Module 2. NTD Strategies

Session 3. LF Morbidity Management and Disability Prevention (MMDP)
Overview – LF and Trachoma MMDP

- Spectrum of morbidity associated with LF and its impact
- Cause and management of lymphoedema caused by LF
- Cause and management of hydrocele caused by LF
- How LF morbidity management and disability prevention can be part of an integrated NTDP
- Understand the spectrum of morbidity associated with trachoma and appreciate the impact
- Be familiar with the principles of trichiasis (TT) and corrective surgery
LYMPHATIC FILARIASIS
Goals of the GPELF

• Interrupting transmission by using mass drug administration; and
• Managing morbidity and preventing disability (MMDP) among people who have already been affected by the disease.

An estimated 40 million people worldwide have clinically significant manifestations of the disease, predominantly lymphoedema, elephantiasis and urogenital disorders (especially hydrocele in men).
MMDP minimum package of care

1. Treating episodes of acute attack adenolymphangiatitis (ADL) among people with lymphedema.
2. Preventing progression of lymphoedema and episodes of ADL.
3. Providing access to hydrocele surgery.
4. Providing antifilarial medicines to destroy any remaining worms and microfilaria by mass drug administration or individual treatment.
Integration with PC

• Lymphoedema management can be integrated with:
  – Other disease specific programs – leprosy, buruli ulcer, podoconiosis, wound care, diabetes
  – Home based care – HIV, chronic diseases

• Morbidity control efforts are a critical component of the elimination/control programme.
  – Address the needs of people with existing disease
  – Create awareness of the need for MDA and build support for MDA
What MMDP activities for LF have taken place in your country?
Morbidity in LF

Chronic manifestations
• Lymphoedema
• Elephantiasis of extremities, genitalia
• Hydrocele

Acute manifestations
• Adenolymphangitis (ADL) = ‘acute attacks’
Lymphoedema

Consequences

- Stigma
- Disability
- Social exclusion
- Poverty

Multiple locations

Legs

Genital Organs

Arms
PROBLEMS CAUSED BY LF

- Physical
- Social
- Psychological
- Sexual
- Marital
- Economic
Acute Attacks

- Last ~ 5-7 days
- Painful infections of the skin/superficial tissues.
- Bacteria enter through breaks in the skin (entry lesions).
- Lymph stasis provides conditions for rapid bacteria growth.
- High fever, pain, swelling, nausea, vomiting
- Lymphangitis, lymphadenitis, cellulitis, abscess
- Further damage to lymphatic vessels.
- Fibrosis and progression to elephantiasis.
Entry Lesions
What can be done for a LF patient with a hot red, swollen limb?
Management of Acute Attacks

• Antibiotics, antipyretics, analgesics
• Pain relief is a priority
• Cold compress, soaking
• Elevation
• Rest
• Hydration

Prevention of acute attacks
What can be done for a LF patient with a chronic swollen limb?
Lymphoedema Management
Prevention of Acute Attacks

- Washing the affected parts twice daily with soap and clean, cool water, and drying carefully
- Keeping the nails and spaces between the toes clean
- Raising the affected limb at night
- Exercising the limb regularly
- Wearing comfortable shoes
- Using medicated creams (antibiotics or antifungal) to treat small wounds, abrasions or fungal infections.
Lymphoedema Management

Community Based Care

- Training of health workers
- Training of community health workers
- Training of patients
- Training of family members
- Setting up self-help groups
What are the social benefits for good lymphoedema management?
Social Benefits

- Hygiene prevents acute attacks, reduces unpleasant odors, helps to prevent and heal entry lesions.
- Elevation reduces the size of the arm or leg.
- Improves the patient’s ability to work, attend school, and/or their self-confidence.
- Reduced discrimination by family, community, and health facilities.
- Reduced social isolation and emotional, economic, and psychological problems.
- Treatment/management is important and helps gain the community’s confidence, which tends to increase participation in MDA.
Hydrocele Caused By LF

Cause

- Chronic manifestation of LF.
- Accumulation of fluid in the sac covering the testes.
- Swelling, inflammation, hardened skin, and infection can occur.
Hydrocele Surgery

**Surgery:** hydrocelectomy if properly conducted is curative.
Indications for Surgical Hydrocelectomy

- Interference with sexual function.
- Interference with urination (penis buried in the scrotal sac).
- Negative impact on the patient’s family.
- Dragging pain
- Possible effect on the testis of long-standing hydroceles.
- Liability to trauma whilst working or cycling.

Aspiration with/without injectable sclerosants is not recommended due to risks of testes damage and recurrence rate.

Advocacy, mobilizing resources and orientating NTDPs needed to make surgical hydrocelectomy more accessible.
Hydrocele Surgery Results

Quality pre- and post-operative care are important components that help make this surgery successful.
Enhancing Hydrocele Surgery

- Training of surgeons/district surgeons.
- Inclusion of LF recommended hydrocele surgery technique in the curricula of medicine schools.
- Practical training workshops for surgeons.

THE AFRICAN LYMPHATIC FILARIASIS MORBIDITY PROJECT
FILARICELE SURGICAL HANDBOOK
An Aid to District Hospital Surgeons
3rd edition 2015
Sunny D. Mante
Anders R. Sehn

Training in the University hospital

District surgeon training workshop
Hydrocele Surgery Camp

Patients waiting in front of the surgery room.

Patients under the tent of hospitalisation.
Hydrocele Surgery Camp

Cost:

- **150 USD / person** (in camps or as outpatient)
- **250 USD / person** (7-days inpatient)

- 25 patients could be operated on per day by a team of 4 surgeons corresponding to 125 patients during a week period camp.
- Free drugs (antiseptics for local care, analgesics and antibiotics) given to the patients.
- 7 days hospital stay and then,
- Post-operative care in health centres.
Patient Education and Counselling

Psychological counselling is also essential to support those patients with LF-induced disability who can suffer from acute shame, isolation, sexual dysfunction, and intense chronic pain and suffering.
What are the steps to setting up an effective MMDP programme?
Steps to Setting Up an Effective MMDP Programme:

1. Conducting a situation analysis.
2. Preparing an implementation policy and plan.
3. Operationalizing activities to provide the minimum package of care.
4. Ensuring activities are integrated into health services.
Guidelines, External Collaboration and Capacity Building

- WHO Programme Managers Aide Memoire
- NTD MMDP Training Module
- MMDP Tool-Kit
  - Situational analysis
  - Burden assessment menu
  - Hydrocele management manual
  - Health worker training materials
  - Health volunteer job aide
  - Patient materials
  - Protocol for evaluating MMDP services
What do you think are the key messages from this session?
Key Messages

• Main causes of LF morbidity are lymphoedema and hydrocele.
• Both can significantly impair a patient’s ability to function, carry out the activities of daily living and have profoundly negative social and economic impacts.
• Lymphoedema is irreversible, but significant improvements in quality of life and prevention of further worsening can be achieved by proper management.
• Surgical hydrocelectomy is recommended and increasingly available at health facilities.
• Patient education and counselling is of paramount importance.