Management of severe acute malnutrition

Jeané Cloete
Introduction

• Malnutrition remains a global health concern
• Contributes significantly to childhood mortality
• Nearly half of all deaths in children below 5 years of age attributed to undernutrition
Introduction

• Implementation of programmatic approaches to management
• By the WHO and UNICEF
• Markedly reduced fatalities due to severe acute malnutrition (SAM)
• Further expansion of the existing programs to include community based initiation
Introduction

• Acute malnutrition develops when undernutrition occurs in an essential period of childhood growth

• Exacerbated by co-existent infection and metabolic abnormalities
Diagnosis

- Differentiating between ‘acute’ and ‘chronic’ malnutrition is important

- Management and mortality differs in the two groups.
Acute Malnutrition

Marasmus
- MUAC<11.5 cm
- WFH† Z score > 3 SD below the mean
  - MUAC < 12.5 cm
  - WFH Z score > 2 SD below the mean
    - Simmetrical bilateral pitting oedema
    - Clinical signs
    - Severe wasting
    - Bilateral pitting oedema
    - Other signs of malnutrition

Kwashiorkor
- WFH† Z score > 2 SD below the mean

Marasmic Kwashiorkor
Management and treatment

- Despite the three categories of acute malnutrition
- Important that management should be approached in the same manner
- Integrative management protocols
- Ensure that mortality and morbidity are kept as low as possible
- Assess for in or out patient management
Management

**Stabilisation phase**
- Prevention and treatment hypoglycaemia
- Prevention and treatment of hypothermia
- Prevention and treatment of dehydration
- Correction of electrolyte imbalance
- Treating infection
- Correction of micronutrient deficiencies
- Feeding

**Rehabilitation phase**
- Continued feeding
- Achieve catch-up growth
- Provide sensory stimulation and emotional support
- Preparation for discharge
Management

• Hypoglycaemia and hypothermia first 2 days
• Dehydration – difficult to assess
  – Intravenous fluids increases risk to mortality
  – Safer option by far is oral rehydration
• Antibiotics for infection
• Feeding early – start low, go slow end high
Management

First 1-2 weeks

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Conclusion

• Severe acute malnutrition remains a problem in public health
• Especially in developing countries
• Adhering to programmatic approaches for diagnosis and management
• Ensures lower mortality rates and better outcomes.
References