



STEP 9:

Care for Movement Limitations

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Step 9: Care for Movement Limitations

Introduction

Higher risk for movement limitations is observed when wounds, burns and/or scars are at or near a joint. Some limitation of movement may also occur when a lesion is not near a joint or is a result of muscle weakness or paralysis. Identifying limitations in movement early and taking immediate action to restore full movement is important, and prevents joint stiffness and contractures. Preserving mobility is key to doing daily activities and participating fully in family, school, work and community life. Teaching the affected person and their family how to do daily movement/exercise helps prevent or restore lost movements. Movement and exercise start at the time of diagnosis, continue during disease-specific treatment and may need to continue for one to two years after the lesion is healed or continue for a lifetime, if there is muscle weakness or paralysis. The participation of the affected person in their self-care and other daily activities is critical for improving movement and strength.

Goal

Identify body structures (eyes, limbs, etc.) at risk for movement limitation early and take action to prevent or improve loss of movement.

Key Messages

1. The goal is to have the movement on the affected side be the same as the unaffected side.
2. Best results come from doing a few exercises many times a day.
3. Frequent movement/exercise is needed even when a wound is present and may need to be continued after the wound is healed.
4. Movement/exercises should be learned and practiced by the affected person or done with assistance from the family/friend/caregiver.
5. Movement/exercise may cause discomfort, but should not cause intense pain.
6. Movement causing severe pain is a sign that movement/exercise is excessive and the exercise needs to be modified.
7. If a limitation in movement increases, the community health worker or nurse should be contacted immediately.

References

- Lehman, L. (2012). *Buruli ulcer drug trial protocol: Patient home self-care*. WHO.
- Lehman, L., et al. (2006). *Buruli ulcer: Prevention of disability/POD*. Geneva: WHO Press. <http://www.who.int/buruli/information/publications/BU-OPOD-presentation.pdf>
- Lehman, L., Orsini, B., Fuzikawa, P, Lima, R., & Gonçalves, S. (2009). *Para Uma Vida Melhor: Vamos Fazer Exercícios*. (2nd ed.) American Leprosy Missions and ILEP, 1997 Belo Horizonte, MG Brasil.
- Simonet, V. (2008). *Prevention of disability in Buruli ulcer: Basic rehabilitation*. Geneva: WHO Press. http://whqlibdoc.who.int/hq/2008/WHO_HTM_NTD_IDM_GBUI_2008.1_eng.pdf



A Quick Supervisory Checklist for Step 9

Care of Swelling	Yes	No	Not Obs	Observations & Recommendations
1. Identifies Limitation of Movement (LOM) comparing affected with unaffected side				
2. Begins movement and exercise at diagnosis and continues during daily activities				
3. Positions, if necessary, during day and night to improve movement				
4. Monitors if strength, movement and ability to do daily activities is better or worse and refers to rehabilitation specialist when necessary				
5. Restricts movement following skin graft or restricts movement immediately following tendon transfer according to surgeon's protocol				
Teaches affected person and caregiver how to:				
6. Improve strength and movement through daily activities, exercise and positioning				

Guidelines for Teaching the Module

Health Coach/Facilitator should use the local language and ensure that all terms are found in the local language.

Estimated time to teach the task: 3-4 hours

Learning Objectives

At the end of the module, participants will be able to:

1. Demonstrate normal body movements.
2. Identify body structure at risk for movement limitations; e.g., when a wound is on or near a joint, when there is muscle weakness or paralysis.
3. Identify movement limitations by comparing both sides of the body.
4. Count and record the number of areas with movement limitation.
5. Implement movement/exercise within games, daily activities, etc. so that mobility is improved or preserved.
6. Know when movement/exercise should not be done.
7. Know when mobility difficulties and movement limitations need the help of a rehabilitation specialist.

Step 9: Care for Movement Limitations

List of Teaching Activities and Learning Materials

Activity 1

Normal Movement

Activity 2

Identifying and Recording Movement Limitations

Activity 3

Preventing Movement Limitations and Providing Care for Persons with Movement Limitations

Activity 4

Managing “At Risk” Situations to Prevent or Minimize Movement Limitations (positioning and exercise)

Handouts

- 9.1 Instructions for Screening Movement Limitations
- 9.2 Individual Impairment Record Form (IIRF) – Limitation of Movement (LOM) Section
- 9.3 Actions to Prevent Movement Limitations
- 9.4 Community Care for Movement Limitations or Referral
- 9.5 Home Self-Care Activities to Move and Stretch Arms and Hands
- 9.6 Home Self-Care Activities to Move and Stretch Legs and Feet
- 9.7 Home Self-Care Activities to Rest and Stretch Arms and Hands
- 9.8 Home Self-Care Activities to Rest and Stretch Legs and Feet
- 9.9 Home Self-Care Exercises for Persons Affected by Hansen’s Disease (Leprosy)
- 9.10 Home Recording Form for Self-Care Practices
- 9.11 Instructions for Activity 4 – Managing “At-Risk” Situations to Prevent or Minimize Movement Limitations Through Positioning and Exercise

Activity 1: Normal Movement

Handouts

- None

Equipment & Materials

- None

Instructions for Teaching the Activity

Room Arrangement: Participants stand in a circle allowing enough space to do movements.

