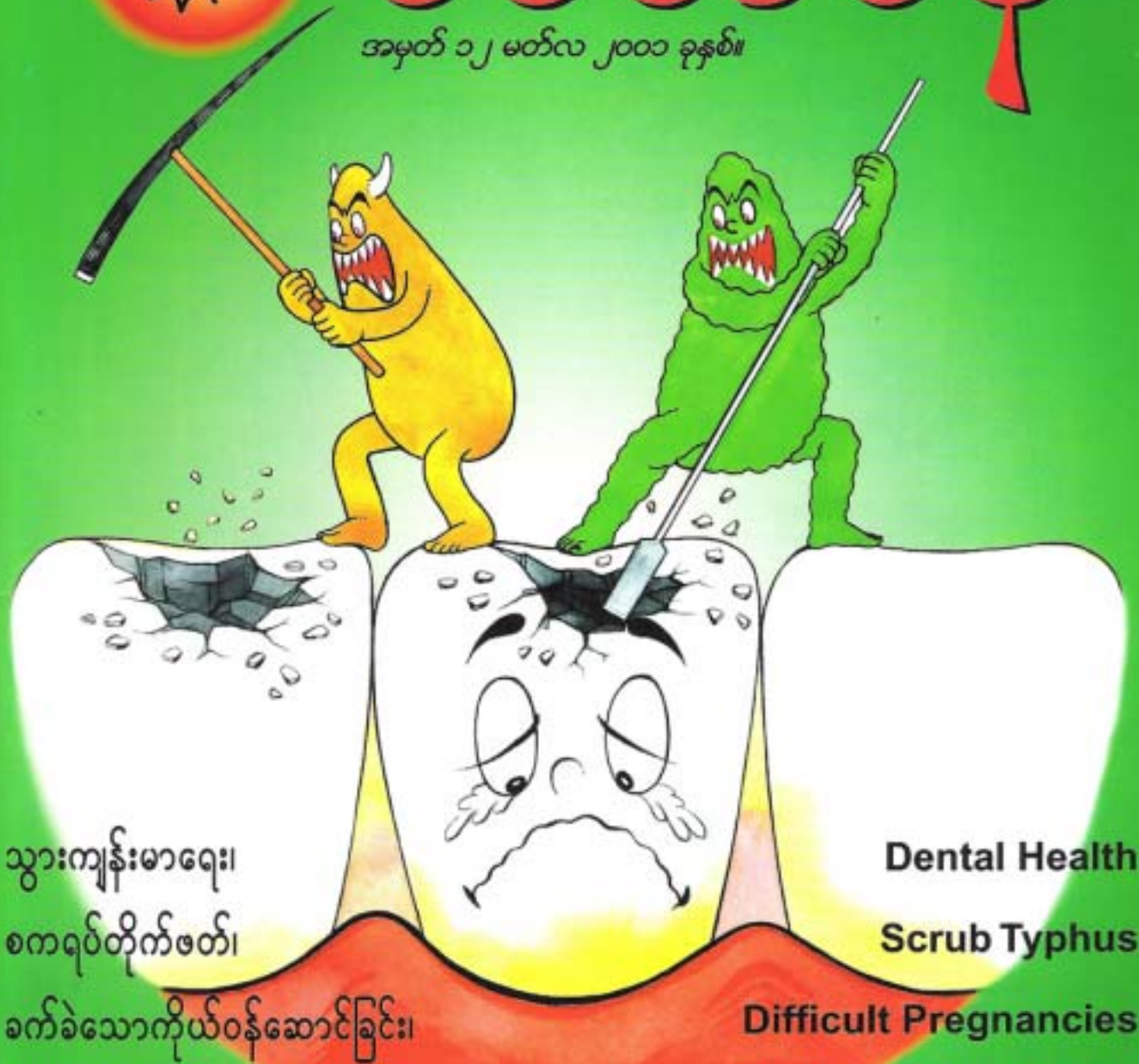




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Dental Health

Scrub Typhus

Difficult Pregnancies

## Health Messenger

ISSUE 12  
BURMESE EDITION  
MARCH 2001



# rmvdlm

## CONTENTS

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### taxlxuelfma&; / General Health

oñ;. wnñqmuylEStZlyl(uefrma&; apwref) 2

The Tooth: Structure & Development (Health Messenger)

jzpbv/jzpbx&&ñom oñ;jy\ emrm;? (uefrma&; apwref) 8

Common Dental Problems (Health Messenger)

pcefrsm;wñfyfrñ;uL&mrS&&ñom wñfwñefzsm;a&m\*g(uefrma&; apwref) 30

Scrub Typhus (Health Messenger)



### uefrma&;yrmay; / Health Education

oñ;EStqññom xefortapmiñ&ñufEStuav;oli, frsm; (uefrma&; apwref) 16

Dental Care and Children (Health Messenger)

'aomif. oñ; yñyif(uefrma&; apwref) 58

The Tale of Thaung's Teeth (Health Messenger)



### julwñumug jcif / Prevention

oñ;buñqññm uefrma&; wñwñuñqmiñ&ñujcif (tif &ñ, mñefñzñ/bñpñ) 24

Dental Health Promotion (Andrea Menefee, BBC)

cucñomul Deñqmiñcifrm; rjzpyñ;añmiñumug jcif (uefrma&; apwref) 42

Prevention of Difficult Pregnancies (Health Messenger)



### vrqubññ&; / Social

tñ;vñtwñuefrma&; - aqmiñylññaz:aqmiñef 36

urñwvññ;rñpñññr\_(c&pññwññ [ mñpñwññ bññm&pñ)

Global Gathering to Achieve Health for All (Christine Harmston, BRC)



### a&m\*gñvññññ / Case Study

ñyaumñef. vññwñpñyñtñumif (qutrmññ tñtñpñtññ) 52

The Case of Mi Pakow Son (Saikamer Non, MSF)



### vññefcññrs From the Field

oñ;buñqññm vñññ;r\_tñpññññm (orñvmap;Eññar&ñ oññpñññm/armññvññm [ ñññññ 56

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Dental Activity Report (Tham La Sey & Marie-Therese Benner, Malteser Hilfsdienst Germany, MHD)

This text has been drafted with financial assistance from the Commission of the European Communities. The views expressed herein, in no way reflect the official opinion of the Commission.

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

Dear Readers,

In this issue we discuss an important part of the body – the teeth. Tooth problems affect all ages – from babies to old people. Sufferings are more at the later stage of dental diseases, which may lead to tooth loss. We have tried to provide some basic information on the anatomy of tooth, the common dental problems and some simple but important preventive measures, which can save all from getting dental diseases.

We have also included topics on difficult pregnancies and scrub typhus – both of which are found in the camps.

I hope this issue will help you to improve your knowledge related to the above topics, and also will support you in health education activities. One test is included in this issue. The questions will be made from issues # 9, 10 and 11. Please do answer the questions and return it to us on time; the best 200 will win a prize!

Best of luck to all readers. Happy reading!!

Best regards.

Dr.Seerat Nasir  
Editor

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A diagram of the oral cavity, showing the tongue and throat area. A red arrow points to the pharynx, which is the part of the throat at the back of the mouth.

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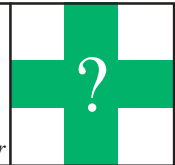
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# The Tooth: Structure & Development

Health Messenger



*The tooth is one of the essential parts of our body, but we do not think much about them. They help us in many ways, but often are neglected by us. This article will provide a short description of the development and structure of teeth.*

Teeth are set in the gaps of the jaw bone called the alveolar processes. The jaw bones (the mandible or lower jaw bone and the maxilla or upper jaw bone) are the bones that contain all the teeth and provide stability and mobility for the mouth and teeth for chewing. Each tooth consists of three parts – *the crown, the neck and the root*.

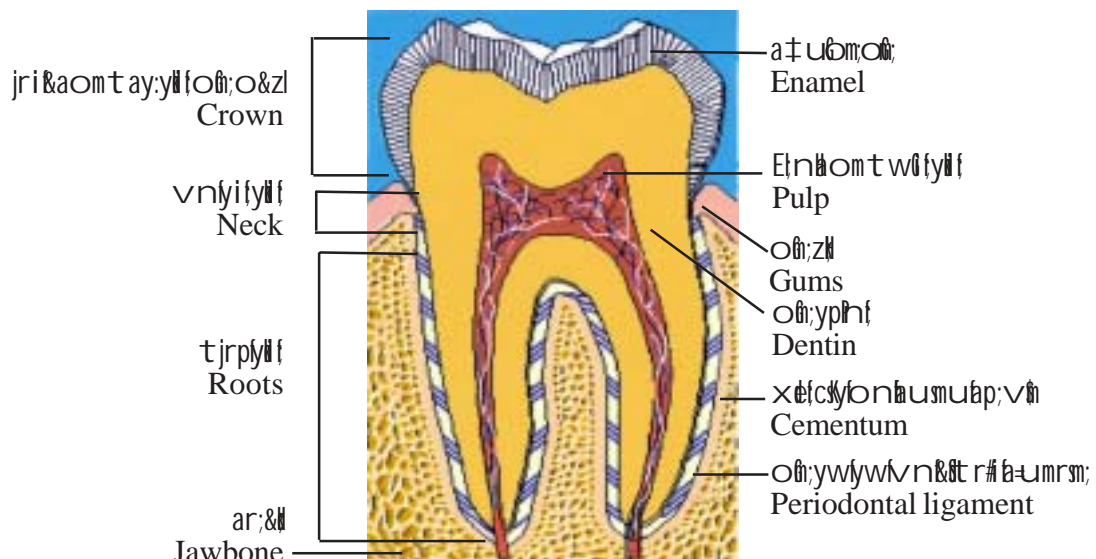
- 1. Crown:** the visible part above the gum that looks like bone. It has a central cavity which contains the dental pulp.
- 2. Neck :** the narrow portion between the crown and the root.
- 3. Root:** the portion embedded within the gum and attached to the periodontal membrane. The root holds teeth in the bone of the jaw, just like a tree's roots hold it in the earth. The root of the tooth with its

blood vessels and nerves extends down into the jaw bone and provides blood supply and sensation to the tooth.

The solid part of a tooth includes: *dentin*, forming most of the tooth and resembling true bone, which is harder and denser than bone but softer than enamel. It is covered by enamel on the crown and cementum on the root.

*Enamel* is a very hard substance, that covers and protects the dentin of the crown. It is the hardest substance in the body and is almost entirely composed of calcium salts.

*Cementum* is the bonelike rigid (not flexible) connective tissue covering the root of a tooth. It also serves as an attachment structure for the periodontal ligament, thus helps in supporting the tooth.



(Fig. 1) Parts of the tooth





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The soft tissue, the *dental pulp*, is composed of connective tissue containing blood vessels and nerves.

## Development of teeth

In humans, there are two sets of teeth *deciduous* (fall off or shed at maturity) or baby teeth and *permanent*.

**Deciduous or baby teeth:** the 20 teeth a child has which are shed and replaced by the permanent teeth. The central incisors in the lower jaw appear between 6-9 months followed by the upper central incisors within 8-10 months. All the milk teeth are erupted by the end of 24 months.

Between ages 17 and 25 years, four more permanent teeth – the molars – grow in the far back of the mouth. This means that an adult should have a total of 32 permanent teeth - 16 teeth on the top and 16 teeth on the bottom.

The adult teeth have different shapes. Teeth have various shapes according to their function. We need different kinds of teeth to help us eat our food.

