

## **Domiciliary and Field Work**

### **TEACHING FOOT CARE**

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**Summary.** A new approach is being made to the teaching of foot care.

The learning of the group is in the context of the team involved. The emphasis is on a practical and participative approach.

### **Introduction**

The care of the foot is not the work of any one person in the leprosy health delivery service. It is essentially a team responsibility. The doctor is required to understand the basic factors which bring about plantar ulceration and to recognize the different types and their treatment. He must be able to prescribe appropriate preventive footwear intelligently and also to operate on feet that require simple surgical intervention. The physiotherapy technician also needs to understand the factors causing ulcers and prevention. He should be able to treat uncomplicated ulcers and is normally the person in the team who gives soaks, makes assessments and applies plaster-of-Paris casts. The third essential member of the team is the shoemaker, often somewhat disparagingly referred to as the 'cobbler'. An intelligent understanding of his role is a very strong motivating factor in his work.

However, the care of the foot is still probably the most neglected aspect in the treatment of the leprosy patient. It has no obvious scientific attraction, it is not important from a public health angle and its aesthetic and cultural appeal is not great.

Nevertheless, the plantar ulcer probably contributes more than any other lesion of neglected leprosy to a patient's mental suffering and social instability.

In the last 2 years we have been involved in teaching the care of feet in several centres throughout the country. This article sets forth the pattern of teaching which has evolved.

### **The learning teams**

It is difficult for a single person to introduce new activities to a programme already established. New ideas meet with resistance on the part of other members of one's institution. The plan was therefore conceived, of training not one member of the team, but all three at the same time.

Thus from the outset participants are invited in teams. Six centres were each asked to send a shoemaker, a physiotherapy technician (or a paramedical worker willing to care for ulcers) and a doctor.

As far as possible the aim is for teams to learn together, separating only to study in greater depth each member's particular role, for example the doctor to operate, the physiotherapist to assess, to treat the foot and to apply plasters, and the shoemaker to produce the prescribed shoes.

### **The teaching team**

The care of the foot is essentially a matter of skills and for a doctor to think that he can teach a shoemaker to make shoes is the height of presumption. So the logical decision was to involve a teacher for each topic being taught.

This was easy when the first 2 courses were conducted in our own centre. We then experimented in other centres to which we were invited, and took to each centre a teaching team, which consisted of a physiotherapist who was an experienced teacher, a shoemaker who was skilled and with teaching experience, and a surgeon. The proposed host centre had been briefed in advance and supplied the necessary materials.

All the members of the course are resident in the host centre and have their meals together. This serves to increase the team spirit, and to cement a relationship between members from the same centre.

## INTRODUCTION

The first session is introductory, with each member introducing himself and stating his designation.

The team leaders are asked to report on the activities in the area of foot care in their own institution. The members of the teams are then asked to state their problems frankly. This session is conducted bilingually to encourage the shoemakers as they usually do not understand English. Interesting problems have emerged, problems of role interaction, difficulties in working arrangements, too many repairs, shortage of supplies, lack of patient compliance, dissatisfaction with slipper patterns offered. In some cases members of the same team were not aware of each others difficulties.

## SETTING OF OBJECTIVES

Course objectives are then set by the members. The following is a typical set of objectives compiled from the 5 courses so far conducted.

1 *Shoemakers* should be able to (a) make 3 pairs of simple 'Y' strap chappals per day; (b) give instruction to patients in shoe maintenance and foot care; and (c) change the pattern of the uppers.

2 *Physiotechnicians* should be able to (a) give comprehensive instruction to patients in routine foot care, soaks, scraping and oil massage and the home treatment of any pre-ulcerative conditions encountered during inspection of the foot; (b) apply an average of 6 plaster-of-Paris boots or shoes per week; and (c) demonstrate for 6 patients per day the technique of foot soaks, scrapes and oil massage.

