2. Evaluation Workshop 資料

Leprosy Control and Basic Health Services

Department of Health, 36 Theinbyu Rd, Yangon, Myanmar

Tel: +95 1 379019, Fax: +95 1 379007

Evaluation Workshop on Leprosy Control and Basic Health Services with Mid-term Evaluation Mission, JICA

Venue: Meeting room (2nd fl.), Central Special Skin Clinic, Yangon General Hospital

Timing: 9:30-16:00 (tea and lunch will be served)

1. Opening speech
   a. Dr. Ye Myint (Director, Disease Control, DOH, MOH)
   b. Dr. Kiyoshi Tanaka (Team Leader, JICA mid-term evaluation mission)
   c. Dr. Kyaw Nyunt Sein (Deputy Director, Leprosy, DOH, MOH)
2. Presentation of project activities during first 2 years and 9 months
   a. Change of Global situation on Leprosy Control (by NLCP)
      I. From the conclusion of Global Alliance for Elimination of Leprosy (GAEL) meeting, 6-8th Feb. 2003
      II. From 16th of International Leprosy Congress (ILC), in Brazil, Aug. 2002
   b. Progresses of Leprosy control in Myanmar during last 3 years
      I. New case detection (by NLCP)
      II. Classification and treatment (by LCP)
      III. Awareness, Health Education (LCP), IEC & School Health (by NLEP)
      IV. POD/POWD & Rehabilitation (by JICA)
      V. Basic Health Services, Microscope training, Reconstructive surgery training & Sewing Training (by JICA)
      VI. Reconstruction surgery training (by JICA)
   c. Evaluation of project activities
      I. Report of Field Monitoring on Project Activities conducted in Dec. 2002 & Jan. 2003 (by JICA), (Dr. Aoki, Ms. Baba)
      II. Result of follow up on MCR foot wear with arch support for G=2 deformity (by Dr. Aoki)
   d. Report by Ms. Honda (JICA Mid-term Evaluation Mission)
3. Future plan
   - What has been done so far and what is to be done during the second half of project period? (Dr. Ishida, JICA)
   - Action plan 2003/2004 (Dr. Ishida/Dr. Kyaw Nyunt Sein)
4. Necessity of present PDM revised
5. Closing

GLOBAL SITUATION ON LEPROSY CONTROL.

Leprosy Elimination.

- Reached at global level in 2000.
- Within 15 years, reduced 90 % of global prevalence.
- More than 12 millions patients – cured.
- 108 out of 122 endemic countries reached elimination in 2002.

Next phase.

- To achieve elimination at the national level in all endemic countries.
- Than focus on the sub-national areas of high endemicity.
- Integration and sustaining leprosy control activities.
- Developing " ownership "

Role of WHO.

Funding, providing technical advice, MDT supply logistics, global advocacy.

- In order to fully respond to the remaining challenges.
- A need for a much wider and more field based collaboration than before.
- Targeted particularly at remote areas and marginalized community.

Global Detection

- Peak of 820,000 in 1998.
- Leveled of at around 750,000
- A number of factors.
  intensification, high transmission over diagnosis and re-registration LECs.

General Situation.

- Prevalence and detection highest in SEAR.
- MB % (39) SSL % (9) under 15 (17 %) highest in SEAR.
- NC-G 2 % - highest in Europe and Eastern Mediterranean although detection is low (32 % and 21 %)

Leprosy Elimination Strategy.

- Based on early case detection and cure with MDT.
- Focuses on –

  MDT, together with early case finding.
- Reduction of disease prevalence will lead to a reduction of transmission and incidence.
- Preventing disabilities by early diagnosis, treatment and improved case management
- Changing the negative image.
- Working closely with partners.

Future Program.

- MDT services – made available and accessible at the most peripheral level.
- Integration of MDT services.
- Specialized element

  Technical guidance

  Monitoring & Evaluation

  Training

  Research
- Strengthened referral centres and specialized care to patients with complications.

Main issues on the path to leprosy elimination.

- Phasing out and handing over.
- New case detection
- LECs
- Improving service coverage
- Closing the gender gap
- Quality of diagnosis
- Sustaining elimination
- Specialized vs integration
- Promoting community action
- Advocacy
- Research
- POD and Rehabilitation

Main activities to be carried out.

- Review of the current situation and active updating of leprosy registers.
- Technical support
- Implementation of intensive elimination activities.
- Implementation of an integrated leprosy surveillance system.
- Implementation of LEM

Leprosy Elimination Monitoring (LEM)

- To identify potential problems that may hinder the provision of MDT services or
- Retard progress towards leprosy elimination.
- Collection of three sets of indicators
  - elimination indicators
  - level of integration of MDT services.
  - quality of MDT services.

Recommendations of 3rd GAEL meeting.

1. Political support for integration.
   - Recommendations
   - Political will
   - Multi-sectorial approach
   - Situation Analysis
   - Planning - Short Term
   - - Long Term
   - Involvement of Local NGOs
   - Inclusion of leprosy elimination strategies into the general education system.

2. Paradoxical detection trends.

Recommendation.

- Undertake studies for validation of diagnosis
- Strict adherence to WHO-Recommended case definition.

3. Challenges for elimination.

- Recommendation
- Focusing and sustaining total coverage.
- Continuing advocacy, information and resources.
- Decentralization, flexibility and strengthened partnership.
- Full integration of MDT services.
- Locally innovative approaches to improve accessibility and referral.
- Community empowerment and participation.

GLOBAL SITUATION

IN

LEPROSY CONTROL

16th International Leprosy Congress

(I.L.C - Brazil)

Resolution of the International Leprosy Association

(I.L.A)

Technical Forum

- Dramatic reduction of prevalence
- Detection – not shown a comparable decline
- Simplification
- Discussion – in the light of evidence from research
- I.L.A – Technical Forum – 16 experts
  - to review – critically the strategic issues
  - major technical policies

CONCLUSIONS AND RECOMMENDATIONS

1. Global Situation

- New patients will continue for many yeas
- Many people living with the consequences
- Essential to sustain the activities (BP)

2. Diagnosis and Classification

- Peripheral health workers – taught to suspect leprosy
- Referral level must be able to diagnose almost all cases (EB)
- Classification – can be based on counting (EB)
- Research for identifying M-Leprae infection and diagnosing (R)

3. Chemotherapy

- Monitor the relapse rates
- Surveillance for the emergence of Rifampicin – R (R)
- Studied in – common regimen (R)
  - nerve function (R)

4. Prevention of Disability and Rehabilitation

- Impact of MDT on NFI depend on early case detection and treatment (ER)
- Relevant training and a supply of steroids
- Research on optimal steroids regimens and use of prophylactic steroids (R)
- Teaching and empowering patients on self-care and use of locally acceptable, appropriate foot wear is a cost-effective intervention (ER)
- Socio-economic rehabilitation is best delivered through CBR (BP)

5. Epidemiology & Organization of Leprosy Services

- To reduce the incidence - early diagnose & treatment – corner-stone, additional strategies should be developed (R)
- Repeated BCG – considered for individual protection (EB)
- Study on – chemoprophylasis based on bacteriocidal drugs (R)
- Transmission, role of sub-clinical infections, progression from infection to disease, trends of incidence and impact of MDT (R)

cont-.

- New case detection rate – a better indicator – analysed in conjunction with other indicators
- Treatment completion rate – effectiveness of patient management (BP)
- Sustainable leprosy services integration – carefully planned and adapted to the local situation Simplified field procedures (BP)
- Case detection – focused approach
- Suspect and refer

Cont.

- Task-oriented training
- Leprosy in curricula of medical facilities & paramedical schools
- At least one centre with expertise for training of specialized staff (BP)
- Combining IEC – cost-effective
  - does not set leprosy apart (BP)
- If no health infrastructure - innovative, situation – specific strategies should be developed Should be combined with other special initiatives (BP)

What has been done so far and what is to be done during the second half of project period?

Leprosy Control and Basic Health Services

Key issues of further cooperation programs with JICA (I)

A. To strengthen "Technical Transferring of Expertise"

B. To strengthen "Sustainability

Key issues of further cooperation programs with JICA (II)

a) Review of past experts / past expertise for better "Technical Transferring of expertise" (Key issue A)

b) Review of physical rehabilitation program (Key issue A)

c) New technology / expertise for surveillance (Key issue A, B)

Key issues of further cooperation programs with JICA (III)

a) Promotion of CBR ((Key issue A, B)

b) Comprehensive surveillance / monitoring such as on irregularity (Defaulters) and for drug taking (Key issue A, B)

Promotion of technical research

A) Measures on;

1. To find out pocket areas of leprosy
2. To find sub-clinical infection of leprosy

Promotion of technical research

B) Measures for;

1. A simple and low cost rehabilitation program designed for the disable
2. A simple and low cost rehabilitation program designed for the elderly

Elimination of leprosy (New case detection and Treatment with MDT)

- Elimination of Leprosy at national level has been achieved in January 2003.
- To Maintain elimination level at national
- Elimination of Leprosy at sub-national / district level will be the next target

POD & Rehabilitation

Services are still limited

- Lack of baseline data (Disability surveillance, Action plan 2003)
- Prevention of nerve function impairment (NFI) : Service for leprosy reaction (case detection and proper management, Action plan 2003) to be strengthened.
- Community Based Rehabilitation to be developed / promoted
- More community participation to be promoted
- Information system for POD & Rehabilitation
- Monitoring and evaluation system

BHS Training for 48 townships

- Improvement of knowledge and practical skill of leprosy control, Tuberculosis control & EPI through BHS training 2001/2002.
- More comprehensive technical supports may be needed.--Action Plan 2003/2004
- Referral system to be strengthened --Action Plan 2003/2004

POD Training for vertical staff (Action Plan 2003/2004)

- To build up the skills of vertical staff for conducting "disability survey" in their own area. After training course, participants will conduct "disability survey" in their own area and JICA experts will join the survey
- With the results of baseline "disability survey", they will be able to make a "POD action plan" for their own area.