The front teeth are called **incisors** or cutting teeth. They have sharp edges that tear or cut food into pieces. For example, while eating a guava, one uses one's front teeth to bite into the food and cut it into pieces.

Deciduous or baby teeth		Permanent teeth	
Central Incisor:	4	Central Incisor :	4
Lateral Incisor:	4	Lateral Incisor:	4
Canine (Cuspid):	4	Canine (Cuspid):	4
First molar:	4	First premolar (Bicuspid):	4
Second molar:	4	Second premolar (Bicuspid):	4
<b>TOTAL:</b>	<b>20</b>	First molar:	4
		Second molar:	4
		Third molar:	4
		<b>TOTAL:</b>	<b>32</b>

When the child is between about 6 and 12 years old, the permanent teeth start to grow. Most of the permanent teeth form under the baby teeth, and push against the roots of the baby teeth. When this happens, the baby teeth fall out.

Not all of the baby teeth fall out at once - one tooth at a time becomes loose, falls out and then is replaced with a permanent tooth. The new tooth may take up to several months to grow all the way back in.

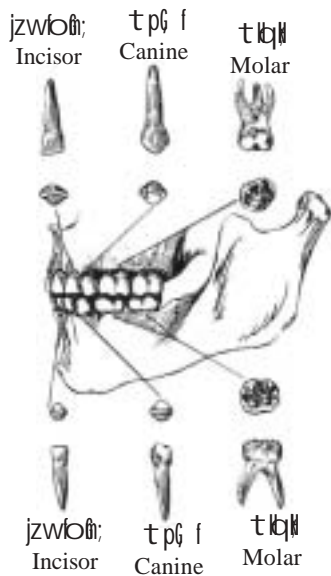
**Permanent teeth:** in the years between ages 6 and 12, the 20 permanent teeth replace the 20 baby teeth. In addition, 8 other teeth grow in the back of the mouth.

The **canine** teeth are lateral to the incisors and have a pointed, sharp crown. These are used for tearing tough food, like meat.

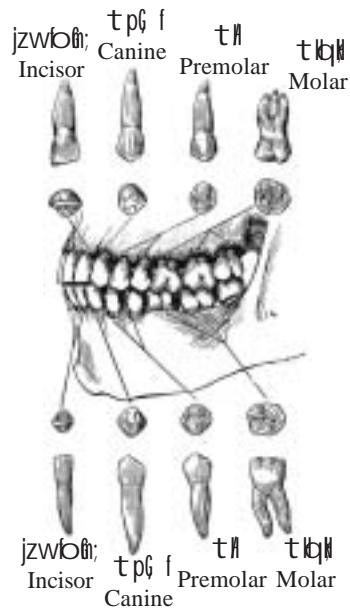
The teeth at the back or **molars** are flatter and are used for grinding the pieces of food into small bits that are easy to swallow. For example, if you eat chicken, your back teeth grind the meat into small bits that are ready to swallow. So, the front teeth are for biting and the back ones are for chewing.

We should all take good care of our teeth and show our children how to take good care of their teeth.





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Fig. 2 Deciduous teeth



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Fig. 3 Permanent teeth

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## Glossary

**Gum:**

Gum of the mouth or 'gingiva' is that part of the oral mucous membrane that overlies the crowns of unerupted teeth and encircles the necks of those that have erupted. It is pale pink in colour and is immovably attached to the bone and the teeth.

**Eruption of tooth:**

To come to the surface of the gum and become visible during the normal process of tooth development.

**Cusps:**

The peaks or pointed ends on the chewing surface of the back teeth.

**Cuspid:**

Having one peak.

**Bicuspid:**

Having two peaks.









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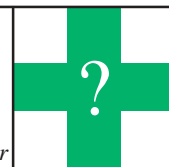
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# Common Dental Problems

Health Messenger



*Most of us suffer more or less from some kind of dental problems. The most common is the tooth decay or dental caries, toothache and gingivitis. This article will discuss in brief some common dental problems and their management.*

## **What is a dental caries?**

Dental caries or tooth decay is a lifestyle-dependent infectious disease.

Some bacteria in the mouth produce lactic acid which causes tooth structure to dissolve. It destroys the dental enamel, the hard cover of the tooth. When dental decay spreads to the nerve and pulp tissues of the tooth, the result can be dental pain (toothache), dental abscess, or facial cellulitis.

## **What causes dental caries?**

Dental caries is caused by some bacteria in the mouth.

The bacteria causing dental caries are able to metabolize sugar, produce a destructive lactic acid and a sticky dental plaque. This

acid dissolves the mineral structure of teeth. Continuous acid attack can cause the loss of tooth mineral. As a result, the surface of the enamel will eventually be destroyed, producing a cavity.

The bacteria which cause caries are usually “passed on” from mother to infant, as early as 10 months of age. The danger of infecting an infant’s teeth is increased if the mother already has the caries disease herself.

Children who frequently eat refined sugar products, such as candy and soft drinks, have a high risk of developing dental caries. Sugar is therefore an important contributor to dental caries.

The newly erupted teeth of infants are the most susceptible to caries because they are not yet fully hardened.

## **What is Plaque?**

Plaque is the accumulation of bacteria, microorganisms and their products which sticks to the tooth surfaces. Dental plaque is soft and easily removed by brushing. Accumulation of plaque can lead to tartar formation and then to gum disease (gingivitis) and periodontal disease, as well as tooth decay.

## **What is Tartar?**

If dental plaque stays on the teeth for more than 24 hours, it will mix with saliva, harden and make tartar. Tartar coats the teeth, can be very sharp and hurt the gums. Also the germs in groups or ‘colonies’ can make a coating on top of tartar more easily than on a clean tooth. When the colonies are new, they make more acid to cause tooth and gum problems. After 24 hours, they harden and make a new layer of tartar. The tartar get bigger and bigger and you need a dental worker to scrape it off.









## What is a cavity?

A cavity is the destruction of the tooth enamel, dentin, cementum and may involve the tooth pulp (Fig. 6).

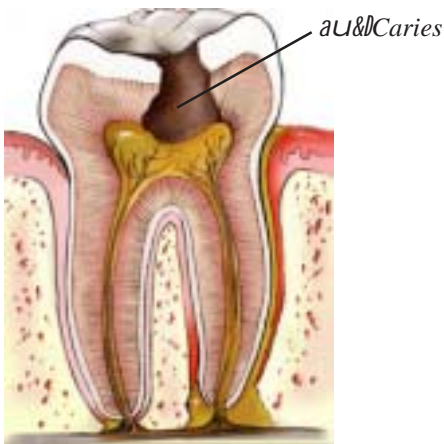
## How does a cavity form?

Many factors influence the formation of a cavity. For example:

- The tooth itself plays a role (how strong it is).
- The ability of the mouth to cleanse itself (flow of saliva).
- Diet (frequency and selection of sugary foods).
- The bacteria in the mouth (good or bad).
- The length of time the tooth is under attack by the bacteria in the mouth.

**Heredity:** may play a major role in how susceptible one is to the formation of a cavity, for example:

- Tooth structure, size and shape of the tooth may be passed down through generations. This includes deep pits and grooves which are ideal “plaque traps”, and therefore, are susceptible to decay.
- There may be a higher risk of cavities forming if your parents also had a large number of cavities.



(Fig.6) Dental decay



- Teeth that are not well-positioned in the mouth, that are hard to access with the tooth brush also provide an ideal breeding ground for the bacterial dental plaque.
- The absence of fluoride during tooth formation and following tooth eruption can increase the incidence of cavities. Fluoride promotes strong tooth development and remineralization of the tooth.

**Saliva:** has a protective function in the mouth, for example:

- A good flow of saliva washes away food and bacteria that sit on the teeth and gum tissues.
- Salivary flow helps to neutralize the acids produced by bacteria from plaque, thus a good flow helps reduce the chances of a cavity formation.

**Diet:** a well balanced diet from each of the four major food groups is essential for one's oral health, as well as, one's overall health.

- One should avoid frequent consumption of high sugar foods, especially sticky foods
- The longer the time the food stays on one's teeth, the greater the chance of forming a cavity.
- Select between meal snacks that are low in sugar concentration such as plain milk, fresh fruits, raw vegetables, dark breads and whole grain and enriched cereals.





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**BEFORE,** People ate fresh food grown and prepared by themselves. Even sugar cane was not as bad as the sticky candy children eat today. The sugar was bad for the teeth, but the fibre in the cane helped rub the teeth clean.

**NOW,** people are buying softer and sweeter food from the store. This kind of food sticks to the teeth more easily so it has more time to attack and weaken the teeth and gums.

**Time:** the actual amount of sugar eaten is not as important as how often a food containing sugar is eaten.

The consumption of high sugar foods is best if eaten with a regular meal. This will confine the sugar exposure to one time rather than taking high sugar containing foods at different periods throughout the day.

**Bacteria:** the mouth has many types of bacteria that are considered to be normal in the human mouth. Bacteria in a healthy mouth, tends to live in balance but for some unknown reasons, that balance can be disturbed and oral disease may result.



### Signs of a cavity formation

The first sign of a cavity formation may be a white spot, which in time may turn brown. For a white spot, low concentration of fluoride applied frequently can reduce further development.

If the white spot phase progresses, further breakdown of enamel will occur (Fig. 7). If not delayed further, the cavity may be restored with a filling.

### Gum disease

#### Gingivitis

Gingivitis is an inflammation of the gums. Some common features associated with gingivitis are red and swollen gums, the presence of bleeding while brushing or flossing, loose teeth and bad odor-tastes from the mouth. The cause of gingivitis is the bacteria in dental plaque. Gingivitis can be cured with good oral hygiene practice.

Besides being painful, gum disease can cause tooth loss. When food is not cleaned away and bacteria grow on the gums, this causes the gums to become weak and more







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Fig. 8 a) Healthy teeth and gums

b) Dental decay and infected gums

and there are some things that people can do by themselves.

If a cavity causes an infection, the person can go to the clinic for antibiotic treatment for the infection. If cavities are not too bad they can also be filled

likely to get infected. Eventually, the gums pull away from the teeth and form pockets that may fill with pus. Eventually, the teeth will become loose and fall out.

### **Periodontal disease (periodontitis)**

Periodontal disease affects the periodontium (the supporting structure of the teeth). There are several causes of this disease, but the presence of bacteria in plaque certainly plays a major role. The supporting periodontal structures begin to breakdown. This means part of the jaw-bone that supports the teeth or the ligaments holding the teeth securely in place might be destroyed. This disease process is generally not reversible and may require treatment from a dental professional specializing in periodontal disease.

Periodontal disease can develop as a result of poor daily plaque control (e.g. brushing). However, not everyone with poor brushing techniques will develop this condition. Regular check up by a dentist is suggested to detect early stages of the disease and to prevent further damage.

### **Management of dental problems**

The best way to deal with dental problems is to PREVENT them. However, some treatment can be provided in the camp,

with artificial cement made of chemicals. Sometimes, teeth need to be pulled out if the cavity is very bad and causing much pain and infection.

If a person has the signs of gum disease, he should do the following things to prevent the disease from becoming worse and causing serious problems. These include:

- Clean teeth often.
- Eat more fresh fruits and vegetables.
- Clean between teeth with thin string or thread - gums may bleed at first, but when infection stops and gums grow stronger, they will become healthier and stop bleeding.

If gums are infected, a person should also rinse mouth with warm salt water several times a day until the infection goes away - be sure to spit the water out!

Antibiotic should be prescribed in case of severe gum infection with pain.