- 1. Health Coach explains that the groups will learn normal joint movements by starting at the head and working down to the toes.**
- 2. Starting at the head/neck, the Health Coach asks one participant to demonstrate one motion. Other participants are asked to show any other motions for that joint before moving to the next joint.**
- 3. Health Coach will demonstrate any movements that are missed by the group.**
- 4. All participants do the joint movements.**



Activity 2: Identifying and Recording Movement Limitations

Handouts

- 9.1 Instructions for Screening Movement Limitations
- 9.2 Individual Impairment Record (IIRF) – Movement Limitation Section

Equipment & Materials

- Flip chart stand and paper
- 4–6 colored markers

Instructions for Teaching the Activity

Room Arrangement: Participants sit in a semicircle.

- 1. Health Coach asks one or two participants to explain and demonstrate how to identify a movement limitation.**
- 2. Health Coach will correct or reinforce the rule to compare both sides to determine limitation of movement/loss of motion (LOM).**
- 3. Health Coach distributes handouts: *9.1 Instructions for Screening Movement Limitations* and *9.2 IIRF – Movement Limitation Section*.**
- 4. Health Coach demonstrates the set of standard movements for the Upper Limb and Lower Limb that are described on the screening form.**
- 5. Participants practice doing the standard movements described on the screening form.**
- 6. Health Coach reviews the handouts and shows participants how to record LOM on the recording form.**
- 7. Health Coach asks three or four participants to give examples of what conditions increase the risk for LOM.**
- 8. Health Coach reinforces the following:**
 - A wound, burn or scar at or near a joint increases the risk for LOM.
 - If no lesion is present at or near a joint, some limitation may also occur when adhesions are present (sticking of underlying soft tissues that limit movement and cause pain).
 - Always evaluate LOM by comparing both sides.
 - Movement/exercise must be started early (when problem identified) during treatment and may need to continue after the injury/wound has healed (lifelong).
 - Movements affecting a graft must be avoided the first 10 days after skin grafting.
 - If there is a severe LOM or if LOM is getting worse, the person needs to be referred, preferably to a specialist (physiotherapist and/or surgeon).

Step 9: Care for Movement Limitations

Activity 3: Preventing Movement Limitations and Providing Care for Persons with Movement Limitations

Handouts

- 9.3 Actions to Prevent Movement Limitations
- 9.4 Community Care for Movement Limitations or Referral

Equipment & Materials

- Flip chart stand and paper
- 4–6 colored markers
- 1 blank flip chart paper for each group
- 1 marker per group

Instructions for Teaching the Activity

Room Arrangement: Initially, participants sit in semicircle. Later participants are divided into groups of four persons to a group.

1. **Health Coach starts at one end of semicircle and asks each participant to name something that can prevent movement limitations without repeating what another participant has said.**
2. **Health Coach or volunteer participant records responses on flip chart.**
3. **Health Coach distributes the handout *9.3 Actions to Prevent Movement Limitations* to participants and asks them to compare their responses recorded on the flip chart to responses on handout *9.3*.**
4. **The Health Coach divides the paper on the flip chart into three columns with each column labeled: 1. Problems that can affect movement, 2. What can be done at the community level and 3. What needs to be referred.**
5. **Health Coach asks participants to list on the flip chart problems that can affect movement. Responses are recorded under the number 1 column.**
6. **Health Coach divides participants in groups with four persons per group and gives each group a blank sheet of flip chart paper and a marker.**
7. **Each group is asked to look at each problem listed and decide what can be done about the problem within the community and what should be referred. Responses are recorded on the flip chart paper.**
8. **Each group presents to the large group. A summary of all the groups' responses are recorded on the flip chart under columns 2 and 3.**
9. **The Health Coach distributes the handout *9.4 Community Care for Movement Limitations or Referral*.**
10. **Participants are asked to review handout *9.4* and complete any information missing from the responses that were recorded on the flip chart.**
11. **Health Coach reinforces:**
 - The need to identify mobility difficulties or problems that can cause movement limitation and take action.
 - The importance of involving and empowering the affected person and caregiver to do daily exercise and finding solutions for mobility difficulties.
 - The importance of encouraging the person to participate and do daily activities.



Activity 4: Managing “At Risk” Situations to Prevent or Minimize Movement Limitations (positioning and exercise)

Handouts

- 9.5 Home Self-Care for Moving & Stretching the Upper Limb
- 9.6 Home Self-Care for Moving & Stretching the Lower Limb
- 9.7 Home Self-Care for Resting & Stretching the Upper Limb
- 9.8 Home Self-Care for Resting & Stretching the Lower Limb
- 9.9 Home Self-Care Exercises for Persons Affected by Hansen’s Disease (Leprosy)
- 9.10 Home Recording Form for Self-Care Practices
- 9.11 Instructions for Activity 4 – Managing “At-Risk” Situations to Prevent or Minimize Movement Limitations Through Positioning and Exercise

Equipment & Materials

- Flip chart stand and paper
 - 4–6 colored markers
- Write body parts on small pieces of paper as detailed on handout, fold in half and place in one container for participants to select
- Marker pens for drawing wound on specific body part OR use pieces of paper
 - Paper tape
 - 2 chairs
 - Plastic to lay on the floor
 - Cane stick/Round stick/Dowel rod (wood or PVC) – cut to 60cm in length
 - Cord to use to make foam rolls when needed
 - Cord 1 m in length to attach empty plastic water bottles to stick
 - Empty plastic water bottles, large and small
 - 2 clean cloth rolls 15cm x 2m
 - Ball
 - Used double bed flat sheet
 - 2 furniture foam (approximately 3cm x 15cm x 1m)
 - 1 furniture foam (approximately 20cm x 50cm x 50cm)
 - 1 pair scissors
 - 1 utility or serrated knife

Instructions for Teaching the Activity

Room Arrangement: Initially, participants sit in a semicircle. Later, the Health Coach divides the participants into pairs.