Multipurpose Microscope training course for 48 townships

- Skills and knowledge of labo-technician (participants) by rather practical means are increased on leprosy, malaria & TB microscopy
- Problem solving at township hospital level – Action Plan 2003: Follow up of Microscope training course 2002(Joint meeting for monitoring and promotion of microscopy at each township hospital)

Sewing Training Course

- Can be categorized as part of POD/POWD.
- Model development for further application
- Done three times at Sewing Dep. In National Yenanthar Leprosy Hospital (2001/2002)
- With good collaboration of NGO (Hito Center, Mandalay)
- Continued in other places or other communities where there are beneficiaries.(Action plan 2003/2004)

Reconstructive surgery course

- Training were done for higher referral level
- More experiences may be needed for trainees who have received training.
- Reconstructive surgery team (surgeon, physiothrapist and nurses) to be strengthened
- Capacity Building of 48 TMOs (Action Plan 2003) is the next

Reconstructive surgery course (II)

- Capacity Building of 48 TMOs
  (To strengthen the referral system of leprosy control and leprosy patient care including POD/POWD at township level for those who have complicated plantar ulcer, severe leprosy reaction, adverse reaction of medicine, eye problem, poor general condition and other conditions related to leprosy. Management of complicated foot ulcer, foot wear for POD/POWD and reconstruction of foot drop are specially highlighted.)

Footwear project

- **Project on POD/POWD for anesthetic foot due to leprosy with local made, low cost MCR foot wears in Myanmar**
  - Started from September 2002 (continues in Action Plan 2003/2004)
  - Development of standard MCR sandals
    - Trial for effectiveness, durability and acceptance
  - Development of delivery system
    - Preparing project proposal
    - Guideline for shoe-maker
    - Trial in three TSs

  Expand to 48 TS in Action Plan 2004

IEC/School Health

- More strength should be put for teaching and empowering communities
- To reduce stigma / prejudice by giving proper awareness to communities
- More IEC material and new strategies may be needed for school health education by referring Japanese experiences

Referral institutions

- Strengthening of functions of following referral institutions;
- National Yenanthar leprosy hospital
  (as clinical & research institution)
- Yangon Central Special Skin Clinic
  (as clinical & research institution)
- Mandalay Special Skin Clinic
- Mayanchaung Station Hospital
  (to be functioning more)

Prevention of Disability (POD)
and Rehabilitation

Presentation material on 17th February 2003

Prevention of Disability and Rehabilitation(1)

- Early diagnosis and treatment with MDT reduces the frequency of nerve function impairment (NFI).
- MDT will not prevent all NFI, and the magnitude of the impact of MDT on NFI is dependent on early case-detection and treatment

16th International Leprosy Congress, 2002, Brazil

Prevention of Disability and Rehabilitation(2)

- During MDT, nerve function should be assessed regularly using standard methods.
- Steroids are recommended for the treatment of reactions and NFI of recent onset.
- Relevant training and supply of steroids should be assured.

16th International Leprosy Congress, 2002, Brazil

Prevention of Disability and Rehabilitation(3)

- Teaching and empowering patients in self-care is an effective activity, which should be part of all leprosy programmers.
- The use of locally acceptable, appropriate footwear is a cost-effective intervention for those with loss of plantar sensation

16th International Leprosy Congress, 2002, Brazil

Prevention of Disability and Rehabilitation(4)

- Socio-economic rehabilitation, which requires participation by client, family and the community, is valuable for selected clients, and is the best delivered through general, community-based rehabilitation programmers

16th International Leprosy Congress, 2002, Brazil

1. Early diagnosis and treatment with MDT

			G=2	%
PB	<15	484	3	1%
	>15	3652	199	5%
MB	<15	320	6	2%
	>15	4942	675	14%
SLPB		306		
Total		9684	883	9%

Data from LCP, DOH, 2001

2. Teaching & empowering patients in self care practice for POD/POWD

- Subject at BHS training course in 2001 & 2002
- Pictorial Teaching Chart for BHS/Vertical staff use
- Leaflets for patients & families

3. Foot wear for anesthetic foot

- **Project on POD/POWD for anesthetic foot due to leprosy with local made, low cost MCR foot wears in Myanmar**
  - Started from September 2002 (continues in Action Plan 2003/2004)
  - Development of standard MCR sandals
    - Trial for effectiveness, durability and acceptance
  - Development of delivery system
    - Preparing project proposal
    - Guideline for shoe-maker
    - Trial in three TSs

4. Reconstructive surgery

- Category I: for orthopedic surgeons, physiotherapist and nurses of referral hospitals (Jan.-Feb. 2002)
- Category II for surgeons, physiotherapist and nurses of specialized hospitals (Nov. 2002)
- Category III for medical officers and nurses in township hospitals (Action plan 2003/2004)

5. Sewing training course

- Can be categorized as part of POD/POWD.
- Model development for further application
- Done three times at Sewing Dep. In National Yenanthar Leprosy Hospital (2001/2002)
- With good collaboration of NGO (Hito Center, Mandalay)
- Continued in other places or other communities where there are beneficiaries.(Action plan 2003/2004)

6. POD/POWD Package for leprosy foot

- At Community level
- Components:
  - Daily self care practices
  - Proper footwear (low cost & local made)
  - Management of simple trophic ulcer at community level (with instructions of BHS)
  - Management of Complicated trophic ulcer at Township hospital (Action Plan 2003/2004)
  - Collection of foot-drop deformity at Township Hospital (Reconstructive surgery category III)
  - Early diagnosis and proper treatment of neurities

7. POD/POWD at higher referral level

- At referral hospital (District hospital or higher):
  - Reconstruction of Deformities in Hand
  - Reconstruction of Deformities in Eye
  - Reconstruction of Facial deformities (Lip, Ear & Nose)
- At Ophthalmology Department
  - Corneal ulcer, Iridocyclities, glaucoma, cataract, Iris pearl etc

Partnership in POD & Rehabilitation

- Multi-sectoral approach within Government, MOH, Social Welfare etc)
- NGOs (MMCWA, Red cross etc)
- Settlement vellages (Nanthar Myain, Mayan-chaung etc)
- WHO
- ILEP
- ALM
- NLM
- Sasagawa
- Other NGOs

Challenge in future on POD and Rehabilitation

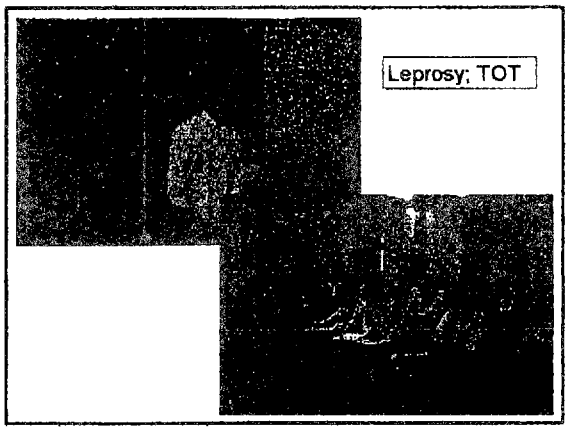
- Lack of baseline data (Disability surveillance, Action plan 2003)
- Leprosy reaction (case detection and proper management, Action plan 2003)
- Community Based Rehabilitation to be developed / promoted
- More community participation to be promoted
- Information system for POD & Rehabilitation
- Monitoring and evaluation system

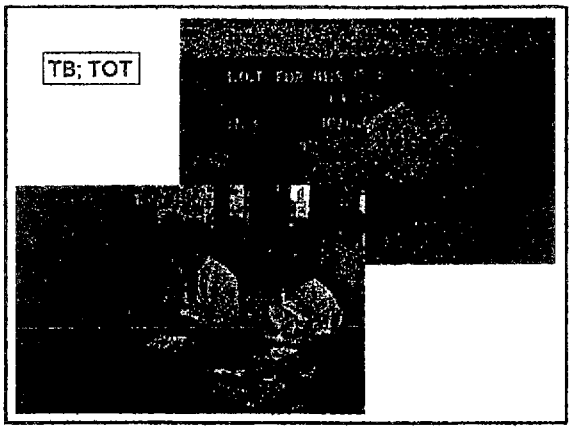
BHS Training

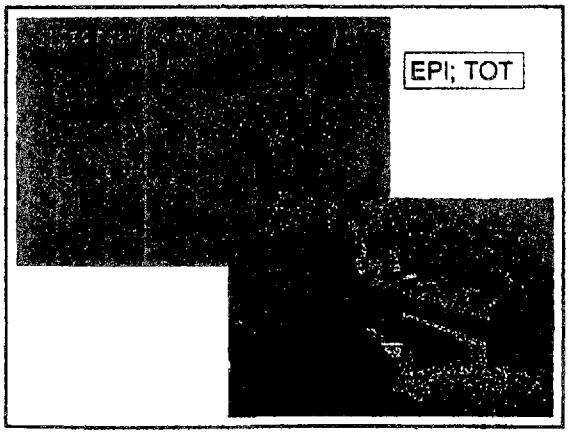
Leprosy Control & Basic Health Services Project
Experts; Ms. Hiroko Baba