**Tooth extraction should only be done at the clinic by a trained medic.**







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# Dental Care and Children

Health Messenger



*Children should be given knowledge about dental care as it will help them to have healthy teeth.*

Parents, most of the time ignorant of the fact about the bad effects of certain foods on teeth, buy their children sugary candies, soda drinks, sweet sticky cakes etc. Children should know what these foods can do to their teeth and how they may suffer from toothache, periodontitis or finally tooth loss.

Help children understand these ideas. Help them to prevent decay and periodontal disease. Children should learn two key points:

- It is most important to clean teeth to remove sugar and plaque.
- Sweet foods and soda drinks rot teeth.

**DO NOT GIVE TOO MUCH SWEETS TO YOUR CHILDREN TO EAT. IF THEY EAT SOME, TEACH THEM TO CLEAN THEIR TEETH AFTERWARDS OR GIVE THEM SWEETS AT THE END OF A MEAL BEFORE BRUSHING TEETH.**

Parents as well as teachers can follow some steps to make children understand the importance of having healthy teeth.

## **Some suggestions for parents and teachers**

### ***Looking at teeth***

Children could look at teeth of younger brothers and sisters, older children, babies, friends, other students in their own class and adults. Here are some suggestions:

Get children to count the number of teeth in a person's mouth. Ask the children:

- Does everyone have the same number?
- What is the maximum number of teeth in a mouth?
- How many teeth do babies have?
- Do all the teeth look the same?
- Why do we have different teeth?

Discuss the children's observations with them. Teachers can ask the students if they can make drawings to show the arrangement of teeth in the mouth after the observation.

Teachers can encourage children to bring their milk teeth to school after they fall out. Discuss with children why teeth are important. What is it like to have no teeth? What problems does a person with no teeth have?

Explain to children that we have two sets of teeth. Remind them that their permanent teeth are their last.

Do any of the children have younger brothers and sisters? Ask the children to have a look at their teeth.





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### One easy experiment:

Get two milk teeth. Drop one into water and one into a bottled soda drink. Leave them for a few days. Then take them out and observe them. You will find that the tooth in the water stays healthy. But the tooth in the soda drink becomes soft. You can scrape some of it off. (Don't tell the children the findings beforehand. Do the experiment and let the children observe the results for themselves).

Tell the children about the bad effects of sweet foods and soda drinks. The sugar in the liquid quickly rots their teeth. Explain to them how these food and drinks can make holes in their teeth.

### Looking after teeth

Children should learn how to keep their teeth clean. Emphasize the importance of brushing them regularly. Clean the teeth at least once a day very thoroughly to remove plaque and sugar. Clean the teeth after eating food with sugar in it. Toothbrush or chew sticks can be used to clean the teeth. If neither is available, the fingers can be used (see page 27).

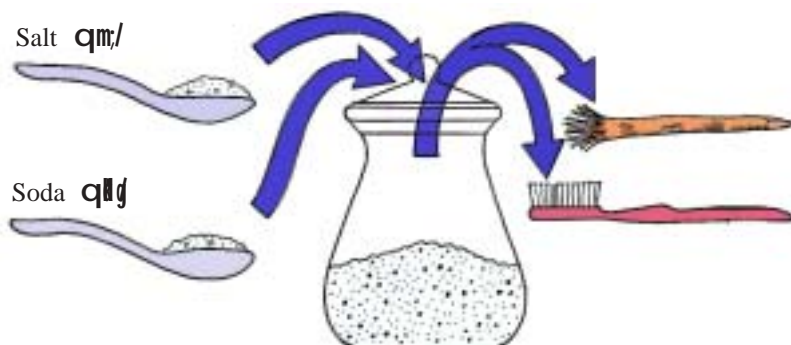
Children could make chew sticks by themselves.

Find the twig (small branch) of a suitable tree which is locally used for this purpose.

Chew on one end and use the fibres as a brush. Sharpen the other end to a point. With this pointed end, the food can be removed from between the teeth.

Toothpaste or toothpowder might be used to clean the teeth but are not essential (see page 27). Toothpowder can easily be prepared at home. Mix equal amount of salt and bicarbonate of sodium (soda) together and the tooth powder is ready. If no soda is available, salt by itself can be used. Wet the brush used so that the powder sticks to it.

Show children how to brush their teeth. The brush should clean all the surfaces of the teeth including the inner surfaces. It is best to brush up and down, to flick out the food between the teeth. Brush the biting surfaces with a backwards and forwards scrubbing movement. Clean near to the gums (see page 29).



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(Fig. 9) Making toothpowder





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añjñzñhñyñvñl uñsñf yñg  
uñeñf rñmoepñf faponñh tñpm;tñpmñrsñ;uñl pmñ;olñyñg  
nñl, fñnñi, fñrsñ;uñl oñ;wñl uñ&Eñ oñfayñyñg  
rñbmñ;pkñvñl fñwñl pñdt wñl uñf oñ;yñvñl wñl vacñni fñpñl ðñyñg pñ/

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rñpmñ;yñg Eññ  
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### Do's and Don'ts for teeth and gums

#### Do

Brush teeth everyday.  
Brush teeth before going to bed.  
Rinse mouth at least with water after eating sweet food.  
Eat healthy food.  
Teach younger brothers and sisters to brush their teeth.  
Have a brush or brushstick for each person in the family.

#### Don't

Let teeth rot.  
Forget to brush teeth.  
Use broken brick, charcoal or other hard materials for cleaning teeth.  
Drink too much soda or bottled drink.  
Eat many sweets and sugary food.  
Use one brush for everyone in the family.  
Use other's brush or brush sticks, even it is of your parent's, brother's or sister's.





## Children can make a play in the school (Adapted from Child-to-Child Readers)

The children can do a sketch or puppet play about their teeth. The characters could be as follows:

**\*Jimmy Germ:** The gum thief; a bad man

**Simon Sugar:** A bad man who rots teeth (a rotter)

**Sammy Molar:** A good but rather stupid man

**Dan Dental Worker and Bella Brushstick:**

Two good, helpful people who stop Jimmy Germ and Simon Sugar from attacking Sammy Molar

**Fred the Farmer:** Who grows fresh food

Here is an outline plot which can be developed by teachers and children:

1. Sammy Molar tells Dan Dental Worker what it is like to be a tooth. He says how frightened he is of Jimmy Germ and Simon Sugar.
2. Jimmy Germ and Simon Sugar appear and tell the audience how they plan to rot Simon Molar and make his gums so weak he will fall out.
3. Dan Dental Worker and Bella Brushstick discuss how to stop them from attacking Sammy Molar.

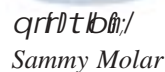


Simon Sugar

\*Jimmy Germ

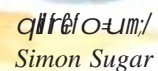
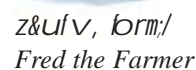
Sammy Molar





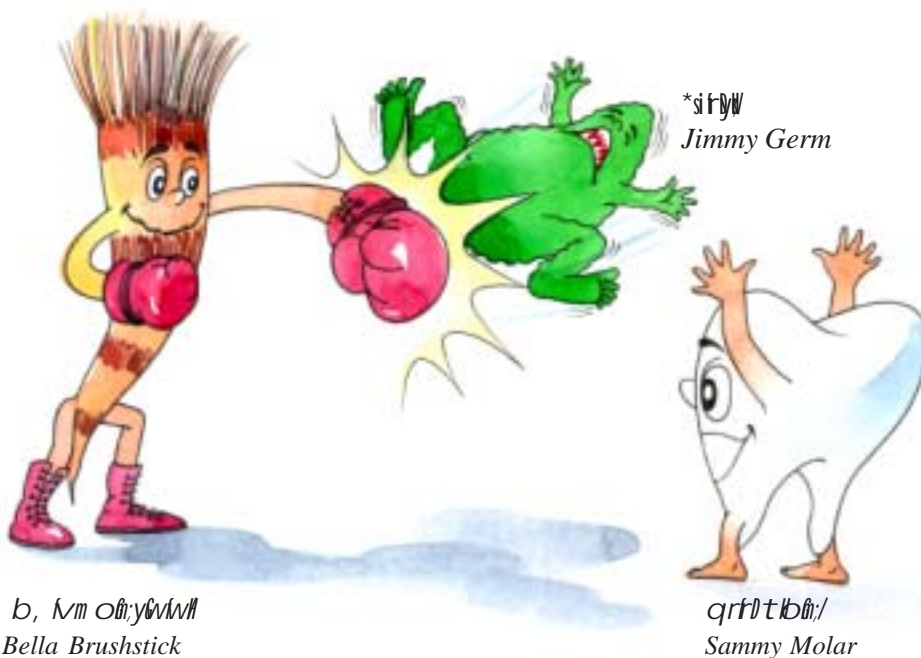
4. Sammy Molar gets covered in sweet food by Simon Sugar. Sammy Molar starts to go bad. Jimmy Germ attacks his gums. Sammy cannot stand up well.

5. Sammy Molar describes his problems to Dan Dental Worker who explains the importance of not eating too much sweet food and cleaning his teeth regularly.



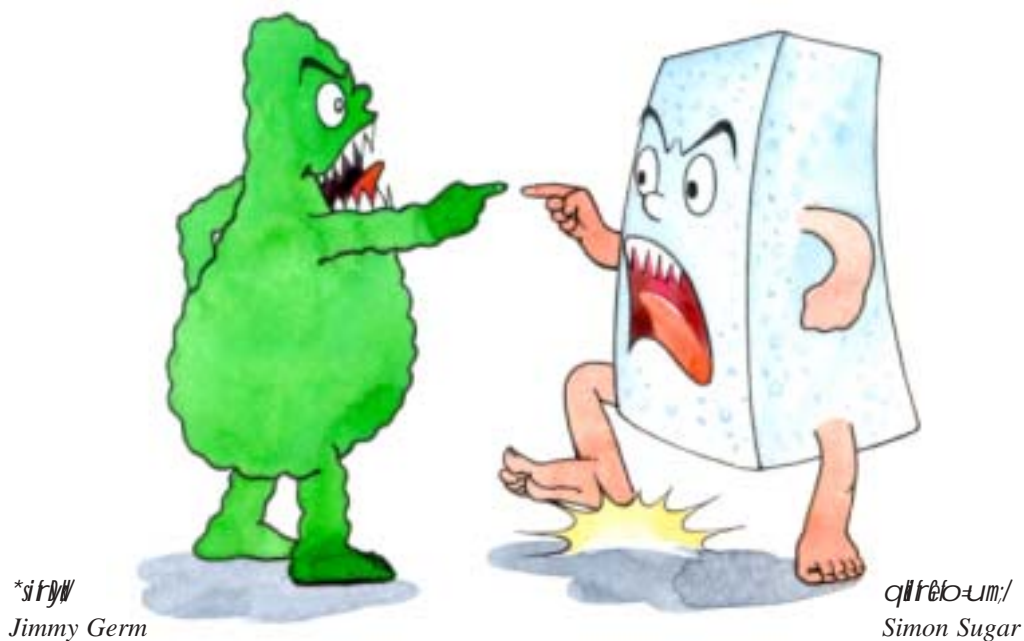
6. Dan Dental Worker introduces Sammy to Fred the Farmer. He tells Sammy about foods that will not hurt him. Simon Sugar is very angry.





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7. Sammy then visits Bella Brushstick, who drives out Jimmy Germ.



8? qrɪtɪb;Eɪ\*sɪrɪwɪɛzɪpɪwɪ wa, muɪlwa, muɪtɪpɪzɪwɪ?

