Concepts in prevention of disability and rehabilitation
Buruli ulcer often starts as a nodule. Ulceration of the lesions and occasional involvement of the bone are seen in late cases. Following excision, soft tissues contract during the healing process. In most cases, muscles and joints are not directly involved but can become affected if soft tissue contractures develop, limiting movement and activity. These complications can limit an individual’s ability to carry out normal daily activities and restrict social participation.

The goal of rehabilitation is to maintain or restore function. This may require those affected to learn new ways of going about their activities and to adapt their environment or work instruments to enable participation. The International Classification of Functioning, Disability and Health, developed by the World Health Organization, helps to more adequately describe the impact of BU on body structure and function, as well as its impact on the individual’s activities and participation.

**International Classification for Functioning, Disability and Health (IFC)**

The ICF provides a framework for coding information about health. Communications about health and health care across the world can use a language that is uniform and standard among various disciplines and sciences. The ICF focuses on the “consequences of a disease or other health condition” and describes the impact it has on the body, the individual, and society in relation to body functions and structures, activities, and participation (Figure 3.1).
Concepts in prevention of disability and rehabilitation

Health condition (*disorder or disease*)

**Body function and structures**
- Mobility of the joints and muscle power

**Activity**
- Preparing meals

**Participation**
- Engaging in the sport of basketball

**Environmental factors**

**Personal factors**

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**Table 3.1**
Definitions of components in the context of health (WHO/ICF)

<table>
<thead>
<tr>
<th>Functioning components</th>
<th>Body functions</th>
<th>Body structures</th>
<th>Activity</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The physiological functions of body systems (including psychological functions).</td>
<td>Anatomical parts of the body such as organs, limbs and their components.</td>
<td>The execution of a task or action by an individual.</td>
<td>Involvement in a life situation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disability components</th>
<th>Impairments</th>
<th>Activity limitations</th>
<th>Participation restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problems in body function or structure, such as a significant deviation or loss.</td>
<td>Difficulties an individual may have executing activities.</td>
<td>Problems an individual may experience in involvement in life situations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Environmental factors</th>
<th>Personal factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The physical, social and attitudinal environment in which people live and conduct their lives. This includes: products and technology, natural environment and human-made changes to the environment, supports and relationships, attitudes, etc.</td>
<td>Attributes of the person such as age, race, gender, social status, life experiences, education, character style, habits, copying styles, etc.</td>
</tr>
</tbody>
</table>

The ICF includes personal and environmental factors that affect functioning (body functions, activities, and participation) and disability (impairments, activity limitations, or participation restrictions). More details about this classification can be obtained through the WHO web site: www.who.int/classification/icf.

In summary, the ICF is:
- a framework for reporting health information using a uniform and standard language;
- able to describe the consequences or impact of disease or a health condition on the person’s functioning or disablement;
- a classification for determining functioning and disablement; and
- able to classify impairments, activity limitations, and participation restrictions within the context of a person’s environmental and personal situation.

Prevention of disability (POD)

Disability in Buruli ulcer can be prevented or minimized through early diagnosis, antibiotic treatment, and surgical excision, together with adequate management of skin, soft tissues (tendon, ligament, muscle), and joints during the wound-healing process. POD in Buruli ulcer is a process by which actions are taken to prevent or minimize complications that can cause disability. This may include physical, socioeconomic, psychological, spiritual, environmental, and personal areas. (Figure 3.2)
Rehabilitation

The United Nations Development Programme uses the following operational definition of rehabilitation.

Rehabilitation includes all measures aimed at reducing the impact of disability for an individual, enabling him or her to achieve independence, social integration, a better quality of life and self-actualization.

Rehabilitation includes not only the training of disabled people but also interventions in the general systems of society, adaptations of the environment and protection of human rights.

Protection of human rights is an obligation for the authorities of each country, for its communities and for every citizen. Disabled people shall have the same rights to a life in dignity as others, and there must be no exceptions. Special attention may be needed to ensure the following: access to health and social services; to educational and work opportunities; to housing, transportation and to buildings; to information; to cultural and social life, including sports and recreational facilities; to representation and full political involvement in all matters of concern to them.

Responsibility and teamwork

POD is a process that involves the affected person, the family, the community, and all health professionals working together to prevent and minimize the problems associated with Buruli ulcer. It requires early and continuous intervention to maintain or improve quality of life. Empowerment of the person and the family is essential.

Review questions

1. What is the International Classification for Functioning, Disability and Health (ICF)?
2. How does BU impact functioning and disablement?
3. When can POD interventions start?
4. What is the aim of rehabilitation?
5. Who is responsible for POD and rehabilitation?