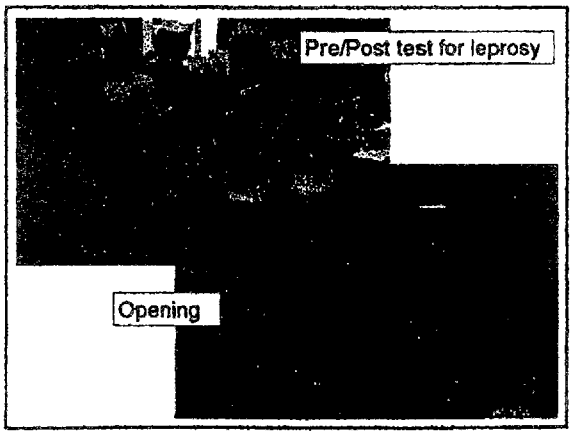
Duration & No. of participants

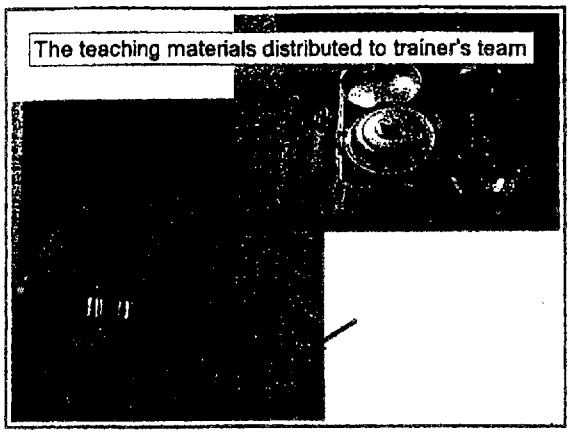
- TOT for BHS training in 2001
  - ·Training Methodology: May/01(11 persons)
  - ·Leprosy(3days), TB(2days); Jul/01(total 26 persons)
- BHS training in 2001(total 3days)
  - ·48 Townships: Jul/01-Oct/01(3,091 persons)
- TOT for BHS training in 2002
  - ·Leprosy(3days), TB(2days), EPI(2days); May/02-Jul/02(total 42 persons)
- BHS training in 2002(total 4days)
  - ·48 Townships: Jul/02-Sep/02(3,119 persons)

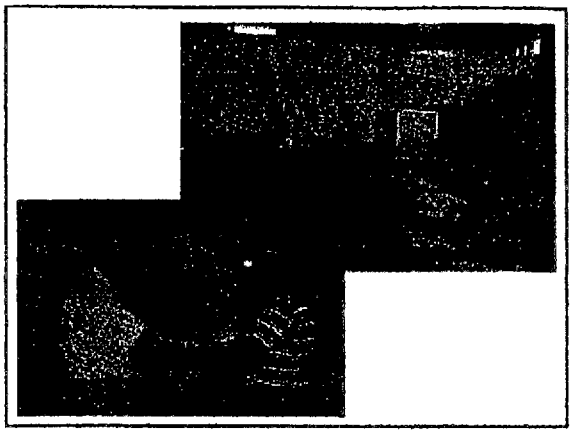


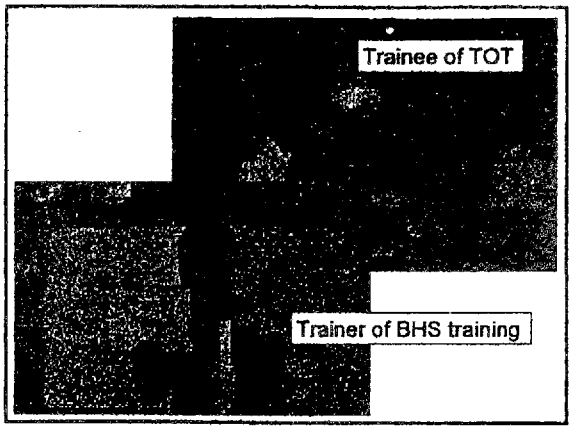




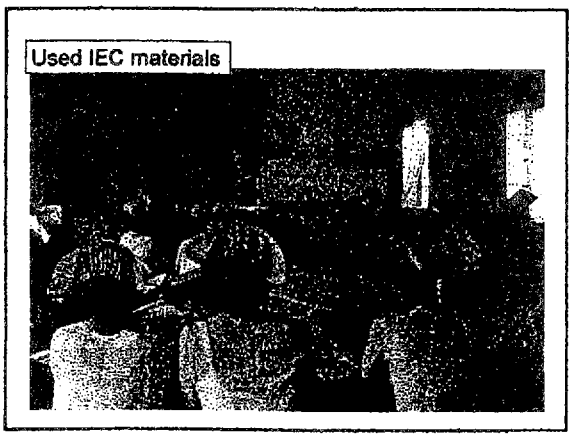


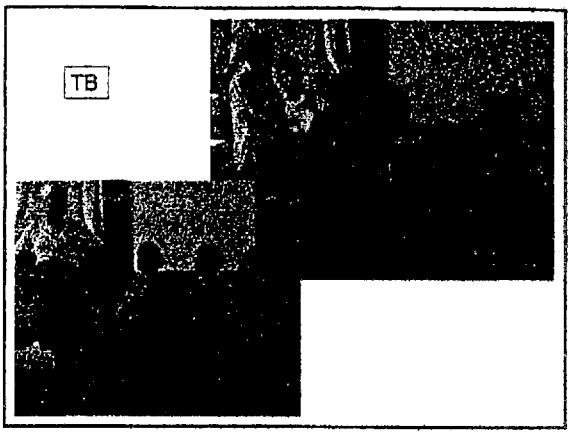

The teaching materials distributed to trainer's team




Trainee of TOT
Trainer of BHS training

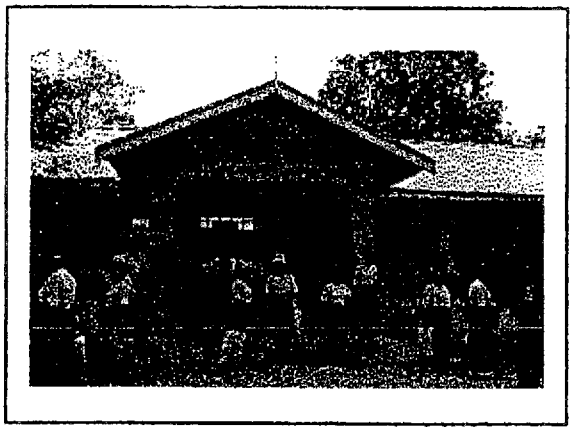

Role playing


Used IEC materials



Pre / Post tests score

	Questions	Pre-Average	Post-Average
2	General	70.7	72.5
3	Examination of the patch	54.9	61.6
4	Classification	78.0	95.2
5	Treatment	87.7	80.2
6	Reaction	46.2	25.4
7	Soles of the feet and Self-care	63.2	69.7
8	Eyes, hands and feet	44.0	48.0
9	Disability	15.8	16.2
10	Referral system	46.0	45.9
	Grand Average	56.3	57.2



Questionnaire on Leprosy for BHS

- ✓ **Please answer within 30 minutes.**
- ✓ **Please choose only one answer to every question.**

1. **Basic Questions**
   1) Name:
   2) Division:
   3) Township:
   4) RHC:
   5) Age:
   6) 1. Male, 2. Female
   7) Occupation/Post (Position):
   8) How many years have you been working as a BHS staff? ( ) years
   9) Have you attended leprosy and POD training courses? 1. Yes, 2. No

2. **General Questions**
   10) Leprosy is an infectious disease. 1. True, 2. False
   11) Leprosy can be cured. 1. True, 2. False
   12) Which is the main symptom of leprosy?
       1. Headache, 2. Eczema, 3. Anaesthetic patch, 4. Itchiness
   13) Leprosy patients are- new patients who have never taken MDT, patients who are taking MDT at present and patients who had taken only one type of medicine and are now having the signs and symptoms of leprosy again. 1. True, 2. False
   14) Can you contract leprosy easily? 1. Yes, 2. No
   15) What is the main route of infection for leprosy?
       1. Do not understand, 2. Through the respiratory tract, 3. Food, 4. Insect bite
   16) If your patient has white patches, what will you ask your patient in order to know whether the patches are due to leprosy?
       1. I will ask the patient whether the patches are anaesthetic or not.
       2. I will ask do you feel itchy or not.
       3. I will ask the patient how long the patches have been existing.
   17) If your patient has patches, how will you examine?
       1. To find out whether the patch is anaesthetic or not, I will examine the patch by using a knife
       2. I will examine the patch by using a pin.
       3. I will examine the patch by using a hair-slide.