8. Simon and Jimmy quarrel and blame each other.







# Dental Health Promotion

Andrea Menefee, BBC



*Teeth and gums play a very important role in our overall health. As health educators, we often do not realize the importance of keeping our teeth and gums healthy. But one of our jobs as Community Health Educators (CHEs) should also be 'Dental Health Promoter.' Let us discuss why healthy teeth and gums are so important.*

## What are the functions of teeth and gums?

1. Teeth help you to eat:
  - Teeth crush food.
  - Teeth help the food mix well with saliva.
  - Teeth make food ready to swallow into the esophagus and stomach.
2. Teeth help you speak:
  - Your tongue and lips touch your teeth and help you make sounds.
3. Teeth help your looks:
  - Nice, healthy teeth make you look better.
4. Teeth affect your breath:
  - Dirty, rotten teeth make your breath smell bad.
5. Gums help to keep teeth strong and keep food and bacteria away.

You need strong teeth and healthy gums to eat different kinds of foods that are important to keep you healthy. Foods, such as nuts, meat, hard fruits, and beans, may be difficult to bite and chew if your teeth are loose and hurting.

To be strong, teeth need healthy gums. Gums are the skin around your teeth. To keep your gums healthy, you need to keep your teeth clean.

## Dental Problems

Tooth decay and gum diseases are the most common dental problems, but are also



very easy to prevent, if people know how to prevent them.

## Prevention

Most tooth and gum problems can be prevented if people know what to do. There are some simple things that the CHEs can teach the community about promoting dental health and preventing dental problems.

**Prevention is the most important way for people to have healthy teeth.**

Remember that bits of food like to stay in the 'hiding' places, between teeth and under gums and in the grooves on tops of the teeth. If you do not clean your teeth properly, the food that is left on your teeth can decay the teeth and cause problems in the gums near them.





## umuŋ jciŋ

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t c s h y g o n?

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u m u ŋ j c i f o n f  
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r s m; u l l q f a j r l y s u p l a p E l l h y d u y l v s u l a o m o ŋ; z h w l f  
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t c s h g v l e l u p h y g o n h t p m; t p m r s m; u l p m; r d o m  
t c g p m; y d o n E s h y g p y l u l a q; a u m y g

E t n h a y m h a j y m i f a o m / t c s h u a o m t p m; t p m  
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v n f y l l q l a q m i y g o n? E t n h a y m h a j y m i f l t c s h u l  
a o m t p m; t p m r s m; u l l r s m; p h p m; o l u a o m u a v; o l  
i, r s m; o n f a q f a j r l y s u p l a o m o ŋ; r s m; u l y l l l & & l t h  
r n j z p b n?

## • o ŋ; r s m; E s h o ŋ; z h u l a e p o f o e l s f r t y y g

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o ŋ; r s m; u l l o e l s f r t y y l y & m w l f t e n f i, f h a o m  
t c s h E s h \* t p l u r w l e v l t y y g o n? t u, ɲ  
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t p m r s m; E s h a & m \* g l r s m; r s m; u s e h e w w l y d x l a & m \* g  
y l r s m; u o ŋ; r s m; w l f t a c g f a y g u r s m; j z p a t m i f E s h  
e m u s i h a o m o ŋ; z h r s m; j z p a t m i f q u l v u l t y y l y f  
u y g v l r n?

t u, ɲ o i l w l b o ŋ; y l w l w l l y g u x l b o ŋ; y l w l w l l u l  
o l l y g o n? r & l w l f o ŋ; y l w l w l l u l l w l l t y y l y f  
E l l y g o n?

t a & l u r s o ŋ; r s m; u l l o e l s f r t y y o v l t w l f  
b u r s o ŋ; r s m; u l l v n f o e l s f r t y y l y b e f r a r l y E s h  
c s h l r s m; a j r m i f r s m; & l m o ŋ; r s m; . a b; E p z u E s h  
t a y; y l l r s m; u l l y l w l w l l y g o ŋ; y l w l w l l t a r g r s m; u  
c s h l r s m; a j r m i f r s m; t w l f t r e l w u, b e l s f a & u l l  
t r s m; q l v l y a q m i f a y; y g o n? o ŋ; w l l y d y g u t m  
c l w l f r s p m; t u o f p m; u s e r s m; u l l a & E s h y y l y u s i f y d  
a x g y p l y g





To prevent tooth decay and gum disease, it is important to:

### **Eat healthy foods and keep teeth and gums clean.**

#### **• Eat healthy foods every day**

The same foods that are good for the body are good for the teeth.

Try to eat some foods from each of the three food groups every day; these include energy foods like rice and oil, protein foods, like yellow beans and meat, and protective foods, like fruits and vegetables.

Be sure that you eat enough food to give your body the energy it needs.

Try to avoid eating sweets like cookies and soda drinks.

If you do eat sweets, wash your mouth afterwards.

Soft, sweet foods stick to the teeth more and attract more bacteria. Children who eat a lot of soft and sweet foods will get more tooth decay.

#### **• Clean your teeth and gums every day**

Clean your teeth *at least once every day*.

Cleaning teeth requires a little time and care. If you hurry, you will leave food and germs behind, and these germs will continue to make cavities and sore gums.

If you have a toothbrush, you can use it, or you can make your own brush.

Be sure to clean your back teeth as well as your front teeth - scrub the tops and sides where the grooves are - the hairs on the brush do most of the real cleaning. When you finish brushing, rinse away the loose pieces of food in your mouth.

Toothpaste is not necessary - water is enough; but toothpaste can be used if available.

Clean between the teeth, and sweep the bits of food away. Use thin, strong thread to carefully clean between your teeth. Cleaning between your teeth is very important to help prevent gum disease.



#### **How to make a homemade toothbrush**

If you don't have a store-bought or homemade toothbrush, you can use:

- Small branches from a plant, for example, zepiewkai
- Salt + finger
- Ash + finger



#### **Taking care of baby teeth**

Baby teeth are just as important to children as permanent teeth are to adults. They help a child to eat, talk, and look good.

Many parents think that, because baby teeth will fall out anyway, it is not worth looking after baby teeth.



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- jym ± vuācmif/

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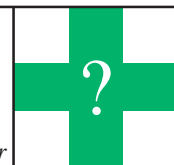






# Scrub Typhus

Health Messenger



*A report from Médecins Sans Frontières (MSF) revealed that there were some cases of scrub typhus in Umpiem and Mae La camps. AMI also reported some cases in Nu Poh. This article will provide some information on scrub typhus and briefly present the findings of the reports.*

## What is scrub typhus?

Scrub typhus is an infectious disease caused by a parasite which is transmitted through the bites of mites. Those mites live on field mice and rats and may pass on humans. The main symptoms of the disease are fever, a wound at the site of the bite, a spotted rash on the body, and swelling of the lymph glands.

The parasite that caused scrub typhus is called *Rickettsia tsutsugamushi*. As they are intracellular parasites, they can live only within the cells of other animals.

The mites have a four-stage life cycle: egg, larva, nymph, and adult. The larva is the only stage that can transmit the disease to humans and other animals. The tiny chiggers (mite larvae) attach themselves to the skin. While they suck blood, they may either get the infection from the host or transmit the germ to other animals or humans.

## Signs and symptoms

The incubation period of scrub typhus is about 10 to 12 days after the initial bite. The illness begins rather suddenly with: shaking chills, fever, severe headache, infection of the mucous membrane lining the eyes (the conjunctiva), swelling of the lymph nodes (lymphadenopathy).

A wound (lesion) is often seen at the site of the chigger bite. But it is more visible in fair skinned people.

The initial lesion, which is about 1 cm in diameter and flat, eventually becomes elevated and filled with fluid. After it bursts, it becomes covered with a black scab (eschar). The patient's fever rises during the first week, generally reaching 104-105 degree F (40 – 40.4 degree C).

About the fifth day of the fever, a red spotted rash develops on the trunk, often extending to the arms and legs. It may either fade away in a few days or may

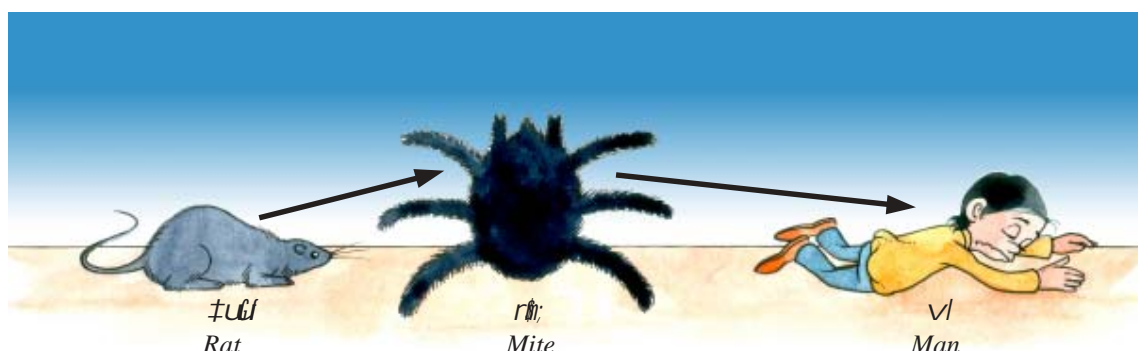






Fig. 12 Primary lesion at the point of infectious chigger bite.

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become spotted and elevated (maculopapular) and brightly coloured.

Cough is present during the first week of the fever. An infection of the lung (pneumonia) may develop during the 2<sup>nd</sup> week.

In severe cases, the patient's pulse rate increases and blood pressure drops. The patient may become delirious and lose consciousness. Enlargement of the spleen is observed.

In untreated patients, high fever may last for more than 2 weeks. With specific therapy, however, the fever goes down within 36 hours. The patient's recovery is prompt.

## Treatment

Scrub typhus is treated with antibiotics. Tetracycline and doxycycline are used. Chloramphenicol can also be used.

## Prevention

There is no effective vaccine for scrub typhus. Precautions include:

- Wearing protective clothing.

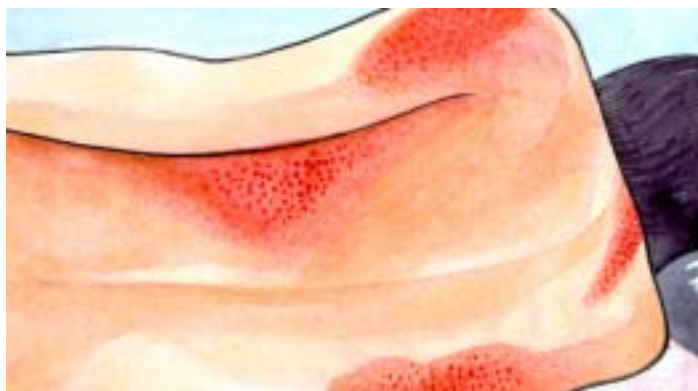


Fig. 13 Rash on the body.

- Using insect repellents that can be applied to the skin and clothing to prevent chigger bites.
- Clearing of bushes and chemical treatment of the soil may help to break up the cycle of transmission from chiggers to humans to other chiggers.

## Findings from Umpiem camp

A report from MSF found that during the months of August to October, 2000, 20 'rickettsia' (scrub typhus) cases were diagnosed in Umpiem. The doctor noticed that the scrub typhus patients responded very quickly to doxycycline. This response to doxycycline was used as a diagnostic tool; that is, if the patient responded to

doxycycline within 48 hours, scrub typhus was diagnosed; if the patient failed to respond, then other causes of the fever were looked for. AMI treated scrub typhus patients from Nu Poh with tetracycline.