- 1. Health Coach distributes the following handouts: *9.5 Home Self-Care for Moving & Stretching the Upper Limb, 9.6 Home Self-Care for Moving and Stretching the Lower Limb, 9.7 Home Self-Care for Resting and Stretching the Upper Limb, 9.8 Home Self-Care for Resting and Stretching the Lower Limb, 9.9 Home Self-Care Exercises for Persons Affected by Hansen’s Disease (Leprosy), 9.10 Home Recording Form for Self-Care Practices.***
- 2. Health Coach reviews home self-care handouts and practices exercises with the participants.**
- 3. Health Coach distributes the handout *9.11 Instructions for Activity 4 – Managing “At-Risk” Situations to Prevent or Minimize Movement Limitations Through Positioning and Exercise.***
- 4. Health Coach and participants use the instructions on handout *9.11* to do activity 4.**
- 5. Health Coach summarizes and provides coaching insights:**
 - Include caregivers/family members when teaching the affected person the exercises and how to monitor for changes.
 - Assistance: Either the affected person assists themselves with their unaffected side or another person helps to do movement/exercise.
 - Home exercises should be done as often as possible during the day.
 - Movement causing severe pain is a sign that movement/exercise needs to be modified.
 - If there is a severe LOM or if LOM is getting worse, the person needs to be referred, preferably to a specialist (physiotherapist and/or surgeon).

Step 9: Care for Movement Limitations

Conclusion

In conclusion, the Health Coach summarizes key messages and clarifies any misconceptions.



Handout 9.1: Instructions for Screening Movement Limitations

Preparation for screening swelling:

Gather together equipment and supplies: IIRF form, pen or pencil.

Wash hands with soap and water before and after each screen.

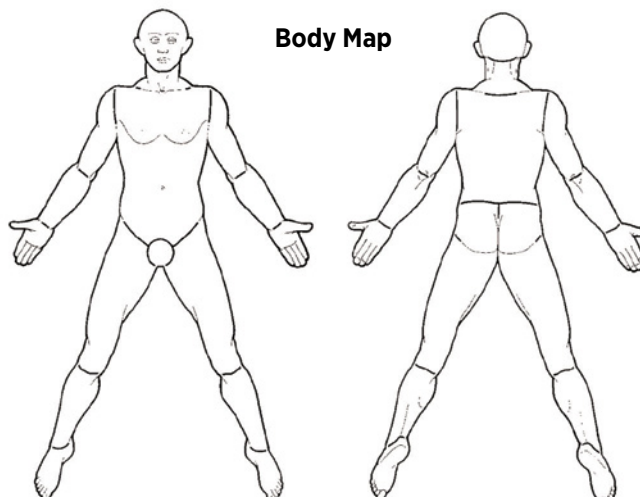
Dominant side	Ask: Which side do you prefer to use for writing, eating, working? Record on IIRF form: Circle right or left.
Complaints	Ask
Patient or family complaints or observations	Do you currently have difficulty with movement? If yes, what movements are difficult? Record on IIRF form: Circle , Yes, R and/or L. Write which movement(s) are difficult.
History	Ask
Previous injury or problem causing movement limitations	Have you ever had an injury or problem that affected your ability to move? If yes, explain what kind of injury or problem. Where and what kind of movement difficulty? Record on IIRF form: Circle Yes, R and/or L and write explanation. Mark location on body chart.
Areas with Limitation of Movement (LOM)	Compare both sides of the body to identify a movement limitation. Follow the set movement procedures:
Upper Limb (UL): Raise arms up to shoulder height with elbows extended. Make a fist with both hands (curl fingers down), move wrist up and down. Open hands (curl fingers up) and show the palms of the hands, spreading fingers out and then bring fingers together. Turn hands over (palms up) and lift thumbs up. Bend elbows so that the hands can touch the back of the shoulders. Extend arms out to each side with thumbs up. Raise arms up above head until hands touch.	
Upper Limb (UL)	Is there LOM of thumb, hand/fingers, wrist, elbow or shoulder? Record LOM on IIRF form: Circle Yes, R and/or L. Record total number of Yes responses for LOM UL. Mark area with LOM on body chart.
Lower Limb (LL): Sit in a chair with legs extended. Curl toes down and straighten. Sit with knees slightly bent with soles of the feet on the ground. Keep heels on the ground while raising feet. Press toes down while lifting the heels off the ground. Lay on stomach with feet off the edge of table/bed. Slowly bend knees to touch heels as close as possible to the buttocks then straighten the legs. Observe the hips: Do they stay flat or lift up? If the hip(s) lift(s) up there is a limitation at the hip.	
Lower Limb (LL)	Is there LOM of toes, ankle, knee or hips? Record LOM on IIRF form: Circle Yes, R and/or L. Record total number of Yes responses for LOM LL. Mark area with LOM on body chart.
Other: Trunk, head and neck (including eyes), mouth and other	
Other	Is there LOM of trunk, head (including eyes) and neck, mouth and other? Record LOM on IIRF form: Circle Yes, R and/or L. If other, record the other. Record total number of Yes responses for other. Mark area with LOM on body chart.