3. **Examination of the patch Questions**
   18) The patient must not look at the area where an examination will be done.
       1. True, 2. False
   19) How do you use a pin?
       1. Put on the patch
       2. Put near the patch
       3. Put on the patch and also on the skin near the patch
   20) When you are examining the patch with a pin, what should you ask the patient?
       1. Itchy or not, 2. Sharp or blunt, 3. Can feel the touch or not

4. **Classification Questions**
   21) Your patient has 3 anaesthetic patches. 1. Not leprosy, 2. PB, 3. MB
   22) Your patient has 1 nerve involvement and 3 anaesthetic patches.
   1. Not leprosy, 2. PB, 3. MB
   23) Your patient has 6 anaesthetic patches. 1. Not leprosy, 2. PB, 3. MB
   24) Your patient has 3 nerve involvements and 3 anaethetic patches.
   1. Not leprosy, 2. PB, 3. MB
   25) Your patient has a plantar ulcer. 1. Not leprosy, 2. PB, 3. MB

5. **Treatment Questions**
   26) How many months will you give MDT to a MB leprosy patient?
   1. 1 month, 2. 3 months, 3. 6 months, 4. 9months, 5. 12 months, 6. 24 months
   27) How many months will you give MDT to a PB leprosy patient?
   1. 1 month, 2. 3 months, 3. 6 months, 4. 9months, 5. 12 months, 6. 24 months
   28) When your patient begins treatment of MDT on the first day, will you ask your patient to take the medicine in front of you (same as DOTS for TB)?
   1. Yes, 2. No
   29) How will you treat MB patients who have finished monotherapy?
   1. No treatment, 2. Start MDT, 3. Wait for new lesions

6. **Reaction Questions**
   30) Signs and symptoms of reaction are aches and pains, malaise, raised red patches and neuritis. 1. True, 2. False
   31) Reaction can occur before MDT, during MDT and after completion of MDT.
   1. True, 2. False
   32) During the time when there is reaction MDT should be stopped.
   1. True, 2. False
   33) When there is reaction in RFT patients, MDT should be given. 1. True, 2. False

7. **Soles of the feet and Self-care Questions**
   34) If a leprosy patient has a simple ulcer, what should be done?
   1. Refer to a township hospital
   2. Teach self-care
   3. Scrape the necrotic tissues and do necessary care by MW
   35) If leprosy patient has a complicated ulcer with pain and fever, what should be done?
   1. Refer to a township hospital
   2. Teach self-care
   3. Scrape the necrotic tissue and do necessary care by MW
   36) If a leprosy patient has a complicated ulcer without pain and fever, what should be done?
   1. Refer to a township hospital
   2. Teach self-care
   3. Scrape the necrotic tissues and do necessary care by MW
   37) What type of hand exercise will you teach to a patient with stiff claw hands?
   1. Active exercise
   2. Passive exercise
   38) What will you teach to a patient with hard skin on lateral malleolus?

1. Do not walk long distance
2. Do not sit cross-legged

39) What type of footwear will you advise for patients with anaesthetic feet?
1. Wooden sandals
2. Footwear made of care type
3. Soft top and hard base footwear

8. Eyes, hands and feet Questions

40) Which is the best device to use to prevent injury in a patient with lagophthalmos?
1. Sun shade
2. Sunglasses
3. Towel to wrap around one's head)

41) The objectives of prevention of disability are to prevent deformity developing in leprosy patients, to prevent worsening of existing deformity. 1. True, 2. False

42) When you see a patient with hard skin and fissures on the hand, what will you advise?
1. Put medicine
2. Apply oil
3. Soaking, Scraping, Oiling (SSO)

43) Is it necessary for patients with foot drop to do exercises? 1. Yes, 2. No

44) When there is a plantar ulcer the most important thing is
1. to rest
2. to put medicine
3. to take medicine

45) If a patient with anaesthetic feet sits cross-legged for a long time
1. ulcer can occur on the knee
2. ulcer can occur on the lateral malleolus
3. ulcer can occur on the sole of the foot

9. Disability Questions

46) In primary and secondary impairments, which is preventable?
1. Primary
2. Secondary

47) To prevent deformity due to health staff, how many times will you visit your patients?
1. Weekly, 2. Monthly, 3.Yearly, 4. According to the schedule

48) SSO is
1. soaking, scraping, oiling
2. scraping, soaking, oiling
3. oiling, soaking, scraping

10. Referral system Questions

49) If a patient comes to you with corneal ulcer, refer to
1. Team Leader
2. Township Hospital
3. Eye Hospital

50) If a patient comes to you with discharging ulcer and dead bone
1. take treatment at home, 2. do SSO, 3. will refer

51) If a leprosy patient has severe reaction

1. will give analgesics, 2. will stop MDT/will refer

52) If you cannot differentiate between a patient with sulpha allergy and a patient with reaction what will you do?
1. continue MDT, 2. stop MDT, 3. give steroid

53) If you cannot differentiate between reaction and relapse case
1. Team Leader, 2. TMO, 3. Health Assistant

54) How will you treat a patient who is a known case of sulpha allergy?
1. will treat with MDT
2. will give only Rifampicin and Lamprene (Clofazimine)
3. will give only Rifampicin

Answer:

2. General Questions
10) 1
11) 1
12) 3
13) 1
14) 1
15) 2
16) 1
17) 3

3. Examination of the patch Questions
18) 1
19) 3
20) 1

4. Classification Questions
21) 2
22) 2
23) 3
24) 3
25) 1

5. Treatment Questions
26) 5
27) 3
28) 1
29) 2

6. Reaction Questions
30) 2
31) 1
32) 3
33) 1

7. Soles of the feet and Self-care Questions
34) 2
35) 1
36) 3
37) 2
38) 2
39) 3

8. Eyes, hands and feet Questions
40) 2
41) 3
42) 3
43) 3
44) 1
45) 1

9. Disability Questions
46) 2
47) 4
48) 2

10. Referral system Questions
49) 3
50) 3
51) 2
52) 2
53) 1
54) 3

Microscope Training

	Title	Content	Days	Times	Participants	
2001	TOT for Lab. Tech	Leprosy	12	3	Vertical staff	27
2001	TOT for Lab. Tech	TB	8	1	Vertical staff	9
2001	TOT for Lab. Tech	Malaria	10	1	Vertical staff	5
2002	Training for Lab. Tech	Leprosy, TB, Malaria	19	3	Lab. Tech of TSH	46

The result of pre post test for township hospital lab. tech

- Most of laboratories in township hospital were doing tests of TB and malaria.
- The knowledge about leprosy and microscope increased up to full marks after training.
- Most of participants hoped further training like this time.

Sewing Training

Leprosy Control & Basic Health Services Project
Experts; Ms. Hiroko Baba

Objectives

- To promote social and economic rehabilitation processes for (ex) leprosy patients and their family members.
- To promote POD/POWD by obtain proper skill for income generation for them.

Collaboration

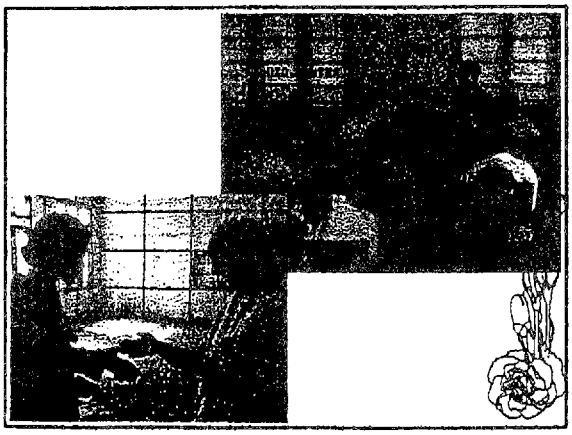
- Department of Health
- Sewing department, Yenanthar Leprosy Hospital
- HITO Center (a NGO in Mandalay)
- JICA Leprosy Project

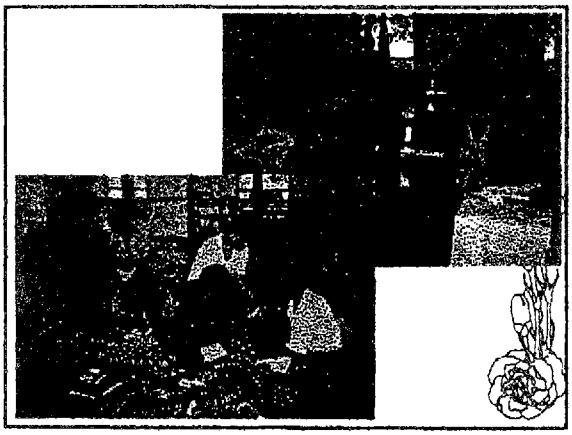
Date / Duration and No. of Participants

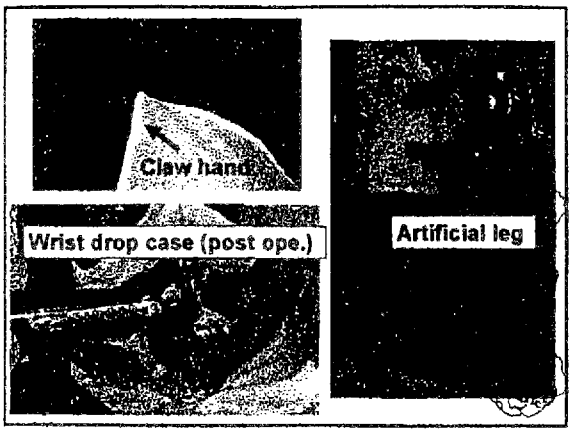
10days, working hours; 6 hours/ day

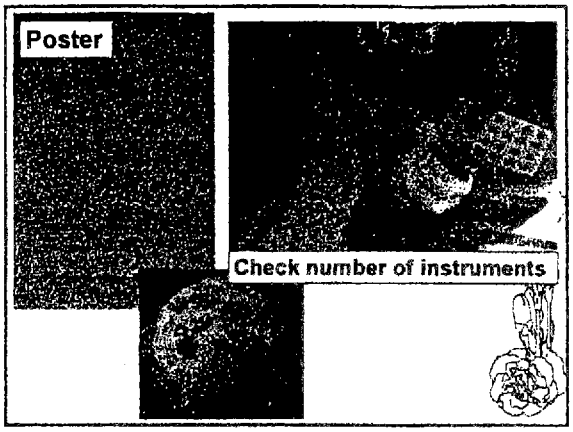
- **1st.batch: 21 persons**
  3/Dec/2001 to 14/Dec/2001
- **2nd.batch: 19 persons**
  1/Apr/2002 to 12/Apr/2002
- **3rd.batch: 23 persons (refresher cause)**
  2/Dec/2002 to 13/Dec/2002