Fig. 14 Umpiem camp (Photo by Dr. Seerat Nasir)





## Summary of findings from scrub typhus patients in Umpiem, by MSF

Sex	Male 60%, female 40%
Age	60% of the patients were male and 40% female.
Age	30% between 11-20 years
Age	30% between 21-30 years
Age	15% between 31-40 years
Age	15% between 41-50 years
Age	10% more than 50 years

### Symptoms and signs

History: all patients had a history of fever before giving doxycycline. Six (30%) of the patients had a fever for more than 10 days and the least was 2 days of fever. After commencing treatment with doxycycline 11 of the patients (55%) had fever for only 1 day, 5 had 2 days and the maximum was 5 days.

Fever: all the patients had a history of fever before giving doxycycline. Six (30%) of the patients had a fever for more than 10 days and the least was 2 days of fever.

After commencing treatment with doxycycline 11 of the patients (55%) had fever for only 1 day, 5 had 2 days and the maximum was 5 days.

	Number of cases; n (%)
Headache: most of the patients complained of headache	19 (63.3%)
Chills	18 (60%)
Cough	15 (50%)
Abdominal pain	14 (46.7%)
Burning eyes	11 (36.7%)
Myalgia/Arthralgia	11 (36.7%)
Lower heart beat	11 (36.7%)
Low back pain	11 (36.7%)
Constipation for more than 2 days	10 (33.3%)
Lymphadenopathy	9 (30%)
Vomiting	9 (30%)
Red conjunctiva	7 (23.3%)
Rash	2 (6.7%)
Enlarged spleen	2 (6.7%)
Eschar	2 (6.7%)

Thanks to Dr. Elise Klement and Dr. Khalil from MSF for the data.



## Summary of findings from scrub typhus patients in Mae La, by MSF

Time Period: August 2000 to January 2001

Number of patients: 26

Age group: 9 to 45 years

Male female ratio: 2:1

Symptoms and signs:

Symptoms and signs:

	Number of cases	
Fever	26 (100%)	
Headache	22	
Chills	17	
Cough	09	
Vomiting	14	
Lymphadenopathy	05	
Confusion	06	
Diarrhoea	02	
Red conjunctiva	02	
Photophobia*	02	
Rash	02	
Enlarged liver	03	
Eschar	03	

All the patients responded to doxycycline treatment. Majority of them responded after 24 hours, as the temperature was normal and headache was improving. Many of them were working in the jungle.

\*Photophobia: Can not tolerate bright or sunlight.

## Summary of the report by AMI

Total scrub typhus patients: 28

History of mite bites: 19

Symptoms and signs:

Headache	23	
Photophobia	12	
Apathy or confusion	01	
Muscular weakness	15	
Eschar	08	
Rash	16	
Red conjunctiva	12	
Enlarged lymph nodes	24	
Bronchitis	14	
Enlarged spleen	04	
Enlarged liver	02	





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Fig. 15 Zimbabwe presentation on HIV/ AIDS at the assembly.  
"g v l y l c & p p l w i f [ m r f p w e f Photo by: Christine Harmston*

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# Global Gathering to Achieve Health for All

Christine Harmston, BRC



*This is a short description of a health conference held in Dhaka, Bangladesh in December, 2000.*

Last December, an exciting and energy-filled health conference called the **People's Health Assembly** took place in Bangladesh, in a small town named Savar, two hours away from the capital city of Dhaka. The meeting site was at Gonoshasthaya Kendra, a community health and development NGO, which was established to assist the injured during the war for national independence. GK is now one of the largest health NGOs of Bangladesh and is also famously known as a leading health group in calling for the provision of essential drugs to rural and poor communities throughout the country.

gathered together to participate in the Assembly. The main discussions at the Assembly were focused around the primary health care problems in the world today and their root causes. It was an exciting time to learn from each other and share ideas and experiences about health issues which affect us all. More especially, many talks were held around what local communities in the different countries are doing to help solve some of the health problems they face, and how the Assembly could create ways for these communities to join forces and become more powerful at the grassroots levels to combat the common causes of poor health.



Fig. 16 School children from Savar area giving a dance presentation  
Photo by: Christine Harmston

Approximately 1500 community health workers, researchers, policy makers and social activists from over 100 countries

Specific topics which were discussed included effects of inequality and poverty on health, the status of health-care and health services, environment and human survival and the way forward towards making the dream of 'Health for All' a reality. Besides speaking presentations, people also shared their experiences through storytelling, theatre performances and singing. The end result of the conference was the creation of a People's Health Charter. The Charter is a document





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Fig. 17 "An underlying cause of many childrens' death: malnutrition".





which sets out the Assembly's vision of hope for the future, its guiding principles, its commitments and demands.

**The Assembly's definition of health accepted the World Health Organization's definition as being a complete state of physical, mental and social well-being and not merely the absence of disease or infirmity.**

However, the participants wanted to take this definition further and see health as a fundamental human and social right for which to aim. It was strongly agreed that to ensure health, peoples' basic needs for food, water, sanitation, housing, health services and education, employment and security must be met. To enjoy more than just physical health, to enjoy mental and social well-being, people need confidence in themselves, they need a sense of purpose, meaning and belonging to their community. Healthy societies require a balance between individual freedom and responsibility within society. A culture of compassion, care and respect for life and spirituality are as important to the well-being of individuals, communities and nations as is the importance of the economy.

All participants agreed that some of the most important factors which influence health in the world today are not medical, but economic and political factors. This means that who has control over resources and decision-making, and who has the power over whom, determines the way countries and the world are organized and ruled. This impacts on the health status of people and the way health services are organized. For example, the Assembly discussed the current health crisis that exists throughout the world. In 1999, 20 million people died

before reaching the age of 50, while the mean world life expectancy was 66 years. Each year, over 12 million children continue to die from preventable diseases. An underlying cause in more than half of these deaths is under-nutrition or hunger. There has also been a return of 'old diseases' such as tuberculosis, malaria and vaccine-preventable diseases. Why is this happening? There was firm agreement amongst the conference participants that these illnesses are a direct result of increasing poverty, deteriorating living conditions and inadequate health services which can be found throughout the world and which are related to economic and political factors and the deterioration of national sovereignty in the face of economic and trade globalization.

The People's Charter for Health, a paper created at the end of the conference to represent all the objectives and goals set out by the participants, is a very important document. The vision of the Charter states



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Fig. 18 "Old disease" on the increase: malaria.





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Fig. 19 Malnutrition of children: Xerophthalmia  
causing blindness.





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Fig. 20 A family affected with malaria.

that in order to achieve a better world, we all need, among other things, equity, environmental and sustainable development and peace. The Charter sees health as a reflection of a society's commitment to equity, equality and justice and that health and human rights is an important relationship to recognize and respect. Among many points which the Charter calls on the people of the world to do, here are a few highlights. The Charter calls on the people of the world to support all attempts to implement the right to health and demand that governments and organizations respect this right and ensure that no policies and laws are created which will obstruct this right. The Charter calls on the people of the world to support people's initiatives to achieve a just and lasting peace, especially in countries with experiences of civil war and genocide; and to condemn the use of child

soldiers and the abuse and rape, torture and killing of women and children. Another call is to make health services accessible to all and allow local communities to be involved in decision making with regard to health programmes and policies being established in their area. Finally, all political and economic systems must be created in a way to help people maintain good health and it is the responsibility of governments to ensure that this happens.

The experience of the People's Health Assembly proved that despite the world being made up of people vastly different from each other, we are all connected by our common concern for health and reducing the many health problems which exist.

Our differences become very few when we work together for better health. Since diseases and illnesses do not respect borders, and it is the inclusion of a globalization of respect and caring for each other which will help bring the world to a healthier status in the future.



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Fig. 21 "Old disease" on the increase: vaccine preventable disease







# Prevention of Difficult Pregnancies

Health Messenger



*Newborns and mothers can suffer from various complications of pregnancy. Many can be easily avoided if proper knowledge and follow ups are provided. This article will focus on some of the most common risk pregnancies and their management.*

Women may suffer from the consequences of pregnancies in any of the three stages: **during pregnancy, during labour and after delivery.** To avoid complications, proper knowledge and skills are required for those who care for pregnant women, such as medics, midwives, traditional birth attendants (TBA) as well as CHEs who can provide the necessary information to the pregnant women.

It is important to diagnose risk pregnancies from the beginning. This can save the lives of babies and mothers. To reach an early diagnosis, the health staff caring for pregnant women should be well informed on the most common risk pregnancies. They are as follows:

- High Blood Pressure during pregnancy
- Pre-eclampsia and eclampsia
- Diabetes in pregnancy
- Multiple pregnancies
- Breech presentation & transverse lie

The personnel who do the delivery should have good knowledge for diagnosing the position of the baby, when to push or not to push during labour and how to take care of the cord and the newborn.

## **High Blood Pressure (HBP) during pregnancy**

Any blood pressure systolic  $\geq 140$  mmHG and diastolic  $\geq 90$  mmHg is considered as HBP and needs to be confirmed.

High blood pressure in pregnancy could be serious and lead to severe headaches, fits and even death.

## **Pre-eclampsia and eclampsia**

These syndromes are found at the late stage of pregnancy. They are very serious and there is every chance for the baby and the mother to die.



Fig. 22 Checking oedema









Fig. 24 Headache

**Pre-eclampsia:** it is also known as tox-aemia of pregnancy. If not properly managed it may turn to Eclampsia.

#### *Clinical signs*

Late stage pregnancy  
High BP >140/90 mmHg  
Protein in urine  
Oedema on both legs

#### *Management*

Follow up the patient regularly till she delivers.  
Ensure absolute rest.  
If possible, give high protein diet.  
Salt restricted diet.  
Provide medicine following the Burmese Border Medicine Guidelines.

**Eclampsia:** this condition mostly arises from badly managed pre-eclampsia and is very serious. It is presented with convulsion. The pregnancy must be terminated quickly, otherwise both the mother and baby will die.

#### *Clinical signs*

All the signs of pre-eclampsia (HBP, Oedema, protein in urine)  
Headache, vertigo, visual disturbances

(flashing of light), sleeplessness, nausea, epigastric pain.  
Convulsion (repeated)

#### *Management*

The pregnancy should be terminated as the patient will not be cured till the pregnancy is there. It is better to refer the patient to a hospital as there might be a necessity of caesarian section.

#### *Emergency management of Eclampsia:*

Maintain the airway clear.  
Prevent tongue bites.  
Keep the patient in a dark room.  
Diazepam 10 mg IV or IM stat.  
If BP is very high, give medications according to BBM Guidelines.

### **Diabetes in pregnancy**

Diabetes in pregnancy often causes very serious problems for the mother and the baby. They may die before birth or sometimes grows very large and gets stuck in the pelvis during delivery.

### **Multiple pregnancies**

It is referred to more than one foetus, for example, twin pregnancy. The women



Fig. 25 Twin pregnancy





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y f ( 2 6 ) t r n y f r s m ; / Fig. 26 Multiple pregnancy

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should have regular antenatal check ups. The check-ups are important to assess the number and position of foetuses and to advise the mother to deliver in the clinic or to refer her to the hospital and to be well prepared for the delivery and the potential problems.

### **Diagnosis**

Large uterus (size is bigger than the time of pregnancy).

Presentation difficult to feel.

More than one head.

Foetal Heart Beat (FHB) heard in two or more different places.

**ALWAYS PALPATE THE ABDOMEN AFTER DELIVERY TO CHECK WHETHER THERE IS ANOTHER FOETUS OR NOT.**

When a woman is carrying more than one baby, it is best for her to give birth in the hospital. But in some situations, the delivery can be done at the clinic but it has to be kept in mind that there is a possibility that one baby might be in a wrong position, or that there will be heavy bleeding after the birth.

