform poorly in school
- have mental health problems

Children who are physically abused often become abusive parents.

WHAT CAN BE DONE?

It is very important to identify the abused children as early as possible to reduce the



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long-term mental problems that the children will have to face.

SO, TEACHERS AND OTHER SOCIAL WORKERS, IF YOU IDENTIFY AN ABUSED CHILD, ACT! THIS IS ALSO YOUR RESPONSIBILITY!

- Bring the child to the clinic if necessary
- Meet the parents to find out what the problem is and help to solve it.
- Obtain help from other social workers to help the parents.
- Ask for help from the religious leaders of your community
- Respect the integrity of the family as much as possible.

Health Workers, you also have a role to play!
 When a child has suspicious injuries, you must carefully question those who care for the child about the source of the child's injury. If the child has been abused, the explanation will be unrealistic. Then you must perform a thorough physical examination and look at the child's medical history for signs of past abuse. Carefully and gently interview the child. If the abuse is confirmed, refer to the social workers of your community!

Conclusion:

Saw Hla Pru went to see the parents of Tun Zan. At first, Tun Zan 's father did not want to speak to him, as he felt ashamed and angry. Then Saw Hla Pru went to ask the monks of the village monastery for help. Together, they went to see Tun Zan 's parents again and told them that they were coming to help them, not to interfere in their family life or to judge them.

This way, Saw Hla Pru has helped Tun Zan's family to break its isolation and to link with its community's support systems. With the support of the community, Tun Zan 's father can better overcome his difficulties and therefore, stop beating his children.

Saw Hla Pru was so happy to see Tun Zan recovering and being the good and happy pupil he was before.



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r b a u m i f j z p & e f r n l u b l l a q m i & l u & r n e n f ?

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TIPS THAT SOCIAL WORKERS CAN GIVE ON HOW TO BE BETTER PARENTS

I love my children, but being a parent can be so hard!

Being a parent can be a joy, but it is also a tough job. No parent is perfect. We all make mistakes. Even loving parents sometimes do things they don't mean to do. But if you think that you are having trouble controlling yourself, get help!

I get frustrated sometimes. Is this normal?

Yes, all parents get frustrated. Children take a lot of energy. Being a parent is even harder when you have problems in your life, such as worries about your future, problems with alcohol or other drugs. To be a good parent, you have to take care of yourself. That means getting help for your problems.

What can I do when I get frustrated?

Take a break. Everyone needs a break from being a parent once in a while. For example, ask somebody in your family to stay with the children, so you can visit friends.

I sometimes lose my temper. Does that mean I am a bad parent?

No. Many parents lose their temper with their children. It is OK to feel angry, but it is not OK to take it out on your children. When you are really angry, take a break. For example, take your children for a walk or call a friend to come help you. If you feel angry with your children almost everyday or have trouble controlling your temper, get some help. You might talk to the family health care provider, or to the social workers in your community.

How can I be a good parent?

- Show your love.
- Listen when your children talk.
- Make your children feel safe. Comfort them when they are scared.
- Praise your children when they learn something new or behave well.
- Criticize the behaviour, not the child. Say "Doing this is bad!" but not, "You are bad!"
- Be consistent. Both parents in the family need to use the same rules.
- Spend time with your children. Do things together, like playing and cleaning the house. What children want most is your attention. Bad behaviour is usually their way of getting your attention.

What can I do if I need help raising my child?

- Ask for help from the social workers.
- Request advice from your religious leaders
- Speak to your family doctor or health workers

Don't be embarrassed to ask! Raising children is hard, and no one can do it alone.

Source: American Family Physician



What is Tuberculosis?

MSF TB Programme, Mae Sot

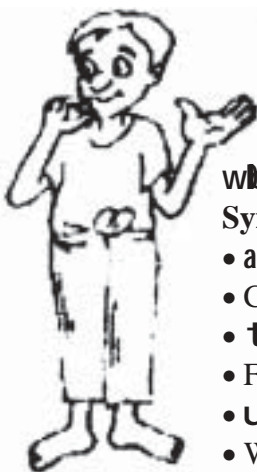
My friend, This pamphlet will help you.