TOTAL; 63 members (40 persons)
***including 16 ex-patients (9 persons)**



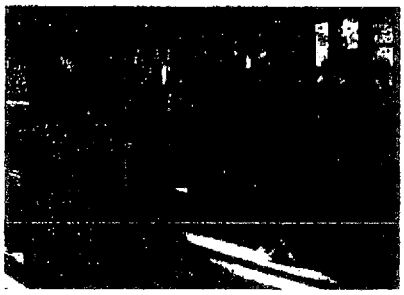






Examine as shown in the figure;

educate of self-care for refresher



Future Plans

- To improve self care methods on sewing more systematically
- To planning limited participants and area;

e.g.) Nanthamyaing village

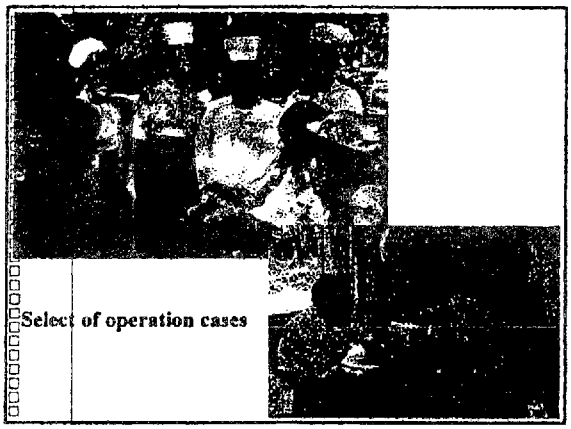
Because they have a workroom for sewing. We consider to make the most of the workroom and opportunity.

Summary of Reconstructive Surgery Training

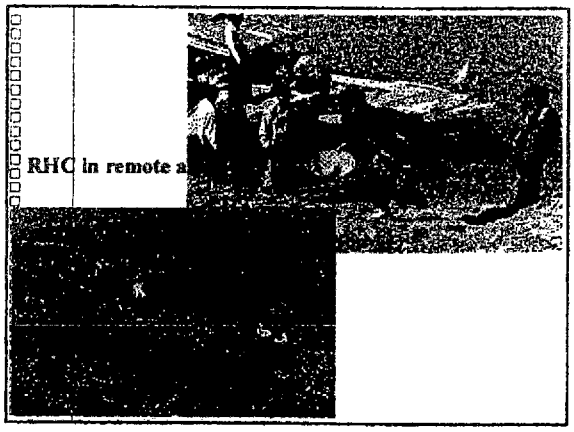
Project consultant; Dr. Saw Lwin

Duration, targets, No. of participants and cases

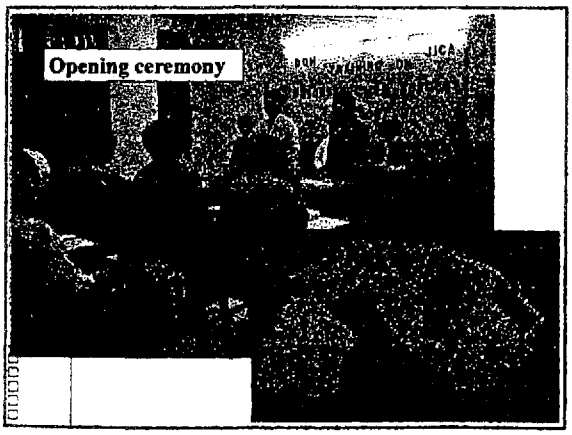
- Category I - Orthopoedic Surgeons
  15th January, 2002 to 9th February, 2002
  (5) Doctors
  (2) Physiotherapists } No. of operations Performed = 17 cases
  (3) Nurses
- Category II - From Leprosy Hospitals
  4th November, 2002 to 22nd November, 2002
  (6) Doctors
  (3) Physiotherapists } No. of operations Performed = 26 cases
  (4) Nurses



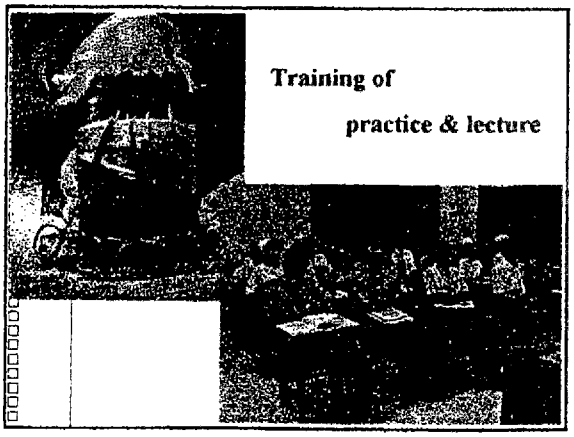
Select of operation cases



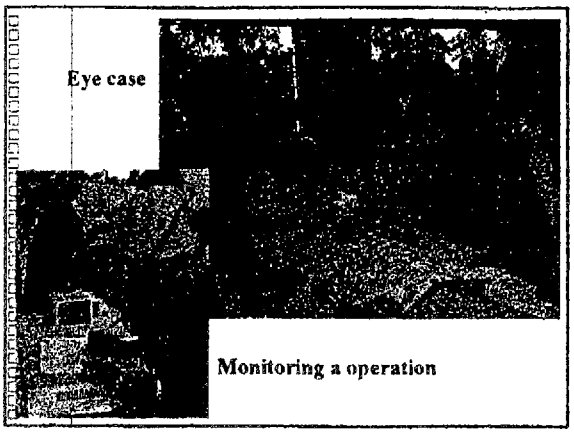
RHC in remote a

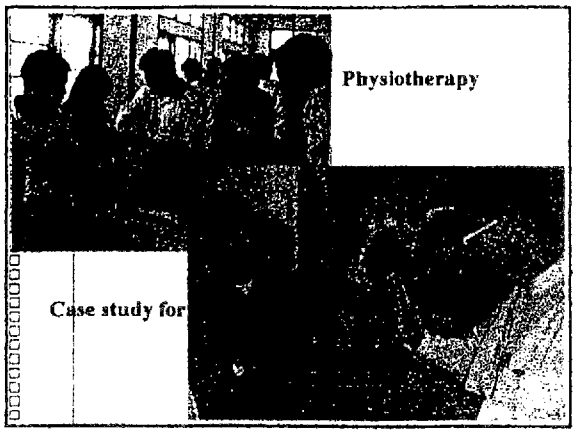


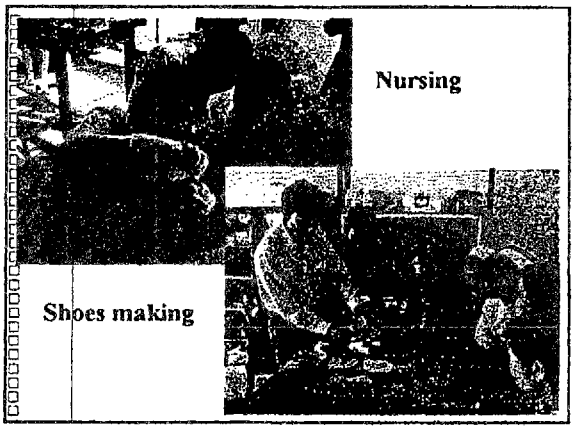
Opening ceremony

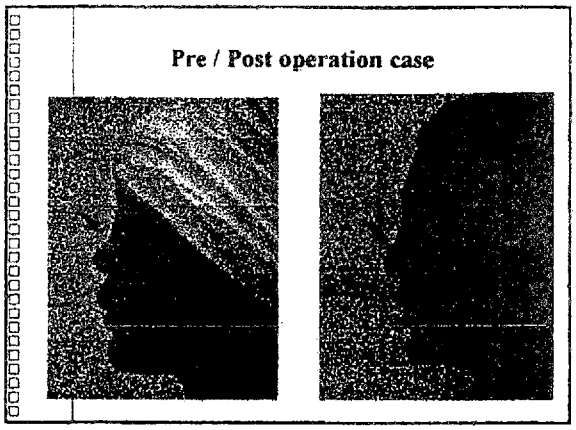


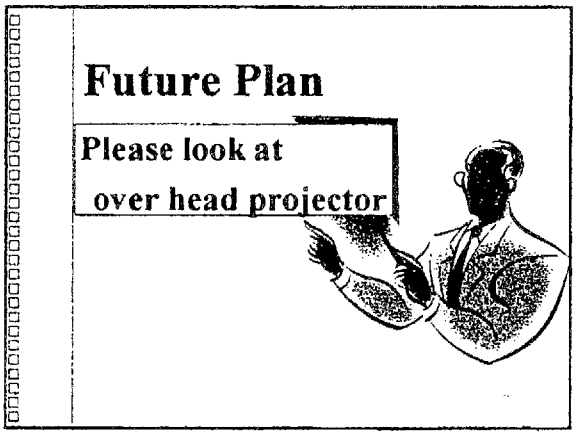
Training of practice & lecture


Eye case
Monitoring a operation


Physiotherapy
Case study for


Nursing
Shoes making


Pre / Post operation case


Future Plan
Please look at
over head projector

Field Visit Small Scale for Monitoring in 2002/2003

Leprosy Control & Basic Health Services Project
Experts; Dr. Yoshinori Aoki, Ms. Hiroko Baba