### **Breech Presentation and Transverse Lie**

If the baby is buttocks first (breech) when labour starts, the birth can be more difficult. If the baby is lying sideways (transverse lie)



Fig. 27 Transverse lie

when labour starts, the baby cannot be born without an operation.

### **What should be done?**

Women should be encouraged to go to the clinic for antenatal/prenatal check-ups.

Antenatal checkups are important to find and take care of problems early – before they become dangerous. Good antenatal care is not difficult to give and does not require very expensive equipment.

Medics, CHEs, TBAs and midwives should remember the danger signs of pregnancy and also inform the pregnant women about those signs. Make sure that they contact the medics or other health workers if any of the danger signs are present.

**Always encourage women with risk pregnancies to give birth at the hospital.**

*If the first baby is head down or is a head presentation and there are no other problems, the woman can deliver in the clinic, the second baby will follow normally, whether head or breech.*

*If the first baby is breech, the woman delivered children before and has no other problems, can deliver in the clinic.*

*If the first baby is not head down and the woman is pregnant for the first time, better to **REFER.***





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## uH Defullppaq;ayAntenatal Check up



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Fig. 28 Check blood pressure



yH(29) uH ftav;c&uHppaq;y&g  
Fig. 29 Check weight

yH(30) aof&ett m;enfr&uHppaq;y&g/ Fig. 30 Check anaemia



yH(31) om;t&fx&w&foaEom;. j&u&h&uHppaq;y&g Fig. 31 Check the growth of the baby in the uterus







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## What to expect at an antenatal check-up (ANC)

A medic, birth attendant or midwife should do the following at an ANC:

- Check the eyelids and fingernails for signs of anemia.
- Check the hands and face for swelling.
- Check blood pressure.
- Check weight.
- Check the growth of the baby in the uterus. Normally the uterus will grow 2 fingers each month. If the uterus is too small or too big for the date it means there is a problem.

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## Danger signs during pregnancy

- Feeling very weak or tired.
- Pain in the lower abdomen (belly).
- Bleeding from the vagina.
- Fever.
- Swelling of hands and face, or severe headache and blurring of vision (can not see clearly).





## oaE<om;. t aet x m; w&y l p p a q; j c i f?

u l l De a q m i a e o n l u m v t a w m t w l f o m; t f t w l f Y o a E o m; o n f , i f. t a e t x m; u l l u t z e l r s m; p h a j y m i f v r f y y l y o n l u l l De a q m i l u m v t q l o w o n l i t c g v l f o a E o m; o n f o m; t f x l w l f o l a c j f O d w l u f t a e t x m; j i h w n l l e o i o n l T t a e t x m; r h a r g z h; & e f t w l u f t a u m i f q l l t a e t x m; j z p o n l u l l De a q m i r d i r s m; t m; o a E o m;. t a e t x m; u l l e m; v n l e E s h a o c m p h o & E l l & e f y l l e p p a q; r f y y l y a y; o i o n l u s e r m a; v l y o m; o n f a c j f w l u f t a e t x m; o a E o m; & h e y g u a c j f u l l p r f u n l l l e f a t m u l y g t p o f t w l f f y y l y a q m i l l u r n l

## 1? r d i f t m; p r f o y b o n l u m v w l f w l f t o u l l x l v f f y y l y a p y g v u E f z u l l t o l l y y l o a E < o m; u l l p r f o y f u n l y g

w i l y q l l l e u l f t t l l t q u i .  
t x u z u f u y l v s u h e m w l f  
v u r E s h v u a c m i f E p a c m i f u l l  
t o l l t y l z p r f u n l y g

y l l (32 u)

t j c m; v u l w p z u j z i h o m; t f l .  
x g y l l f u l l p r f o y f u n l y g

o a E o m;. a t m u l y l l i o n f  
j u d r m; y d u s , h e y g u ...

o a E o m;. a t m u l y l l i o n f  
j u d r m; p h t a y; o l l r i l v u a e  
o n l u l l c p m; o l l l o n l ...

... x l l t w l  
o a E o m;. O l a c j f o n f  
y l l r m a u m y d  
y l l v l o l l i o n l

y l l (32 c)

... o a E o m;. a t m u l y l l i o n f  
a t m u z u f p l u q i f a e y g u y l l  
q i f u s e o n l u l l c p m; E l l l o n l

y l l (32 \*)

2? y x r w l v u l w p z u f x j i h a b; w z u f a b;  
w z u f q l l b l n i o m p h w l f u n l y g x l l e m u f  
t j c m; v u l w z u j z i l l i f t w l l q u l v u l f y y l y g  
T o l l p r f o y f f y a e p o l w l f o a E < o m;. c E < m u l l Y  
b m a w l z p l y h; a e o n l u l l o a E l l & e f t j c m;  
v u l w z u j z i l l e i f a q m i l l u r n l

t u , l l o a E o m;. w i l y g  
q l l s m; t m; a b; z u b l h i o m  
p h w l f u n l y g u o a E o m;. .  
c E m u l l l w p t k l l o n l v n f  
a & l m r n l j z p o n l

o l l o m f O l a c j f t m; a b; z u f  
q l l S n i o m p h w l f u n l y g  
, i f o n f v n l y i t a e m Y  
u l l f a e y d a e m u a u s o n f  
v y l l r a w m l r n l r l l w l y g

y l l (33)

3? a r g z h; v l q q l w l f o a E < o m; i , b n f a r g z h;  
& e f t o i l l t a e t x m; j z p l e f t w l u f o m;  
t f x l w l f a t m u b l e r l q i f a & l m r n f  
j z p o n l T o l l z i h u l l D e l a e m u b l l t c d l w l f  
u a v; . O l a c j f v y l l r u l l o i a w l e l l l v l l r n f  
r l l w l y g

t u , l l o a E o m; o n f  
o m; t f x l w l f j r i h s u l l e  
a o; y g u o i o n l a c j f u l l  
t e n l i , l y l l r; r f y y l y  
E l l r n l j z p o n l o l l o m f  
O l a c j f o n l a t m u z u l l  
a & l q i f y d j z p a e y g u o i f  
o n l o a E o m;. O l a c j f u l l  
v y E l l r n l r l l w l y g

y l l (34)

r d i l w a , m u l . y x r o b q l l o a E o m; o n f w c g v l l r a r g z h; r d E p j w l f v l e k v l f a t m u b l e q i f v m w w o n l  
' l v d ( o l l l l w l l a e m u a r f r n l o a E o m; r s m; o n f a r g z h; j c i f p w i o n l i t c d l a m u b o n l w l l x l l l u l l v i f q i f v m a v l l g g





## Checking a baby's position

A baby changes its position several times inside the uterus during the course of the pregnancy. By the end of the pregnancy, the baby should be lying in the uterus with its head down. This is the best position for birth. Pregnant women should be checked regularly to access the position of the baby. The health worker can feel the head if the baby is in head down (vertex) position by proceeding as following:

### 1. Have the mother breathe out all the way. Using both hands, feel the baby.

With the thumb and 2 fingers, push in here, just above the pubic bone.

(Fig. 32a)

With the other hand, feel the top of the uterus.

The baby's bottom is larger and wider...

So bottom up feels larger high up

...and its head is harder and more round.

(Fig. 32b)

...and bottom down feels larger low down.

(Fig. 32c)

### 2. Push gently from side to side, first with one hand, then with the other. At the same time, feel what happens to the baby's body with the other hand as you push.

If the baby's buttocks are pushed gently sideways, the baby's whole body will also move.

(Fig. 33)

If the baby is still high in the womb, you can move the head a little. But if it has already moved lower, you cannot move it

### 3. Just before birth, a baby will move lower in the uterus to get ready for birth. So, late in pregnancy, you may not be able to feel the baby's head move.

But if the head is pushed gently sideways, it will bend at the neck and the back will not move.

(Fig. 34)

*A woman's first baby sometimes moves lower about 2 weeks before labour begins. Second or later babies often do not do this until labour starts.*



Fig. 35 Checking foetal heart sound by a medic of SMRU, Mae La camp. (Photo by Dr. Seerat Nasir)

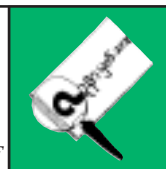






# The Case of Mi Pakow Son

Saikamer Non, MSF



*This is a case study describing a complicated labour managed by a TBA, which lead to the death of a mother and child.*

Mi Pakow Son was 31 years old, and lived with her husband and one daughter in a village of Mon state. In this village, they had only an OPD. The IPD was in a bigger village close to the border areas. In that area the people were very poor and although they received some food supply as help it was not enough to feed all the family. They had to find a job or to have a farm to grow their own food. But it was difficult sometimes, and the life was hard in this village. The family of Mi Pakow Son had a small farm, quite far from the village.

Mi Pakow Son was pregnant, and she went to the OPD for antenatal care, 2 or 3 times per month. For her first child, the pregnancy was complicated, which required forceps delivery at the district hospital. So the supervisor of the OPD was worried, and planned to refer her to the IPD for this delivery. The patient agreed to this idea.

The neighbour of Mi Pakow Son was a traditional birth attendant (TBA). This TBA could speak very nicely and convince people easily. She told that it was normal to have difficulty during the birth of the first child, but the second should be without problem. After hearing what the TBA said, Mi Pakow Son got confused and did not know whose advice to follow – the medic's or the TBA's.

One morning, while her husband was working in the field, Mi Pakow

Son started having her contractions, and the water also broke. So she asked her neighbour, the TBA, to check her. The TBA said she was going to deliver the baby soon.

As Mi Pakow Son was alone, she could not go to the IPD, so she decided to deliver at home. But actually, contrary to what the TBA said, Pakow Son was not ready to deliver. The TBA asked somebody around to push the womb (uterus) from outside, and she prepared the cervix and vagina to deliver the baby.

When her husband came back from the field at noon, Mi Pakow Son was still in labour. The TBA asked the husband to help them to push strongly. Mi Pakow Son had so much pain, and did not want another person to push her belly. But the TBA argued saying the water bag was already broken, and if nobody pushes her belly, she cannot deliver, and the baby will suffer inside the womb. Mi Pakow Son wanted to go to the hospital at this time, but she did not dare to







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 a u m i f u l t x d E l i f r & f y g / t u l l c n / h o m q E l l  
 r & f y g / t w ŷ f v m X m e & a q ; r s ; m ; u v n f p r f o y f  
 p p a q ; r u l v u t y g e f a z m i f z c b n // r y a u m q e f r n  
 t j y i b u b l a o f , p d r w p p l v p & m r & f h c / t e n f i , f  
 r h o m o m ; t r f ! f r w p p l v p & m u l l c p m ; j c i f v n f  
 r & f h c / o r w f i o r f A l u y i l l f u c b m ; r s ; e m u s i a e r o m  
 j z p o n // o r . o m ; t r f x l w f w p p l v p & m r n ; a e o n i f k  
 o r Y r c p m ; & a y //

or a&mu fvaom t cŷ / aofay j c ŷ 100 ± 70  
 r b v m r m u l & j z p o n // o h o m f a o f c e E e f r s m t v e f  
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 r [ k w a c / ( w i l y q ŷ f i . t x u l w f u a v ; . a c j i t y l  
 w p c k & e o u b l o m ; t r f r n t v e f j u l y l t c l w p c y l p h  
 o m j z p a e o n ) ? t w ŷ f v m X m e . j u l u y l o a q ; r s ;  
 u r d , y q ŷ l m p r f o y r j y k l y a o m t c g a c j i r n a r f v r f  
 a u m i t o o l a m u a e j y j z p o n // o a E o m ; . E s / k e f  
 o l u l o r v k o r u m ; & a y // p r f o y p p a q ; r j y a o m t c g  
 w f a q ; r s ; m ; o n i v m . t o u & f r v u e m r s m ; u l l  
 p p a q ; u j y e b n // a o f a y j c ŷ r n 90 ± 60 r b v m  
 r m u l & b t x d u q i f o b ; y d a o f c e E e f r n v n f t v e f  
 j r e l v m o n // x l a u m i f u l u y b a q ; r s ; o n i f i g v u l  
 w l v f t a u m a q ; & n b o f a y ; & e f q ŷ z w t s u t j y d c & f  
 a q ; & b l t v # f t j r e y i f v & j y m i f a y ; y l b n // o h o m f  
 , i f t c b r n r l & m o j z p l y b n t c e l v n f j z p o n //  
 x l a u m i f v r r n t v e f i b l a b ; v u & b n // a q ; & b l  
 a & m u & e f t c e f t a w m f u m a t m i f a q m i & l u c k o n ?