Handout 9.2: Individual Impairment Record Form (IIRF) – Limitation of Movement (LOM) Section

Dominant side: Right dominant | Left dominant

Complaints			
Do you currently have difficulty with movement? If yes, what movements are difficult?	Yes	R	L
History			
Previous injury or problem causing movement limitations? Explain: _____	Yes	R	L
Examination of areas for LOM (limitations of movement). Compare both sides.			
Upper Limb (UL) – arms and hands: Raise arms up to shoulder height with elbows extended. Make a fist with both hands (curl fingers down), move wrist up and down. Open hands (curl fingers up) and show the palms of the hands, spreading fingers out and then bring fingers together. Turn hands over (palms up) and lift thumbs up. Bend elbows so that the hands can touch the back of the shoulders. Extend arms out to each side with thumbs up. Raise arms up above head until hands touch.			
• Thumb movement is less? spread fingers, lift thumb	Yes	R	L
• Hand/finger movement is less? fingers out/in, curl fingers down/up	Yes	R	L
• Wrist movement is less? wrist up/down	Yes	R	L
• Elbow movement is less? bend/straighten	Yes	R	L
• Shoulder movement is less? arms to front up/down, side up/down	Yes	R	L
Total number of Yes LOM responses for UL			
Lower Limb (LL) – legs and feet: Sit in a chair with legs extended. Curl toes down and straighten. Sit with knees slightly bent with soles of the feet on the ground. Keep heels on the ground while raising feet. Press toes down while lifting the heels off the ground. Lay on stomach with feet off the edge of table/bed. Slowly bend knees to touch heels as close as possible to the buttocks then straighten the legs. Observe the hips: Do they stay flat or lift up? If the hip(s) lift(s) up there is a limitation at the hip.			
• Toe movement is less? curl/straighten	Yes	R	L
• Ankle movement is less? sit with knees bent, move foot up/down	Yes	R	L
• Knee movement is less? lay on stomach, bend and straighten knees	Yes	R	L
• Hip movement is less? lay on stomach, hip lifts up when knees are bent	Yes	R	L
Total number of Yes LOM responses for LL			
Other Movements. Compare both sides.			
• Trunk movement is less? bend forward/backward, side to side, twist side to side	Yes	R	L
• Head (include eyes) and neck movement is less? rotate, bend to each side, close and open eyes	Yes	R	L
• Mouth movements less? open, close, blow out, side-to-side movement	Yes	R	L
• Other movement: _____ is less?	Yes	R	L
Total number of Yes LOM responses for Other Areas			

Key for Recording	
Skin Lesion	○
Crack	≡
Wound	∩
Scar Location	X
Joint with Movement Limitations	↓
Swelling	┌
Location of Amputation	—



Handout 9.3: Actions to Prevent Movement Limitations

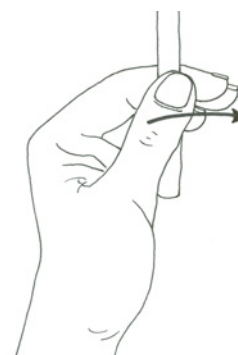
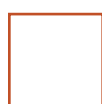
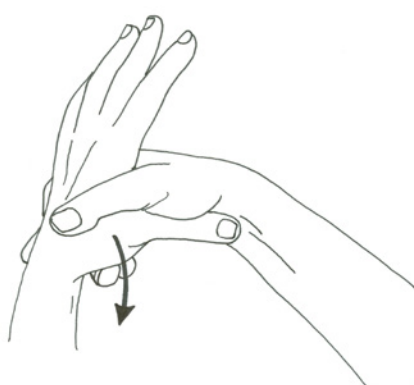
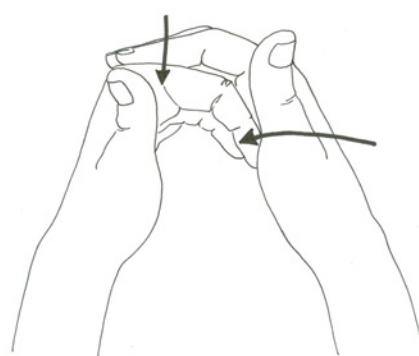
Preventive Actions	Details
<p>1. Identify if the location of lesion (scars, injury, wounds, ulcers) is at or near a joint.</p>	<ul style="list-style-type: none"> • Identify limitation early and take action. Ask patient to do body movements with both sides of the body and compare one side with the other. • If the movement is less, take action with exercises and positioning to regain or improve movement to look the same as the other side. • Avoid habits that may be comfortable but can cause loss of full movement. For example sitting or lying in bed with elbows bent, hips and knees bent, or with feet and toes downward or pulled down with bed covers. • Teach affected person and caregiver daily home/bedside exercises and positioning to make affected part move the same as the unaffected part.
<p>2. Keep skin and scars soft and flexible.</p>	<ul style="list-style-type: none"> • Hydrate and lubricate skin and scars to keep them from cracking during daily activities and exercise.
<p>3. Reduce or prevent swelling. 4. Reduce or prevent pain.</p>	<ul style="list-style-type: none"> • Reduce swelling and pain as quickly as possible. It will make movement easier and less painful. • Elevate the swollen parts and move often. • Wrap with light compressive dressings. • Affected person is taught to do appropriate positioning and exercise within his/her pain tolerance in a home and/or bedside self-care program. • Exercise shorter periods of time and more frequently. • If pain and/or swelling increases 15 minutes after exercise, the exercise time and resistance should be reduced. • If there is great pain when touching and/or moving the affected part, the patient should be referred for x-ray and consult a specialty doctor.
<p>5. Movement does not improve or becomes worse even when exercises, positioning and activities are done at home and health center.</p>	<ul style="list-style-type: none"> • Refer to a specialist (physiotherapist, surgeon) for evaluation and assistance with rehabilitation program.
<p>6. “Clawed” fingers with cracks.</p>	<ul style="list-style-type: none"> • Stretch and straighten flexible “clawed” fingers using rubber-tubing cut in half. Place on the finger to open it to its full length during healing and protect it from further injury or infection. <ul style="list-style-type: none"> – Remove and clean rubber tubing daily prior to bathing and exercise. – Replace clean tubing on the finger until healed. – Teach affected person to maintain full passive movement with daily stretching exercises. • If tight “clawing” of fingers makes them difficult to straighten, refer as soon as possible: <ul style="list-style-type: none"> – For therapist or nurse to apply a progressive plaster finger splint to slowly open fingers. – Change splints daily or every other day, after stretching exercises are done. – Teach affected person to maintain full passive movement with daily stretching exercises.