3 *Doctors* should be able to (a) diagnose and classify all foot ulcers; (b) be able to perform the simple operation required for complicated ulcers; (c) correctly prescribe the appropriate footwear in each case; (d) aim at a target of an average of 45 days for the complete healing of all ulcers; (e) ensure an adequate and regular supply of materials to the shoemaker; and (f) maintain statistics of the prevalence of foot ulcers in the field service so as to be able to evaluate the effect of a greater emphasis on foot care.

## CONSTRUCTION OF THE RECOMMENDED FOOTWEAR

In the afternoon of the first day all members of the course watch while the shoemaker of the teaching team demonstrates on a selected patient the full process of the construction of a sandal, from measurement to assembly, fitting and fixing.

During this time, informal conversation is held on the properties of the materials, recommending their costs and availability and possible alternatives. The attention of the group is drawn to technical points, and the principles of ulcer preventive footwear, reasons for recommending the particular pattern chosen, and the essential and non-essential features. Many of the doctors had never seen a slipper being made and were very interested.

## DAYS 2, 3 AND 4

These follow a standard pattern, differing slightly in timing according to the convenience of the host centre.

## THE FOOT CLINIC

Here a selection of about 15–20 patients are examined by the doctor of the teaching team with the whole group in attendance. (The shoemakers are only asked to attend the first clinic, so that they can see the procedure. Thereafter they concentrate on making shoes.)

The emphasis is on method of examination, diagnosis of ulcer type and the treatment recommended, and examination of the other foot to reveal possible pre-ulcerative conditions such as cracks, callouses, blisters, 'hot spots' etc.

From these clinics cases are selected for demonstration of foot care techniques and for operations later in the day.

## LECTURES

After the clinic the physiotherapy technicians and doctors meet together. The subjects dealt with during the course are:

1. Causes of foot ulceration, predisposing and direct causes, and pre-ulcerative conditions. Acute neuritis and the place of surgical decompression.
2. Types of ulcer and their treatment. The features of the full plaster-of-Paris boot, and the below ankle plaster-of-Paris double-rocker shoe, and the indications and contra-indications of both.
3. Health education, i.e. teaching the patient how to care for his feet at home.
4. Principles and features of ulcer preventive footwear, and indications for the various types.

## DEMONSTRATION

Each day one aspect of foot care is demonstrated to the group. The first demonstration is the taking of a Harris Mat footprint. The shoemakers are included in this since it is primarily a test to monitor the effectiveness of the footwear.

Other demonstrations on the following days include: technique of foot soaks, scraping and foot inspection; applications of the moulded double-rocker shoe; and motor and sensory assessment of the foot.

On each day, in the afternoon, the physiotherapy technicians practise the particular technique that has been demonstrated in the morning. The doctors participate in the operations on the septic feet that have been seen in the morning clinic. The shoemakers complete a pair of slippers for each of the two patients that have been allotted to each of them.

The operations demonstrated are minor, common procedures requiring a minimum of surgical skill and ritual. They include: Excision of ulcer and dorsal drainage, with or without metatarsal joint excision; skin grafting of ulcers; and exploration and laying open of sinus and curettage.

During the week, as far as possible, each doctor is asked to do 2 operations.

#### EVALUATION AND PLANNING

On the last day the group reassembles. The shoemakers show the patients the slippers that have been made for them and the doctor and physiotherapy technician of his team inspect and check them. If alterations are to be made, such as corrections to straps or checking of the position of the arch support (by Harris Mat footprint technique) this is done on the spot.

The final session is the planning for implementation. Each team spends 1 h together discussing their plan, which is then recorded and reported to the plenary session by the doctor in charge.

#### FOLLOW-UP

A full report of the course is prepared and sent to each participant and includes the plans which have been made at the final session.

#### COMMENT

The course is always enjoyed by the participants, many of whom have never considered the wide range of interest and therapeutic activity involved in foot care.

I personally have reservations about the participation of doctors in the operating session. Many young doctors have had a minimum of exposure to surgical technology and some could not even put on sterile gloves confidently and correctly. It would appear that 4 operating sessions is not adequate. The question arises 'Is it better to give a little training than none at all?'

#### Suggested reading

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