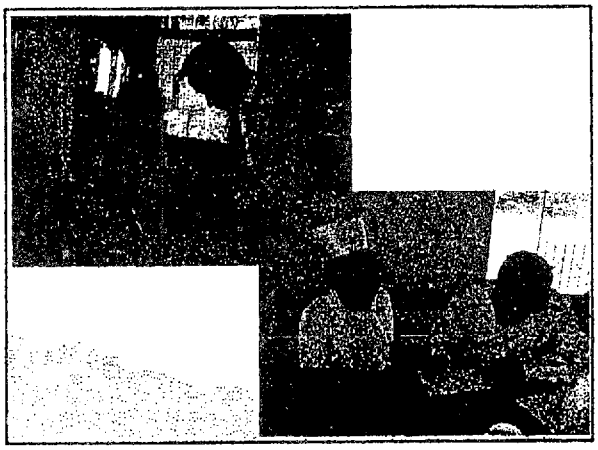
Location & Place, Period

Divisions	Townships	Date
Magway	Aunglan	28-Dec.-02
	Sinbaung We	
	Magway	29-Dec.-02
Sagaing	Sagaing	7-Jan.-03
	Monywa	
	Chanug Oo	8-Jan.-03
Mandalay	Singu	6-Jan.-03

Member of the Team:

Magway Div.; Dr. Kyaw Myint, Dr. Peter Nay Win, Dr. Ye Win Than, Dr. Khaing Win Thee, Dr. Saw Lwin, Dr. Aoki

Sagaing/Mandalay Div.; Dr. Kyaw Sein, Dr. Win Lwin, Dr. Saw Lwin, Ms. Baba



Category of Interviewees

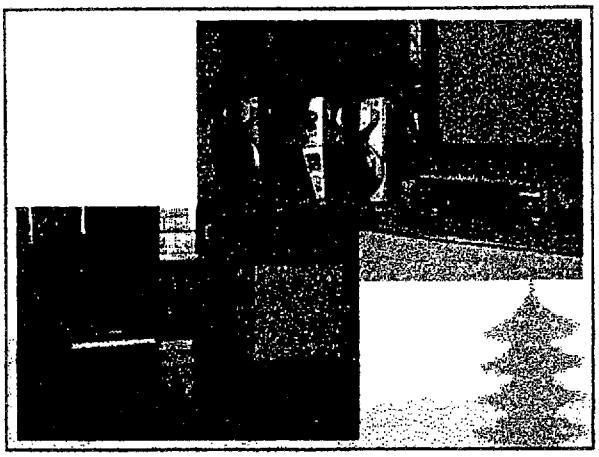
TMO	6 persons	: Questionnaire A
Lab.Tech.	7 persons	: Questionnaire B
HA	9 persons	: Questionnaire C
LHV	8 persons	
PHS-1	7 persons	
PHS-2	6 persons	
MW	29 persons	

TOTAL 72 persons

Material and instruments in use and condition (donated by JICA)

about OHP, TV, VTR, cassette & CD deck, typewriter (E/M) and printing machine

- ✓ Received them from Oct-2001 to Oct-2002.
- ✓ Good condition.
- ✓ They used them for health activities; training, campaign, meeting and etc. to BHS, NGOs, students and villagers.
- ✓ They want a generator, because they sometimes have to use them for health activities outside where there is no electricity.

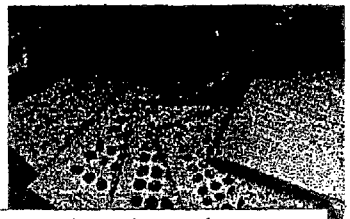


about reagents
(Z-N stain and Gimza stain)

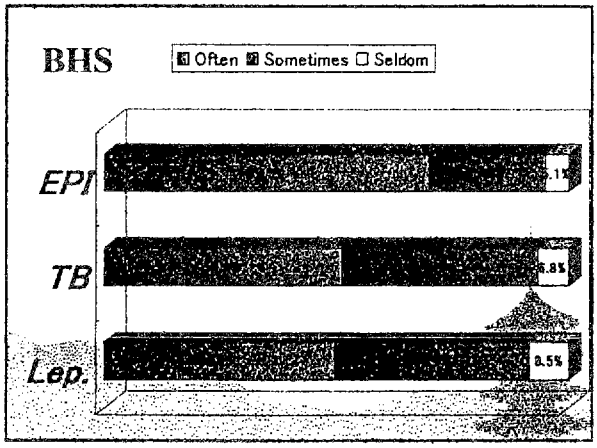
✓ It is available in most of the township hospitals.

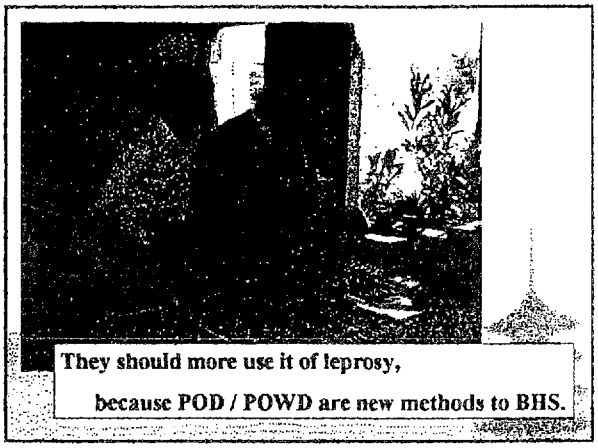
Situation of manual and textbook (prepared by JICA)

Most of the laboratory technician often/sometimes use tuberculosis's, & sometimes/seldom use leprosy's.

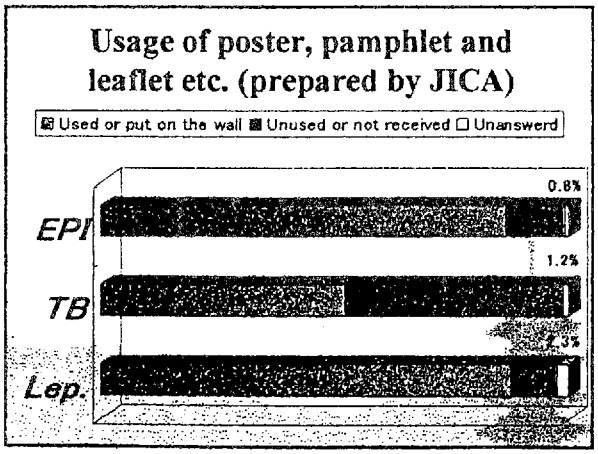


One of the reasons that we do not have skin smear test on national strategy of leprosy in Myanmar.





They should more use it of leprosy,
because POD / POWD are new methods to BHS.



Skill by Laboratory Technician

Q		Identification of Bacilli / Parasites	Reading skill (No. of persons)		
				BI	MI
9	Leprosy	Everyone able	Excellent	3	0
			Good	2	0
			Fair	1	2
			Poor	0	4
10	TB	Everyone able	Excellent	3	
			Good	2	
			Fair	1	
			Poor	0	
11	Malaria	P. Falciparum; Wrong diagnosis is only one			
12		P. Vivax; Wrong diagnosis is only one			

Since microscope isn't in good condition, we couldn't evaluate of skill in a lab. work

Knowledge & skill of Leprosy by BHS

Q	Right answer	Comments
17	98.3 %	Wrong answer is made by only one PHS-2
18	98.3 %	Wrong answer is made by only one PHS-2
19	100 %	
20	100 %	
21	93.1 %	
22	72.4 %	Refer to leprosy vertical staff; 27.6%
23	63.8 %	Those who are able to show both of correct skill; 36.2% (21 persons)
24	41.4 %	

Knowledge is improved much better than skills

Knowledge & skill of TB by BHS

This evaluation method of answer from BHS into 10 grades.

Q	Average	Grade 0 (Grade 1 and 2; nothing) Wrong or Unanswered	Grade 3 Poor	Grade 10 Excellent	Comments
		(No. of person)			
25	7	0	0	13	All excellent; 3 persons
26	8.2	4	2	39	
27	4.1	24	5	13	All wrong; nobody
28	6.6	12	2	30	
29	5.1	5	12	10	

Knowledge & skill of EPI by BHS

Q	Right answer	Comments
30	79.3 %	
31	65.5 %	
32	67.2 %	
33	62.1 %	
34	29.3 %	Select TT from answer; 25.9% (15 persons)
35	87.9 %	
36	79.3 %	
37	82.8 %	
38	43.1 %	Some BHS did not know what AD syringe is
39	60.3 %	
40	1.7 %	Select 1. from answer; 72.4% (42 persons) Right answer is only one PHS-1

Requests by the participant for the next training-(1)

- **Duration**
  - BHS training: 5 days and more (more than 32.8%)
  - Microscopy training: 30 or 45 days (two laboratory technicians)
- **Contents**
  - BHS training: they want more practical training (22.4%) and good level (77.6%)
  - Microscopy training: most of the laboratory technicians answer "good level"

Requests by the participant for the next training-(2)

- **Others**
  - I want a refresher course; one time / 2 years (one laboratory technician)
  - To Supply disposable blades, laboratory text book, sterilizer and more time for practical (one laboratory technician)
  - Most of the BHS agree malaria and HIV/AIDS add to next training.