Handout 9.4: Community Care for Movement Limitations or Referral

Problems Identified on Movement Limitations Screen	Community Care for Movement Limitations	Contact Supervisor and Refer for Clinical Exam, Diagnosis and Other
1. Location of injury. Wound is at or near a joint	<ul style="list-style-type: none"> Encourage participation in daily activities and move as much as possible. 	
2. Limitation of movement identified	<ul style="list-style-type: none"> If the movement is less on the affected side, take early action with exercises and positioning to regain or improve movement to look the same as the other side. Teach affected person and caregiver daily home/bedside exercises to make affected part move the same as the unaffected part. Avoid habits that can cause further limitations. 	<p>If no improvements with good home and community care in two to four weeks, refer to a specialist (physiotherapist, surgeon) for evaluation and assistance with rehabilitation.</p> <p>If further loss of motion occurs, refer as soon as possible.</p>
3. Dry skin/cracks	<ul style="list-style-type: none"> Soak and moisturize daily to prevent cracking during daily activities and exercise. If cracks are on flexible “clawed” fingers, stretch or straighten fingers with rubber tubing cut in half. This will protect it from further injury or infection. <ol style="list-style-type: none"> Remove and clean rubber tubing daily prior to bathing and exercise. Replace clean tubing on the finger until healed. Teach affected person to maintain full passive movement with daily stretching exercises. 	<p>If deep cracking with or without infection, refer as soon as possible.</p> <p>If tight “clawing” of fingers makes them difficult to straighten, refer as soon as possible:</p> <ul style="list-style-type: none"> For therapist or nurse to apply a progressive plaster finger splint to slowly open fingers. Change splints daily or every other day, after stretching exercises are done. Teach affected person to maintain full passive movement with daily stretching exercises.
4. Dry scars	<ul style="list-style-type: none"> Soak and moisturize daily, cover with plastic wrap for 15 minutes. Massage to free the scar. Move and stretch the area affected by the scar. Protect from sun and injury. 	<p>If no improvements with good community care in one to two months, refer.</p> <p>If deep cracking or further loss of motion occurs, refer as soon as possible.</p>
5. Swelling	<ul style="list-style-type: none"> Practice good personal hygiene. Elevate as much as possible day and night unless elevation causes pain. Do strong pumping exercise frequently. Use light compression bandages. 	<p>If pain and/or swelling increases, refer immediately.</p>
6. Pain	<ul style="list-style-type: none"> Affected person is taught to do appropriate positioning and exercise within his/her pain tolerance in a home and/or bedside self-care program. Avoid forceful passive exercises to increase joint movement. Exercise shorter periods of time and more frequently. Gradually increase the use of weights in exercise or resistance in activities. 	<p>Refer immediately, if there is great pain when touching the affected part and with movement. An x-ray needs be done (osteomyelitis, fracture).</p>



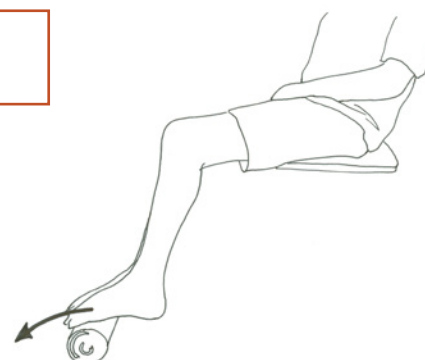
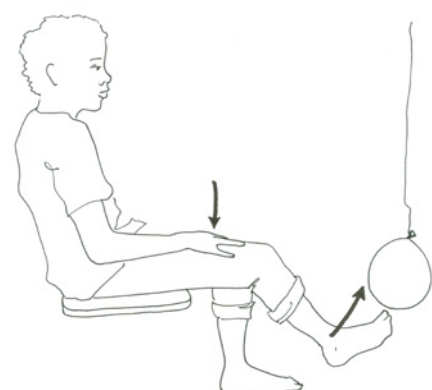
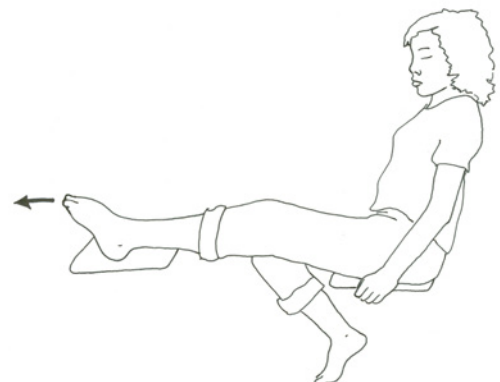
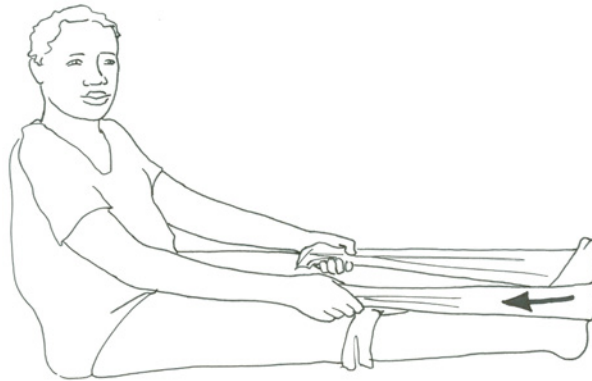
Handout 9.5: Home Self-Care Activities to Move and Stretch Arms and Hands