- Tuberculosis (TB) is caused by a bacterium, which cannot be seen by the naked eye.
- It is easily communicable
- It will kill if treatment is delayed in the case of TB.

My friend, TB can be cured

- Curable
- Treatable
- Preventable



Symptoms of TB

- Coughing
- Fever
- Weight loss

For information call

TEL : 055-542223

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DRAWING CONTEST

HEALTH MESSENGER MAGAZINE WILL PUBLISH A SPECIAL ISSUE ON
"DRUG RELATED PROBLEMS" DURING THE MONTH OF DECEMBER,
2003.

THE HEALTH MESSENGER MAGAZINE TEAM INVITES ALL OF OUR
READERS TO PARTICIPATE IN A DRAWING CONTEST FOR THE COVER-
PAGE OF THIS ISSUE.

MEASUREMENT FOR DRAWING: A-4 SIZE

A PRIZE WILL BE DISTRIBUTED FOR THE SELECTED COVER-PAGE
DRAWING.

*CLOSING DATE FOR THE CONTEST: NOVEMBER 15, 2003
HEALTH MESSENGER MAGAZINE*

ARTICLE-WRITING CONTEST

Dear Readers,

This magazine is yours! Please participate in our article-writing contest! Send articles about your experiences as a Health or Social Worker to the address below:

The winning article will be published in issue No. 23 in February 2004.

Each medical article must fit in with only one of the following topics:

Diagnosis, Prevention, Case Study, Treatment, Sanitation, Health Education, Laboratory, Maternal and Child Health, Social, General Health, Interview

Non specific medical articles will also be accepted too.

- e.g., From the field, Comics

Size : The article should be between 2-6 pages of 2000 characters each page (space included)

Style and contents

The article should be written in simple and clear Burmese, Karen, English or even French. Each article must have a title, the name and qualification(s) of the writer, and if possible, illustrations such as pictures, drawing or ideas for them.

Closing date for the contest: December 15, 2003

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Tel: 02 656 9370 Fax: 02 656 8869 E-mail: hmess@loxinfo.co.th

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11? r i l f o l r s u l l a z m j y y g

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5. If you are ill, can you take anti-malarial drugs by yourself?

a) Yes

b) No

6. What are the main complications of severe malaria?

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7. What is a landmine?

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8. What are the effects of landmines on the families of the landmine victims?

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9. What are the substantial mental illnesses affecting landmine victims in refugee camps in Mae Hong Son?

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10. Describe briefly the four basic steps to follow just after a landmine accident:

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11. Name three types of landmines:

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12. Describe the meaning of "AMPUTATION".

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13. What kinds of gland are called endocrine glands?

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14. Name the location of the thyroid and parathyroid glands?

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15? oif&Luf. tjzpt r; qk&m*gr; onrnbnt a&m*gr; jzpbef?

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15. What are the most common diseases of the thyroid gland?

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tqd (.....%)
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16. Give the recommended amounts in percentage (%) of nutrients to stay healthy for men and women:

Protein (.....%)
Fat (.....%)
Carbohydrate (.....%)

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17. What is the major vector of filariasis in South-East Asia?

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18. What are the major complications of measles?

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19. How can you manage a case of threatened
abortion?

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20. Describe briefly the signs and symptoms
of infection in case of abortion?

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21. What are the social causes of abortion?

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22. Mention the ways to prevent transmission
of HIV between sexual partners:

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23. What is the total average weight gain in
kilograms (kg) during pregnancy?

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24. What is the best way to prevent Hepatitis
B?

- a) Give antibiotics
- b) Give vitamins
- c) Give immunisation
- d) Give liver tonics

25. What is the main duty of men in Kachin
society?

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