Overall comments

- It is desirable that monitoring should be done by a person who is expert in each disease (thank you so much, leprosy vertical staff in this time).
- It is a good measure to evaluate some practices of skills during interviewing.
- It is important we must consider planning based on this pilot scheme for monitoring since next year.

Evaluate a skill

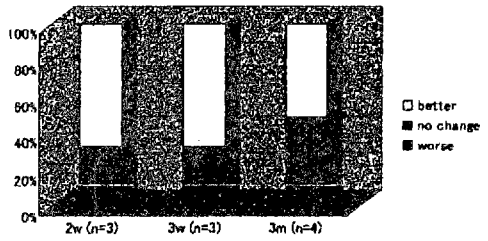
Result of MCR footwear with arch-support for G=2 deformity

A trial in Nanthar Myan village
from Nov,2002 to Feb,2003

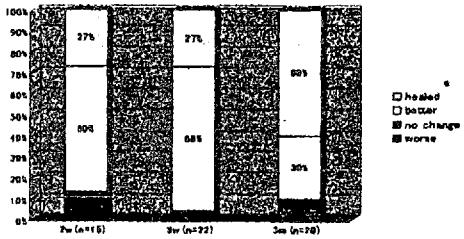
Method

- We chose 39 people who have mild G=2 deformity in Nanthar Myan village and supplied them with MCR sandals.
- We tried to follow them 2 weeks, 3 weeks and 3 months later.
- We could follow 31 people and made them the objects of analysis.

Sequence of Grade=2 feet with hard area

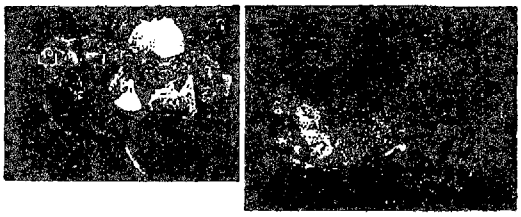


Sequence of Grade=2 feet with simple plantar ulcer (2)



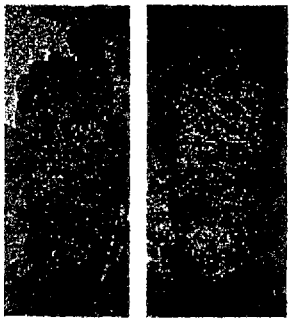
The worse case was only one, who rode a bicycle too much at work.

A case of "worse"



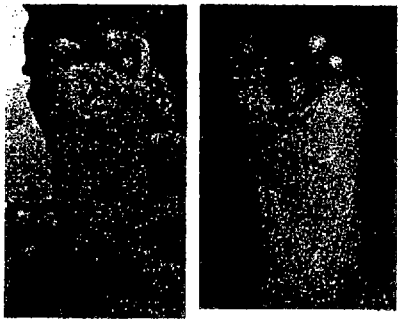
3 months later

A case of "healed"



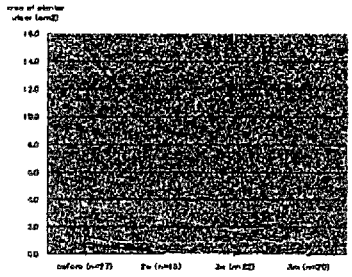
before 3 weeks later(healed)

A case of "healed"



before　　3 weeks later(healed)

Sequence of Grade=2 feet with simple plantar ulcer (1)

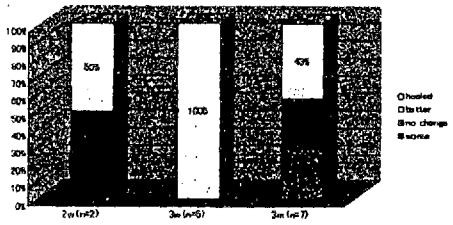


T analysis on the sequence of ulcer area

	before	2w	3w	3m
Number of feet	27	15	22	20
mean ulcer area (cm2)	2.32	1.02	0.9	0.79
p value (T analysis)	–	0.017*	0.003**	0.003**

* <0.05, ** <0.01

Sequence of Grade=2 feet with plantar ulcer who stopped sandals

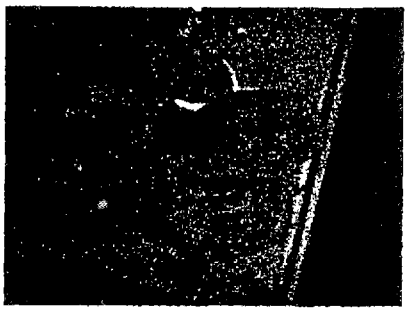


They used MCR sandals over 3 weeks but stopped before 3 months because, for example, sandals were broken.

Durability of MCR sandals

Durability	<3m							>3m	Total
	3w	8w	10w	11w	12w	unknown	Total		
No. of sandals	1	3	1	1	1	2	9	38	47
%	2%	6%	2%	2%	2%	4%	19%	81%	100%

A broken sandal



Conclusion

- MCR sandals are effective for G=2 deformity feet with hard area or simple ulcer.
- MCR sandals with arch-support may be more effective than those without arch-support.
- The durability of MCR sandals is thought to be about three months.

Our Next Plan

- To establish delivery system in township level.
- To evaluate the acceptance of MCR sandals.
- To conduct a cohort study to find whether MCR sandals with arch-support are more effective than those without arch-support.
- To conduct a disability survey and find how many people need MCR sandals.

Minutes of Meeting on Project Activities

Participants: Dr. Kyaw Nyunt Sein, Deputy Director, Leprosy, DOH, MOH
Dr. Maung Maung Gyi, WHO National Consultant, Upper Myanmar
Dr. Yutaka Ishida, Chief Advisor, JICA Leprosy Project

Time/Date: 19:00-21:00, 2nd of September, 2002

Venue: Sofitel Hotel, Yangon

Subject of meeting: Review of project activities and discussion about Principles for future better collaboration of project

(I) Review of project activities

I-1) Advantage of cooperation with JICA in leprosy

1. To advocate / share / promote the importance of leprosy control project in Myanmar at every level to build up a model of sustainable and effective service delivery system of infectious diseases.
2. To assist leprosy control project activities in Myanmar and encourage people who are concern through
   A. Technical transferring, such as foot wear and prosthesis
   B. Counterpart training in Japan to learn Japanese technology such as rehabilitation for the disables and the elderly, because Myanmar Government wants to promote leprosy rehabilitation process as a part of comprehensive CBR (Community Based Rehabilitation)
   C. Procurement of equipments
3. To share many experiences and lessons learnt from project activities to develop health resources.
4. To promote more intimate relationship between Myanmar and Japan through exchanging experts and trainees.

I-2) Present & possible future week points in cooperation programs with JICA concerning with leprosy control

1. Resources of project activities for promoting rehabilitation process mentioned above after the project ended in 2005

2. Communication gap between two countries
3. Skills of experts are sometimes not appropriate for Myanmar
4. Some equipments are not appropriate for Myanmar

(II) Discussion about principles for future better collaboration of project

II-1) Suggestions for further cooperation programs with JICA

Key issues of further cooperation programs with JICA;

A. To strengthen "Technical Transferring of Expertise"

B. To strengthen "Sustainability"

Suggested concrete measures for key issues;

a) Review of past experts / past expertise for better "Technical Transferring of expertise" (Key issue A)

b) Review of physical rehabilitation program (Key issue A)

c) New technology / expertise for surveillance (Key issue A, B)
Promotion of technical research

A) Measures for;

1. To find out pocket areas of leprosy
2. To find sub-clinical infection of leprosy

B) Measures for;

1. A simple and low cost rehabilitation program designed for the disable
2. A simple and low cost rehabilitation program designed for the elderly

d) Promotion of CBR ((Key issue A, B)

e) Comprehensive surveillance / monitoring such as on irregularity (Defaulters) and for drug taking (Key issue A, B)

f) Invitation of experts from the third countries (Key issue A, B)

g) To Continue project after 2005 (Either expansion or phase II) (Key issue B)

PROJECT PROPOSAL (draft)

Project on POD/POWD for anesthetic foot due to leprosy with local made, low cost MCR foot wears in Myanmar (revised in February 2003)

By Leprosy control and basic health services project in Myanmar, DOH, JICA

1. Introduction

Myanmar is about to achieve the elimination of leprosy as a public health problem at national level.[1] There are many people who were affected by this disease and bacteriologically cured by WHO/MDT. The estimated number of these cured patients might be more than 200,000. About 30% of that population has impairment of peripheral nerves or sensory loss of limbs. The project is emphasizing on establishing national rehabilitation program for prevention of disability (POD) and prevention of worsening disability (POWD) in Myanmar. A service system would benefit those who have been affected by leprosy in the past and cured with some impairment in nerve function by providing possible rehabilitation program systematically and consistently for avoiding secondary disabilities. POD/POWD for anesthetic foot by Micro cellular Rubber (MCR) sandals is one of the most important strategies and established method all over the world. At present a few patients with anesthetic feet wear MCR sandals in Myanmar, because of less provision of them. There is no systematic and sustainable provision of MCR sandals, which are fully acceptable by those who are living in the community in terms of their function, appearance and cost. Feet wear for POD/POWD has to have two aspects in order to be accepted and used by those who need to wear. It should be fully functional as MCR sandal for POD/POWD. It should have a good appearance as foot wear to be accepted by community, so that patients feel secure to wear it. For those who have only anesthetic foot sole or anesthetic foot sole with mild deformity (WHO Grade I or Mild Grade II), a ready-made local style sandal with MCR insole would be highly effective for POD/POWD by reducing pressure on foot sole. On the other hand for those who have deformed foot (severe Grade II), order made footwears should be provided according to their deformities. In both cases, daily self-care practices should be essential together with wearing sandals. The most feasible methods should be chosen to give maximum effects within possible expenditure and limited resources available from local settings.