Illustrations: Valerie Simonet and WHO/NTD

Step 9: Care for Movement Limitations

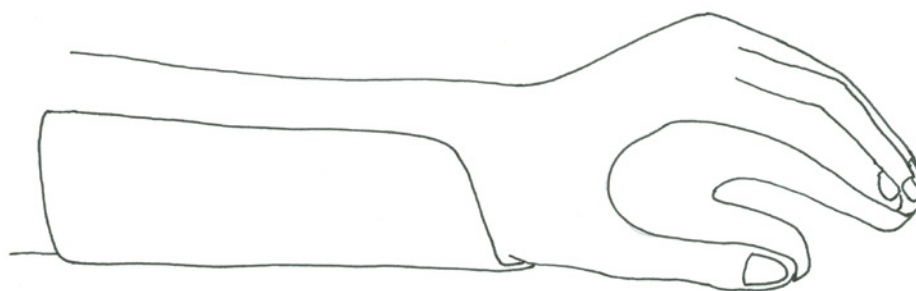
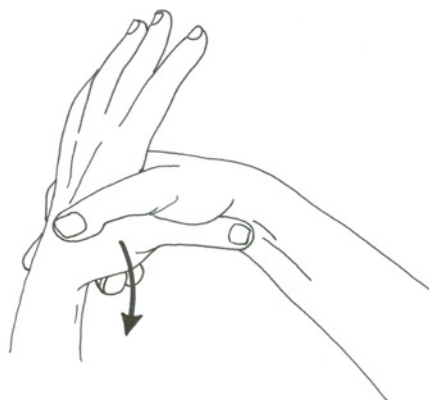
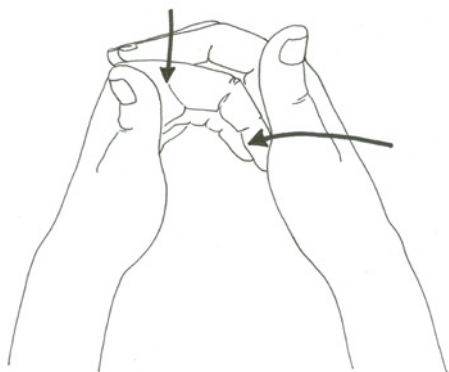
Handout 9.6: Home Self-Care Activities to Move and Stretch Legs and Feet



Illustrations: Valerie Simonet and WHO/NTD

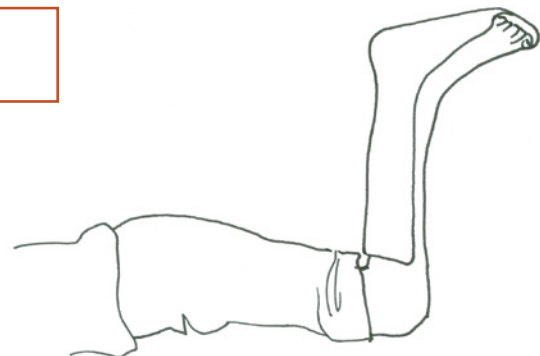
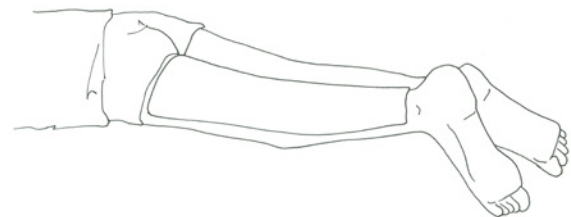
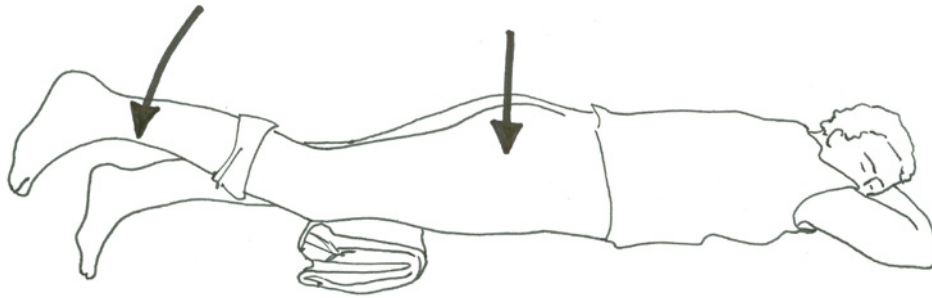