±ifwlv&c&fay; & b l a m u a o m t c g A l u c a r f z n ;  
 j c i f w p & y l l a q m i & l u c k o n // c p w p o l w f r y a u m  
 q e f w ŷ E s / E s h t q k v y l l f q ŷ l l & m y l q ŷ l f r w p & y l z p l  
 y b ; c h y d t o u l u , l q , f a q m i & l u j c i f u l a t m i f  
 a t m i f i r i f r i j y k l y E l l c b n // o r o n f a o f o f r o h , l  
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 t r f u b e a u m i f E s h u a v ; r n v n l y i f u l y d a o q l a e  
 y j z p a u m i f c p w l q & m o e l u & f j y c b n //

c p w j y d a e m u f l l f w f r y a u m q e f o n i o w d

v p l v u & f y i f j z p o n // o r w f i y l y t E b o r a o m  
 a o f v e f w p & y j z p l y ; a e y d c p w j y d a e m u f a p m i b & f u f  
 r u l v i l u p m ; ( 7 ) & u f t u m w f a o q l o b ; c b n ?

edf

Twu, it jz pft yu f Su Ely w b i t e f p m , e l f  
 o n f r n u a v ; a r f z n ; p o l u m v Y t c l a o m & m t  
 a v h t u s i r s m ; o n f r d i E s h u a v ; t o u f q ŷ l u l  
 j z p l y b ; a p E l l o n i f h o m u p j z p o n ? 2000 c E f  
 Z m l l v t w ŷ f u t l e f z p c e f w f a q m i & l u c k o m  
 a v l v m r v & y l a ' g u l v m a e m l u t l a m o g o n f ± l l m  
 t & y l v u b n f r s m ; w f i o m ; t r f u l l y i l y r a e l z w e f  
 c j c i f o n i f y a v l v y x & a o m t a v h t u s i f v & y l z p f  
 a e o n i l a w & b n ? o r . a v l v m c s u l w f a r f z n ; p o f  
 t a w m t w ŷ f u l D e a q m i r d i f . ! f v l u l w l f  
 ! f v l u l w l f w f i x l t r l o r d . c i f y e f ( o l l k v ) t j c m ;  
 a o m & m v u b n l w p D o b u o m ; t r f u l l y i l y r a e l  
 z c a v & b n E s h t w l t c l a o m ± u d r s m ; ( o l l k v )  
 w p & r s m ; j z i h t r l o r d . O r f A l u y l w n l w f i w i f u y f  
 p h c n a E b i f c i f j z i h o a E o m ; t m ; o m ; t r f . t w ŷ f  
 z u b l y e f o i f v m & e l u m u f l w m ; q l r f y e f t v l b n  
 a q m i & l u f u a u m i f a w & b n ? a ' g u l v m a e m l u l  
 a w & s u f t & & m t & y l v u b n f r s m ; o n i f y k l v i w o d o  
 u j y i l y r s w e f c a y ; j c i f r & b E s h u a v ; a r f z n ; E l l j c i f  
 r j z E l l f k , l u n a e u o n ?

& m t & y l v u b n f r s m ; o n f u l D e a q m i r d i f  
 t m ; t c l a o m \* g x m r s m ; / w w l v l w l f & l v l q l e f r w f  
 x m ; o n h a o l l k v t l e f a u l l r d i l w f i n p f t m ; r & b  
 o n h t c g w f j z p a p ( o l l k v ) n p f t m ; t m ; e n f v m  
 o n h t c ŷ j z p a p o l v m p l a c : a & r e f u l n p f t m ; a u m i f  
 v m a p & e f w l u a v & b n ?

om; t d f t m; 4 i f w f v l o n p f t m; r & b l w e f c a y ;  
 j c i f o n f t E W & m , j u l m ; v y p o n ? T o l l y v y f  
 j c i f o n i o m ; t r f u l l a y g u l y b o r ; a p E l l y g o n //  
 t E W & m , & b n h u l D e a q m i j c i f r s m . r s l u e f  
 w l u a o m p p a q ; t u j z w j c i f E s l q l l o n l v l t y f  
 a o m o w i f t c u f t v u f s m ; u l l x m u l y b y ; & e f h  
 t E W & m , l u i f p h a r f z n ; E l l f a q m i & l u j c i f r s m ;  
 ± y v l y a y ; & e f v l t y l y p o n ?

t r f t u p f t u b l r s a ' g u l v m \* s e l t m v l m u l l t x l  
 a u s Z l w i y g o n ?





ask the TBA. So they continued to do the pushing and trying to deliver nearly for one day. At the end of the day, when they thought they could not deliver, they decided to refer her to the IPD.

When Mi Pakow Son arrived at the IPD, she was tired and weak. She did not want anybody to touch her belly and vagina. Medics of the IPD convinced her to accept examination.

Mi Pakow Son did not have any external bleeding. She did not feel any contraction, and she had only the pain of belly muscles. She did not feel anything wrong in her womb.

The blood pressure was 100/70 mmHg when she arrived, but the pulse was quick. The palpation of the uterus was not normal, (not very big, but with a mass, as if the baby had an extra head above the pelvic bone). When the medic supervisor of the IPD did the gynaecological examination the head was at the vulva. She did not hear any foetal heart sound. When they finished the examination, medics checked again the vital signs of the patient; the BP had decreased to 90/60 mmHg, and the pulse had increased. So the supervisor decided to put an infusion of Ringer Lactate, and refer her quickly to the district hospital. But it was during the rainy season and it was night, so the road was very bad, and they required a long time to reach the hospital.

When they arrived at the district hospital, a Caesarian-Section was performed. During the surgery, Mi Pakow Son had a cardio-respiratory arrest and required resuscitation, which succeeded. She needed 3 units of blood transfusion. At the end of the surgery, the surgeon explained that she had a uterine rupture and the baby was dead with the neck broken.

After the surgery, Mi Pakaw Son remained unconscious. She had a septic

shock and even though she received good post-operative care, she died after 7 days.

## Conclusion

From this true story, we can see that some traditional practices during childbirth may cause death of the mother and child. Dr. Naoko Ishikawa, in a study conducted at Umpiem camp in July 2000, found that pushing the uterus externally was a common practice among the TBAs. She described that, during labour, with each contraction, the husband of the woman or the other TBA usually pushes the uterus externally and also ties some cord or tissue tightly around the woman's abdomen so as to prevent the baby to go back inside the uterus. Dr. Naoko found that the TBAs believed that delivering the baby was impossible without the external pushing by other person.

The TBAs gave the woman water or coconut juice blessed by them with some magic words (Tee tha su or magic water for contraction) if there was no contraction or the contractions became weaker.

**It is dangerous to push the uterus if there is no contraction. It may cause rupture of the uterus. It is necessary to provide necessary information about proper diagnosis of risk pregnancies and conduction of safe delivery.**

*Special thanks to Dr. Jerome Artieres, MSF.*





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 wif&a ausmifrs;Saumifom;ppayji2941a, mu  
 ppaq;clgn? ±ifwlt xrs 19±rn ofn;vbm;jcif  
 a&m\*g 5±5± rn Avmrib2 clwifjifa'o'env2±7± rn  
 ofn;tclpRofn;u&jcifES10±5± rn ofn;zhoxuf  
 jcifa&m\* wclbm;ae=ua=umif awclclvgn?

usefma&;ynmay;jcitijzpaom oñ;rm;ultsf  
uepfñwLufci/ t mclvfoe&sfa&/t [ m&"gwfyñi  
Oaom tpm;t pmta=umitfwu t ajccHtzpfi  
jiyivemXmewiflyWfEyer\_±yvlyay;ypñ? oul&mZf  
2001 rSpwifl , cifu wEspv#fw}utlom  
±yvylhom ausniwfifusefma&;ynmay;t pit pOfu  
vpOfwwvjuttf ±yvylcifsm; pwiaqmi&ulof;rnf  
jzplypn?



vW(36) tr t t s' d a g c e l r, h a d i p c e l / Fig. 36 MHD clinic Mae Kong Ka camp.



# Dental Activity Report

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We have regular schedule of dental clinic day in our Mae Khong Kha Camp. In section 11 health center, every Monday we fix the day as 'dental clinic day'. In section 2 health center, every Tuesday is the 'dental clinic day'.

We have started dental care activities since 1999 and we have been facing many cases of dental problem and managing them accordingly. The main problems in the camp included dental caries, dental cavity, loose tooth and few cases of pyorrhoea. Dental caries is the most common problem in the camp, both in adults and children. This may be due to lack of hygiene, betelnut chewing, smoking or vitamin deficiency.

Tooth extraction is done for those, which are really needed to be removed. We use 2ml of 2% Xylocaine as local anaesthesia for tooth extraction. We never refer any case of dental problem. Vitamin B2 supplement

is provided and tooth decay is removed in some cases. All cases are managed by our health workers inside the camp, supervised by the medical coordinator. No tooth filling is provided.

Beside this, twice a year a screening programme in the schools is done where all the school children are checked for any dental problem. In the year 2000, a total of 2941 students in all camp schools were checked for tooth problems. 19% of the checked students got tooth decay, 5.5% suffered from vitamin B2 deficiency, 2.7% lost some teeth and 0.5% had bleeding gum.

Health education on brushing teeth properly, oral hygiene, nutrition are provided on a regular basis in the Out Patient Department (OPD). From the year 2001, we will start a monthly health education program in the schools, which was done once a year before.



*Fig. 37 Mae Kong Ka camp.*





# 'aomiŋ. oŋ;' yŋyif

uæfma&apwref



" uav;wŋ&/ q&mrjymrþum;ullem;xmiŋyŋ 'uæ@q&mr u rifwŋuŋ  
aep0hæ@vŋf rifwŋygyx&ŋjzphæEŋwŋpŋyŋvŋt a-umiŋ aymjyr, ? q&mræ0h  
aomiŋqŋvŋvŋi, æv;wa, muŋuŋ0ymay;yŋ aym&iŋ t aumiŋqŋzpr, ? oluŋ  
q&mr u aq;uhy;clvŋvŋeŋq&mr ocluwŋmjzplv, ? ol ulŋaumiŋclŋbŋ?  
t clæwŋbŋæmuŋuŋyŋsq&mrqŋb&muŋvŋclvŋmrŋbŋoŋ, olæcniŋ qŋt-ŋbŋclv, ?  
'g-umiŋvŋbŋmŋvŋrfuav;ulŋjymj&iŋrifwŋvawŋt wŋŋpŋvŋ0ipm;p&mjzpr, fvŋq&mrxiŋ, ?"

