# Essential interventions to prevent or minimize disability



Essential interventions 1, 2, 3, 4, 5, 6, 7, 8 Remember the essential interventions to be implemented early Summary of common problems with the indicated intervention

#### **Chapter 5**

## **Essential interventions** to prevent or minimize disability

### **KEY POINTS**

- Early and correctly applied interventions can prevent or minimize the disabling physical, psychological, and social effects of Buruli ulcer.
- One of the most commonly observed problems at present is the incorrect positioning and splinting of the hand or foot after surgery or after a dressing change.
- The only time when active and passive movement of a joint must be stopped is during the period (5–10 days) after skin grafting.
- Prior to skin grafting and after the graft has taken, daily exercise of the affected part is essential.
- Complex interventions are generally needed when diagnosis is late and complications have already occurred. These interventions may require more specialized services.
- POD and rehabilitation achieve the best results when there is full and willing participation by the affected individual, the family, the community, and the medical health workers.

arly and adequate implementation of POD interventions should prevent or minimize the disabling physical, psychological, and social effects of Buruli ulcer. The best ways to minimize the risks of skin and soft tissue impairments are by:

- diagnosing and treating the disease early;
- providing adequate surgical excision and skin grafting;
- providing adequate wound care, including appropriate non-restrictive dressings and adequate antideformity positioning; and
- promoting early movement and participation in everyday activities.

POD interventions should be chosen on the basis of the problems identified on the patient assessment form. Following the assessment, the affected person should be informed of the results and the proposed interventions.

Effective communication helps to minimize anxiety and promotes collaboration. Treatment should be holistic, considering not only physical impairments and difficulties but also psychological functioning and the social situation.

The following are the essential POD interventions that need to be implemented early:

- 1. Health education and self-care
- 2. Wound management
- 3. Oedema control
- 4. Scar management and control
- 5. Positioning and splinting
- 6. Management of pain
- 7. Exercise and activity
- 8. Adaptations in activities of daily living

#### **Common problems observed with interventions used to manage Buruli ulcer**

Currently, much of the disability seen with Buruli ulcer is caused by the fact that most of the essential interventions are not being implemented, are being implemented too late, or are being implemented incorrectly. Training and supervision can ensure that health workers living close to the person's home can perform the essential interventions. It is important that specialists and referral hospitals understand the importance of implementing these basic POD interventions and collaborate in teaching the staff of surrounding health centres.

Some of the common problems causing disability are:

- inadequate wound management causing delays in healing and increasing fibrosis;
- restrictive bandaging;
- poor antideformity positioning;
- pain;
- oedema;
- infection;
- excessively dry scars;
- hypertrophic and keloid scars;
- adhesions;
- fibrosis causing shortening of all types of soft tissue;
- restricted movement of the involved body part, including adjacent non-affected parts; and
- limited participation in self-care and ADL.



Figure 5.0.1 Complications of Buruli ulcer and the consequences of late and/or inadequate POD interventions

#### **Prevention of disability (POD)** POD GOALS control maintain or minimize control minimize participate in daily infection improve pain oedema scarring joint fibrosis and activities necrosis movement adhesion **POD INTERVENTIONS** wound care – antideformity – positioning – elevation – compression lubricate skin – massage soft tissue – stretch joints through exercises and activity – participation in activities of daily living

### less disability

**POD RESULTS** 

Figure 5.0.2 POD goals, interventions, and results integrated within Buruli ulcer management

All of these problems contribute to the development of deformity and disability (*Figure 5.0.1*). Therefore, the control of pain, oedema, infection, and scarring during wound care, along with early interventions to maintain antideformity positioning, early joint movement and exercise, can prevent many of the deformities that contribute to disability and stigma. Health education can encourage those with BU to participate in their own self-care activities during prolonged hospitalization, improving self-confidence and responsibility for self. This approach also decreases apathy, depression, and fear.

The goal of POD in Buruli ulcer is to lessen deformity and disability (*Figure 5.0.2*). Essential POD interventions are addressed in detail below. At the end of this chapter, problems and impairments are listed with their treatment objectives and POD interventions summarized (*Table 5.0.1*).