Handout 9.7: Home Self-Care Activities to Rest and Stretch Arms and Hands



Step 9: Care for Movement Limitations



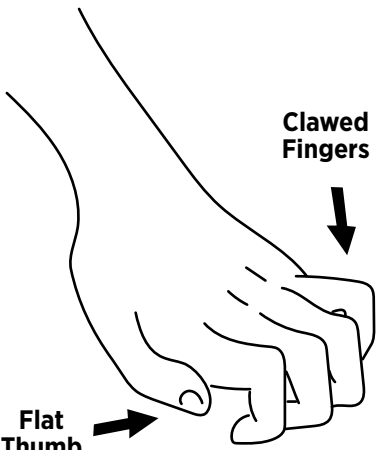
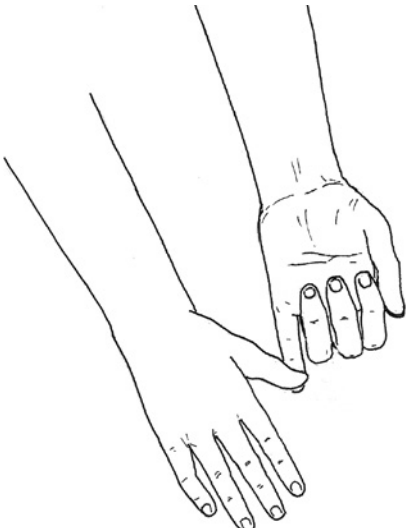
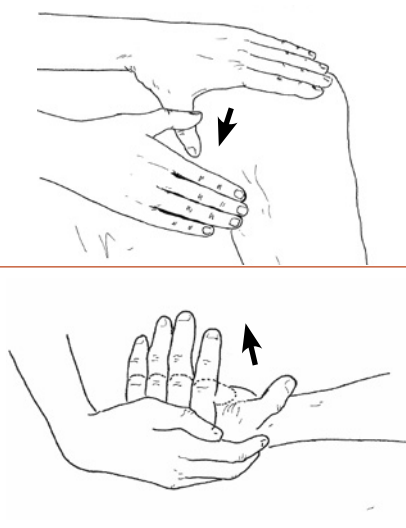
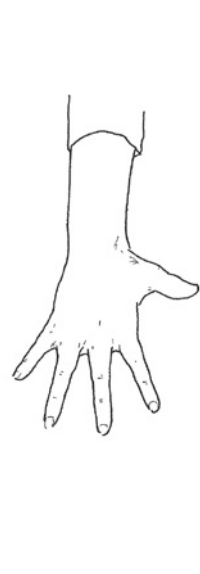
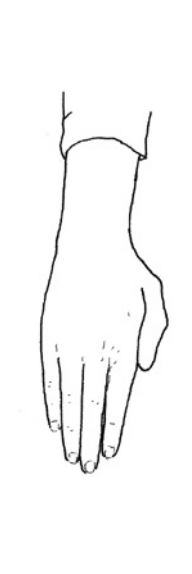
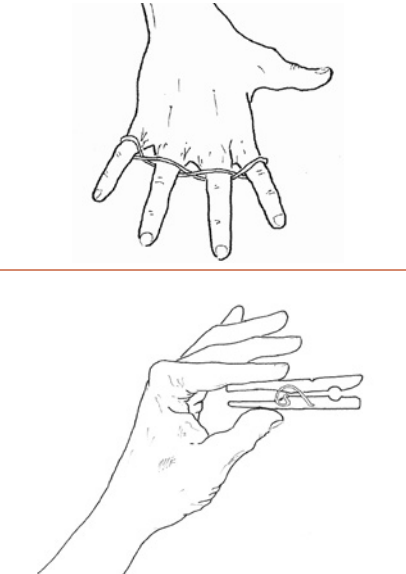
Handout 9.8: Home Self-Care Activities to Rest and Stretch Legs and Feet



Illustrations: Valerie Simonet and WHO/NTD



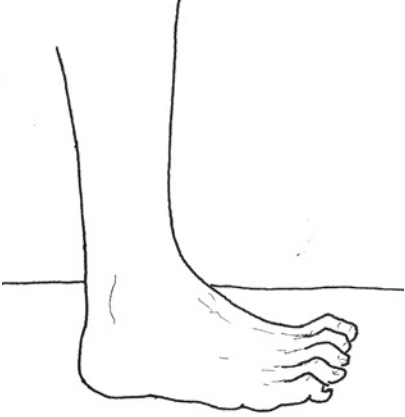
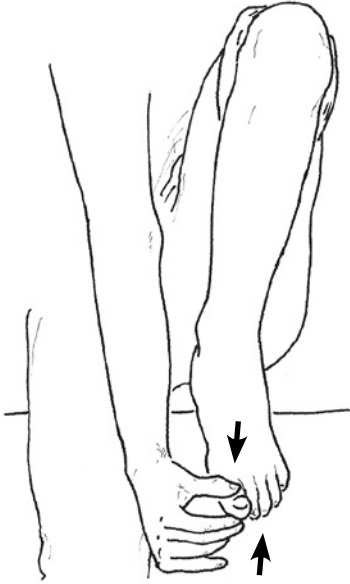


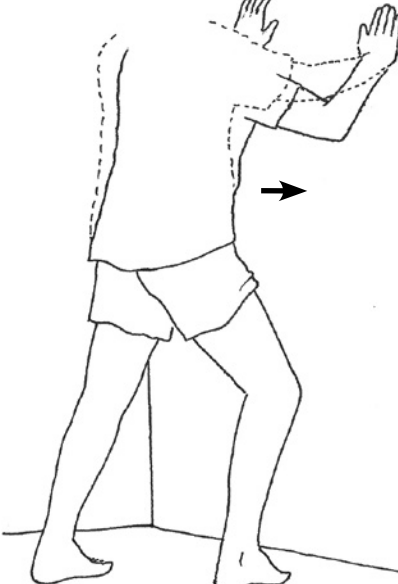
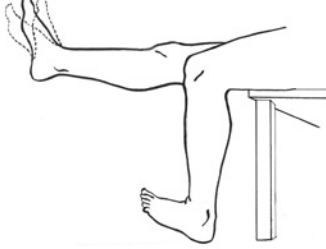
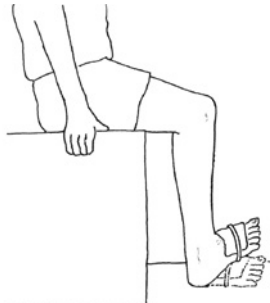
Handout 9.9: Home Self-Care Exercises for Persons Affected by Hansen's Disease (Leprosy)

Problem	Exercise	
<p>Eye Weakness or Paralysis Difficulty closing the eye</p> 		
<p>Hand Weakness or Paralysis Difficulty straightening fingers and thumb, separating fingers and pinching</p> 		
		
		

Reference: Adapted from: Lehman, L., Orsini, B., Fuzikawa, P, Lima, R., & Gonçalves, S. (2009). *Para Uma Vida Melhor: Vamos Fazer Exercícios*. (2nd ed.). American Leprosy Missions and ILEP, 1997 Belo Horizonte, MG Brasil.