" Listen to me children. Today I'm going to tell you about a battle that may take place every day in your mouth. The best is to give you an example with a young boy Thaung I know, because I took care of him. Unfortunately he came to visit me too late and he lost three of his teeth. So I think it's interesting if I tell you his story."

aomiŋqŋvŋumiŋv;u zuŋwŋbŋwŋuav;av? bma-umiŋv? olu  
o-um;vŋuŋbŋyŋt uŋyŋt t&rfvŋpm;wmuŋ

aomiŋ[ m&ŋi, æv;wŋŋŋŋ olæbawŋt whew, ŋuŋ&ŋŋtjyŋbui  
vŋluŋiŋa0;wŋt &yŋu ætŋuav;wŋvŋŋawmŋ o&ŋt zŋ; oŋfoŋu  
æav&ŋ

You see, Thaung is a fat boy, because he likes sweets very much and he eats a lot of them.

Thaung lives in a small village with his parents. Outside the village lives in an isolated house, his grandmother Thin-Thin.

She is now very old and it is difficult and tiring for her to walk to the village market. But this is the place where she has always lived since she has been married, where she raised her children, and where she wants to die. Nothing will make her move.



t zŋ;jzplŋl[ m t ouŋuŋvŋyŋŋ  
&ŋŋŋ&ŋvŋpŋs uŋvŋmzŋqŋvŋm olrtwŋŋf  
cutŋyŋ yŋyŋetwmayŋuŋ ? 'gŋyŋŋ'æetŋf  
uav;[ m tŋæxmiŋuŋuŋŋŋuŋæ vŋmŋ  
whæ&m/ om;orðawŋuŋ)uŋjyŋt tmiŋ  
arŋvŋmŋvŋhæ&m/ 'ŋŋyŋ) acŋjŋcŋsiŋv, ŋŋ  
owŋŋvŋxŋ;wŋhæ&m? b, ŋŋ mawŋŋŋŋŋŋuŋŋ  
'ŋæ&muæ a&\$ŋ aymŋiŋt tmiŋ vŋyŋEŋŋu  
vŋŋŋ, ŋŋ[ wŋbŋ?



# The Tale of Thaung's Teeth

Health Messenger



'g-aumi t z h; jz pbl oifoife  
ajr; jz pbl aomi f w t m oabmw h t sufwk  
vly t u w, f aomi f uaps u b h; ay; & r, f  
y baw m h t z h; jz pbl t w l u f vly p & m d v maw G  
u l l vly ay; & r, f ' h e & m r n t z h; jz pbl t w l u f  
' t vly f a w l u l vly ay; z h a o m i f [ m b m a u m i h  
oabmw k l o v q l w m r i f w l vaw G o d  
t u d t v m?

So Thin-Thin and her grandson Thaung made a deal. Thaung go to the market and do all the errands for her.

And do you know why he likes so much to do that for her ?

b m j z p l v l q l w m h t z h; jz p l o l u o l t i f  
r w e t t u l u f b o u m; v l u l o p m; E l l b a v m u f a y; r, f  
q l l vly ay;

Because she gives him all the sweets he likes and as much as he can eat.



' g t j y i f o t z h; q u r e z k w l l o u m; v l  
0, p m; E l l h a o; w, h v?

Moreover, he gets some money from Thin-Thin to buy sweets from the shops.

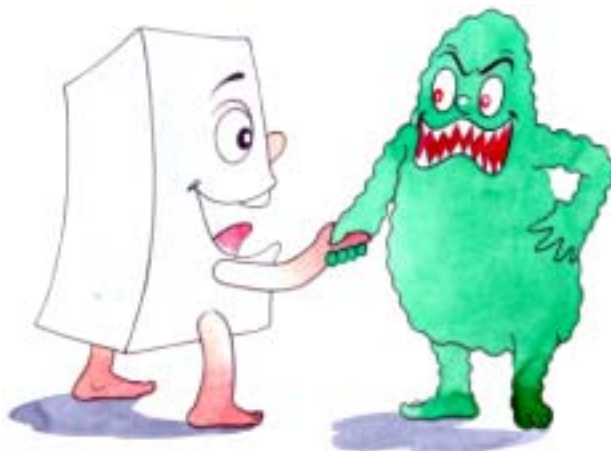




" u-l-tck-'bvmuftcs'leawfm;wh  
aomif&lygpyxrh bmawfzpheovbqvm  
q&mrwunhu&atmifvm;/"

"Now let's look at what happens in  
his mouth when he eats too much sug-  
ary food".

rifwriwltwilyaomifu oñ;rwlfawmh  
a&m\*ylawlu oñ;away:rn&ley) oñ;  
awlu oñ;acsawezhaew, ? ol o-um;vñ  
pm;vluwif a&m\*yleo-um;aygify) tuqpl  
xlvvluw, ? tñt tuqpu oñ;awluwluw, ?



Here you can see that because Thaung does not clean his teeth, germs are covering his  
teeth and make a kind of coat covering them. When Thaung eats sweets, the sugar and the  
germ together produce acid which attacks his teeth.



aomif[ m b, lwefursoñ;rwluclwma-umihq&mrqulolvmywt cñrñ oñ;okacmif[ m vñduñ  
ysuplaecly oñ;ulñfwluzñtenfqlwaeuñ;urfwluzñq&mrucññ ßum;clw, ?

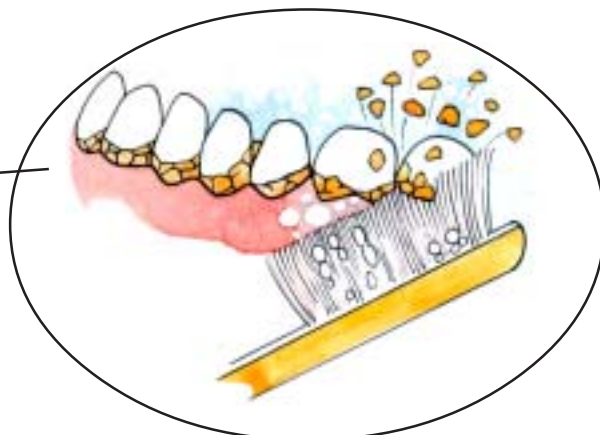


But because Thaung never brushed his  
teeth, three of his teeth were finally destroyed  
when he finally came to visit me.

I instructed Thaung to brush his teeth  
regularly, at least once a day.







tck-unh oñ;wluh ywht cguawmhbmawg zpbov?  
ritw b jriwht wlt y? oñ;acsawg m oñ;ywlvh=umih  
z, &ñ;chvlu&y ysubulety

Now look what happens when Thaung brushes his teeth. You see the plaque is removed and destroyed by the toothbrush.

oñ;awg m }ulh loepf pñe  
tema&m\*guifñ ae-u&awmr, ?

Teeth will remain strong and healthy.



aomif m oet zñ;  
twuf vlyay;p&m  
awlvlyay;awvety?  
o-um;vñ awlvnñ  
pm;wlely? 'gayrh  
t&iluxuf trm;}uñ  
enfoñ;yñ xritpm;

yñwht cñerñ o-um;vñpm;yñwmeñ oñ;wluw, ? tckqñ  
oñ;xñfoñt apmiñ&ñuñ&ñ&ñ ta&ñ;uñyñuñ oem;vñbñ;yñ  
yñawmh touñ 30 t&ñ rñ oñ;awvñor&ñwmyñ t zñuñ  
wa, muñvñjzphñerñuñorjzphñsiñlav? tckqñ oñ;awlvñ  
olwu, lñ\*ñpñuñeyñ



Thaung is still doing the errands for his grandmother. He still eats some sweets but much less. He eats them just after the meal and then brushes his teeth. He now understands the importance of dental care and doesn't want to be like an old man without any teeth when he will be 30 years old. Now he really cares for his teeth.



## Dental Glossary :

| trw#12 | rw# | 2001 | cEs? | apwref |



<b>Periodontitis:</b> ay&h t m' e l w l w p l	The result of advanced gingivitis. The pockets between the teeth and gums gradually deepen and thereby loosen the teeth. o h; y w l v n & g p n f r s m; a & m i j c i f & i l v m a o m o h; z l a & m i j c i f a u m i l j z p l y o h; a o m a & m * g o h; E s l o h; z l r s m; t u m; & d t g r s m; w a j z; a j z j c i f e u & l f v m y d o h; r s m; e l v m r _ q u l v u j z p a y; v m o n? T u p b n f o h; r s m; q l & l j c i f t w l u j z p a v j z p x & h o m t a u m i f & i l w & y j z p o n?
<b>Plaque:</b> o h; a c s	A film of material consisting of food particles, bacteria, and dead cells. t p m; t p m y p h f r s m; y l r h; r s m; / r d s m; E s h a o a e a o m u v m y p n f r s m; y p i a e o n f i t v h w p r d
<b>Pulp:</b> y g v y l f	The center of the tooth consisting of vessels and nerve tissues. o h; . t v n A [ l w i & l o f a u m r s m; E s h t m & h u m w p & & r s m; & h e a o m t y l f?
<b>Periodontal:</b> ay&h t m' e l w , f	Related to the periodontium. o h; y w l y w l v n & l v p & & r s m; E s l q u e g h e a o m
<b>Periodontum:</b> ay&h t m' e l w d r f	The tissues that surround and support the teeth, including the periodontal ligaments, gingivae, cementum, and the bony sockets of the teeth and the supporting bones. o h; u l l o e f & h x m; y d a x m u y l t a y; a o m y w l y w l v n & l v p l t r s m; j z p o n? , i l w l f o h; y w l y w l v n & l t r h a u m r s m; / o h; z l w o h; t j r p E s h i f . t j y i b u f s u E h j y i w l y p i b o n f
<b>Pyorrhoea:</b> y l f t & d , m; /	Same as periodontitis. o h; y w l v n & g p n f r s m; a & m i j c i f /

## t a y g u r s m; j z p j c i f u l l u m u g l w m; q l j c i f u l l u h l e f a u m i f o n f t a v l t u s i r s m; ?

- o u m; y p i a o m t p m; t p m E g u l l t e n f q l o l a v m l y g o l s o m t u l q p x l w l y r y m % a v m e n f r n?  
v w l q w a o m t o d r s m; / ' e t o b u b u l [ i f o d [ i f & l u t p t f r s m; u l l e t a y g u l w p c l u j z p a p & e f t c h  
t a & e n f y g a o m r l e f r s m; u l l a & l c s , l y g
- t a y g u j z p a y; v m j c i f t E l w m , l u l v s m e n f v m a p & e f z v l l u ' l u l t o h y l y g o h; a c s r u y l e f a u m i f p h  
x e f c l y l y g
- o h; a c s } u d x h; v m r u l l a v s m e n f & e f w i f u s y l y l e f x t; b o f a p m i h & h u r u l l v l y l l v l y p o f t j z p x e f  
o r f a q m i & l y l y g

u e f r m a o m c l h v f w p c b n f w u l l v l u e f r m a & u l l w l r s o n?

### Good habits to help prevent cavities



- Minimize the frequency of sugary food, thus reducing the amount of acid produced. Select snacks which have less chance to cause a cavity, such as fresh fruit, plain yoghurt and raw vegetables.
- The use of fluoride will help decrease the risk of cavity formation.
- Good plaque control. Maintain a strict and regular home care routine to minimize plaque growth.

**A HEALTHY MOUTH ENHANCES OVERALL HEALTH**