2. Justification

Prevention of Disability (POD) and Prevention of worsening disability (POWD) for those who have affected by leprosy in the past are crucial because consequence of disabilities due to

[1] Myanmar achieved the national level leprosy elimination in January 2003.

leprosy may make people apart from former job and even neglected or discriminated by the community, which is a big public health problem in many leprosy endemic countries. It is an established method to use proper footwear in order to reduce the pressure on foot sole surface together with daily proper home self-care practices. In Myanmar using of proper foot wear for impaired foot has not been common. Promotion of proper foot wear together with daily proper home self care practices will reduce the number of new secondary disabilities which consequently reduce the suffer of individual patients as well as social burden. Because sandals with a thong are very common in Myanmar, foot wears for POD/POWD also need to be resembled them so that people could not distinguish it from commercial ones. This is thought to be a key point for well acceptance of POD/POWD foot wears by users as well as communities in Myanmar.

3. Objectives

3.1 General Objectives

Promotion of POD practice for those who have already gotten deformities or impairment on foot due to leprosy even though bacteriological or clinically cured with WHO/MDT.

3.2 Specific Objectives

1. Development of proper foot wears for different impairment or deformity of leprosy foot.
2. Development of a sustainable provision system in the pilot area for the foot wears with acceptable price to those who need.
3. Promotion of POD practices in order to keep foot without any problem or prevent further deformities.

4. Methodology

4.1 Development of ready-made footwear with local materials for foot with anesthesia and without deformity (WHO Grade I) and with only mild deformity (mild case of Grade II)

a) To develop some standard type of MCR sandals which have a thong and look almost similar to common sandals in Myanmar as standard types with using local materials only (See annex 1)

b) To train shoemakers to be able to produce standard-type foot wears

c) To conduct trials to improve the quality of standard-type ones

d) To develop final standard, ready-made, low cost MCR sandals with using local materials

e) To develop a delivery system of sandals of d) in project area and put it on trail

f) To evaluate the effectiveness of the delivery system

g) To monitor and evaluate the usage and effectiveness of footwear in terms of POD/POWD.

h) To make a recommendation to the leprosy control project, DOH

5. Time schedule

5.1 Development of ready-made footwear with local materials for foot with anesthesia and without deformity (WHO Grade I) and mild case of deformity (Mild Grade II)

1. September – November 2002: development of proto-type MCR foot wears, Training of shoemakers to produce them
2. October 2002 – March 2003: standard-type MCR foot wears to be put on trial
3. April 2003 – May 2004: Development of delivery system for ready made low cost MCR foot wear for the foot of WHO Grade I and mild case of Grade II.
4. April 2003 – March 2004: Cohort study on the effectiveness of arch-support component for prevention of plantar ulcers and the promotion of healing process of them. (Central Special Skin Clinic, Mandalay Special Skin Clinic)
5. April 2004 – August 2004: Evaluation and report/recommendation writing for submission

5.2 A trial for field implementation (Development of a guideline, Training of vertical Staff and Township Medical Officers and Development of delivery system)

1. September 2002– March 2003: Development a guideline on the prescription of POD/POWD foot wear for foot with anesthesia and deformity (WHO Grade I and mild case of Grade II)
2. April – May 2003: To finalize the guideline and to make it printed for use
3. May/June 2003: A special seminar for Township Medical Officers and Vertical Staff on the POD/POWD of foot (Mechanism of developing trophic ulcers, prevention of trophic ulcers, management of trophic ulcers and how to prescribe POD/POWD foot wear for foot with anesthesia and deformity (WHO Grade I and mild case of Grade II)
4. April 2003 – March 2004: Development of delivery system for ready-made low cost MCR foot wear for the foot of WHO Grade I and mild case of Grade II.

4. April – August 2004: Evaluation and final result/recommendation to be submitted.

6. Project Sites

6.1 For the development of ready-made low cost MCR foot wear for the foot of WHO Grade I and mild case of Grade II including Cohort study on the effectiveness of arch-support component for prevention of plantar ulcers and the promotion of healing process of them. (at Central Special Skin Clinic and Mandalay Special Skin Clinic)

5 project sites have been selected as follows;

1. National Yenanthar Leprosy Hospital
   OPD, Dep. of foot wear, Wards (JICA & DOH)
2. Yangon Central Speial Skin Clinic, OPD (JICA & DOH)
3. Mandalay Speial Skin Clinic, OPD (JICA & DOH)
4. Pyay Township, POD Project (ILEP & DOH)
5. Christian Leprosy and Reconstructive Surgery Hospital, Mawlamyine (JICA & TLM)

6.2 For the development of delivery system for ready made low cost MCR footwear for the foot of WHO Grade I and mild case of Grade II.

3 project sites (Townships) will be selected from three divisions (Mandalay, Sagain and Magway Division)

For further information, please contact JICA project
JICA Project on Leprosy Control and Basic Health Service in Myanmar
Department of Health, 36 Theinbyu Rd, Yangon, Myanmar
Tel: +95 1 291092, Fax: +95 1 200254 lepmdy@mptmail.net.mm

PROJECT PROPOSAL (draft)

Project on Delivery System Development of local made, low cost MCR foot wears in 48 Pilot Township Area (Mandalay, Sagain and Magway Division)

This is part of
"Project on POD/POWD for anesthetic foot due to leprosy with local made, low cost MCR foot wears in Myanmar"

By Leprosy control and basic health services project in Myanmar, DOH, JICA

1. Introduction

Prevention of Deformity (POD) and Prevention of Worsening Deformity (POWD) of feet are crucial because they are beneficial for individual patients with anesthetic feet, reduce social burden and are cost effective. Once a foot has a wound, it is very likely to get either a recurrence or second wound. Daily self care practices are encouraged to do for those who has anesthetic feet and PCR foot wear is a part of them. Two types of MCR foot wears for POD/POWD practice is specially developed by JICA team and trained shoe-makers of Shoe workshop, National Yenanthar Leprosy Hospital. These footwear are made of Local materials with low cost. Design is chosen according to Myanmar traditional ordinary style. People living in villages quite reasonably would accept them. According to the short term follow up of trial conducted in Nanthar Myan Village, Madaya T/S, the durability of these sandals would be for about three months. Accessibility to foot wears for those who need them will be the next problem to be solved. JICA project will try to establish a system of delivery for MCR foot wears to those who need it as a pilot project in 48 townships area.

Purposes of study

1. To establish a system of delivery for MCR footwear to those who need it in some townships of 48 pilot project area.
2. To study the effectiveness of Myanmar style, local made and low cost MCR sandals as a POD/POWD tool together with self care practices in the community.
3. To evaluate the acceptance of Myanmar style, local made and low cost MCR sandals by the community.

2. Methodology:

Interventional Cohort study

3. Period of study:

From March 2003 to August 2004 (18 months)

From March 2003 to May 2003: Preparation phase of study (Process 1-4, 6)

From June 2003 to May 2004: Implementation phase of study (Process 5,6)

From June to August 2004: Evaluation and report writing for submission (Process 7)

4. Number of persons enrolled to the study

In one township:

125 patients whose who need MCR footwear

50 ordinary people (Non leprosy patients)

Beneficiaries: for three townships, totally 525 persons

5. Manpower and Role of service providers

1. Shoemakers: Trainors-4 in National Yenanthar Leprosy Hospital
   Trainees-3 from three divisions
2. Vertical staff:
   a. 3 RLOs for supervision
   b. 3 TLs, 3LIs for selection of cases and monitoring
   c. All HAs and Mid-wives under three townships for delivery of sandals every three months
3. DOH & JICA experts:
   a. Planning, monitoring and supervision
   b. Selection of shoe-makers and their training at National Yenanthar Leprosy Hospital
   c. Supply of raw materials
   d. Evaluation & report writing
   e. Budgeting

5. Processes:

1. To choose one township from each division (Mandalay, Magway and Sagain) as trail township.
2. To choose one local shoemaker from respective township. Train them at the shoe workshop, National Yenanthar Leprosy Hospital in order to get the skill for making the standard MCR sandal that will be provided to each township.
3. To establish the way for the stable provision of materials to townships
4. Shoemakers will start to produce the MCR sandal (about 800 pairs in one year period)

and send them to each township hospital.

5. Leprosy vertical staff (TL or LI) will choose the cases who need to wear MCR sandals and BHS will provide them every 3months.
6. Leprosy Control Project together with JICA experts will monitor these processes.
7. Evaluation and report writing for submission

6. Estimated number of MCR sandals needed for the trial:

In one TS, 5 Rural Health Centers (RHC), each RHC has 5 sub-Health Center

If one health center has 3-5 patients who need to wear MCR sandals;

5*5*5=125 patients/TS

For one TS, 125*4=500 per year

Another 200 pairs for ordinary population as control

and 100 pairs in reserve for change for broken sandals in the middle of period.

Total 800 pairs per TS

Grand total for three TS; 800*3=2,400 pairs

For further information, please contact JICA project

JICA Project on Leprosy Control and Basic Health Service in Myanmar

Department of Health, 36 Theinbyu Rd, Yangon, Myanmar

Tel: +95 1 291092, Fax: +95 1 200254 lepmdy@mptmail.net.mm