Step 9: Care for Movement Limitations

Handout 9.9: Home Self-Care Exercises for Persons Affected by Hansen's Disease (Leprosy) (continued)




Problem	Exercise	
<p>Toe Weakness or Paralysis Difficulty straightening toes</p> 		
<p>Foot Weakness or Paralysis Difficulty lifting foot</p> 		 

Reference: Adapted from: Lehman, L., Orsini, B., Fuzikawa, P, Lima, R., & Gonçalves, S. (2009). *Para Uma Vida Melhor: Vamos Fazer Exercícios*. (2nd ed.). American Leprosy Missions and ILEP, 1997 Belo Horizonte, MG Brasil.



Handout 9.10: Home Recording Form for Self-Care Practices

	✓ the activities to be done at home
1. Elevate and Exercise – 10 minutes (3–4 songs)	
2. Move and Stretch – Stretch 10 seconds x 10 times	
3. Rest and Stretch – 10 minutes (3–4 songs)	
4. Scar Care – Hydrate, Lubricate, Mobilize Scar, Move, Stretch & Protect	
5. Exercises for Persons Affected by Hansen’s Disease (Leprosy)	

Start Date: (dd/mm/yy) ____/____/____			
	Morning	Afternoon	Night
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
Day 8			
Day 9			
Day 10			
Day 11			
Day 12			
Day 13			
Day 14			

At the end of the 14 days, how is your scar?
(Circle if Better or Worse)

Better



Worse



Date patient demonstrates to health worker (dd/mm/yy): ____/____/____

Patient is able to demonstrate self-care correctly? ____Yes or ____No

Reference: Lehman, L. (2012). *Buruli ulcer drug trial protocol: Patient home self-care*. WHO.

Handout 9.11: Instructions for Activity 4 – Managing “At-Risk” Situations to Prevent or Minimize Movement Limitations Through Positioning and Exercise

Instructions for Health Coach & Participants

1. Health Coach lays out materials for the activity on a front table.
2. Health Coach writes locations of the lesion (wound, burn, scar) or muscle paralysis on 21 individual pieces of paper using the list provided in the table below.
3. Fold papers in half and put into one container. Mix well.
4. Health Coach divides group into pairs.
5. Health Coach chooses a piece of paper from the container, then all participants choose a piece of paper from the container.
6. Health Coach demonstrates what participants are supposed to do using the piece of paper selected.
7. The Health Coach then asks for pairs to work together for 20 minutes to discuss the body location written on their piece of paper. Each pair will decide how to demonstrate correct positioning and exercise for their situation. Health Coach reminds pairs to demonstrate using available materials.
8. Participants tape paper to the body area indicated on the paper or draw a circle on the location with a marker. Each pair will present their specific situations and respond to the following questions:
 - Which direction is the pull when a crack, wound, burn or scar is healing at this location?
 - Which direction is the pull if there is muscle weakness or paralysis?
 - What is the best position during the day and at night to prevent joint tightness?
 - What exercise or movement will stretch the body opposite the directions of pull of healing wounds or pulls from weak or paralyzed muscles?
9. Each pair will present their situation to the whole group by answering the questions and demonstrating the positioning and exercise/movement needed.
10. At the end of each pair’s presentation, all participants fill out information on the table below. If there are some body part locations not presented, the Health Coach and participants will discuss the missing information, so the table can be completed at the end of the activity 4. It can also be given as homework to be completed for the next day.

Location of Lesion			
Arm & Hand Location	Direction of pull when wound is healing	Best position during day and night	Exercise to maintain or regain full movement
1. Front and inner side of shoulder and armpit (axilla)			
2. Front of elbow			
3. Back of elbow			
4. Front of wrist			
5. Back of wrist			
6. Thumb web space			
Arm & Hand Location	Direction of pull when muscle is weak/paralyzed	Best position during day and night	Exercise to maintain or regain full movement
7. Clawed fingers and flat thumb from weak/paralyzed muscles			
Leg & Foot Location	Direction of pull when wound is healing	Best position during day and night	Exercise to maintain or regain full movement
8. Upper inside part of thigh near genitalia			
9. Front of knee			
10. Back of knee			
11. Top of ankle			
12. Back of heel, including heel cord			
13. Top (dorsum) of foot and toes			
Leg & Foot Location	Direction of pull when muscle is weak/paralyzed	Best position during day and night	Exercise to maintain or regain full movement
14. Drop foot from weak/paralyzed muscles			
15. Clawed toes from weak/paralyzed muscles			
Other Body Location	Direction of pull when wound is healing	Best position during day and night	Exercise to maintain or regain full movement
16. Side of face extending to mouth			
17. Front of neck			
18. Back of neck			
19. Front of trunk including chest and stomach			
20. Lateral side of trunk extending from armpit (hollow of arm) to top of hip.			
Other Location	Direction of pull when muscle is weak/paralyzed	Best position during day and night	Exercise to maintain or regain full movement
21. Inability to close eye due to weak/paralyzed muscles			