

This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike License](https://creativecommons.org/licenses/by-nc-sa/4.0/). Your use of this material constitutes acceptance of that license and the conditions of use of materials on this site.



Copyright 2006, The Johns Hopkins University and Gilbert M. Burnham. All rights reserved. Use of these materials permitted only in accordance with license rights granted. Materials provided "AS IS"; no representations or warranties provided. User assumes all responsibility for use, and all liability related thereto, and must independently review all materials for accuracy and efficacy. May contain materials owned by others. User is responsible for obtaining permissions for use from third parties as needed.



JOHNS HOPKINS
BLOOMBERG
SCHOOL *of* PUBLIC HEALTH

Health Needs of Refugees

Gilbert Burnham, MD, PhD
Johns Hopkins University



JOHNS HOPKINS
BLOOMBERG
SCHOOL *of* PUBLIC HEALTH

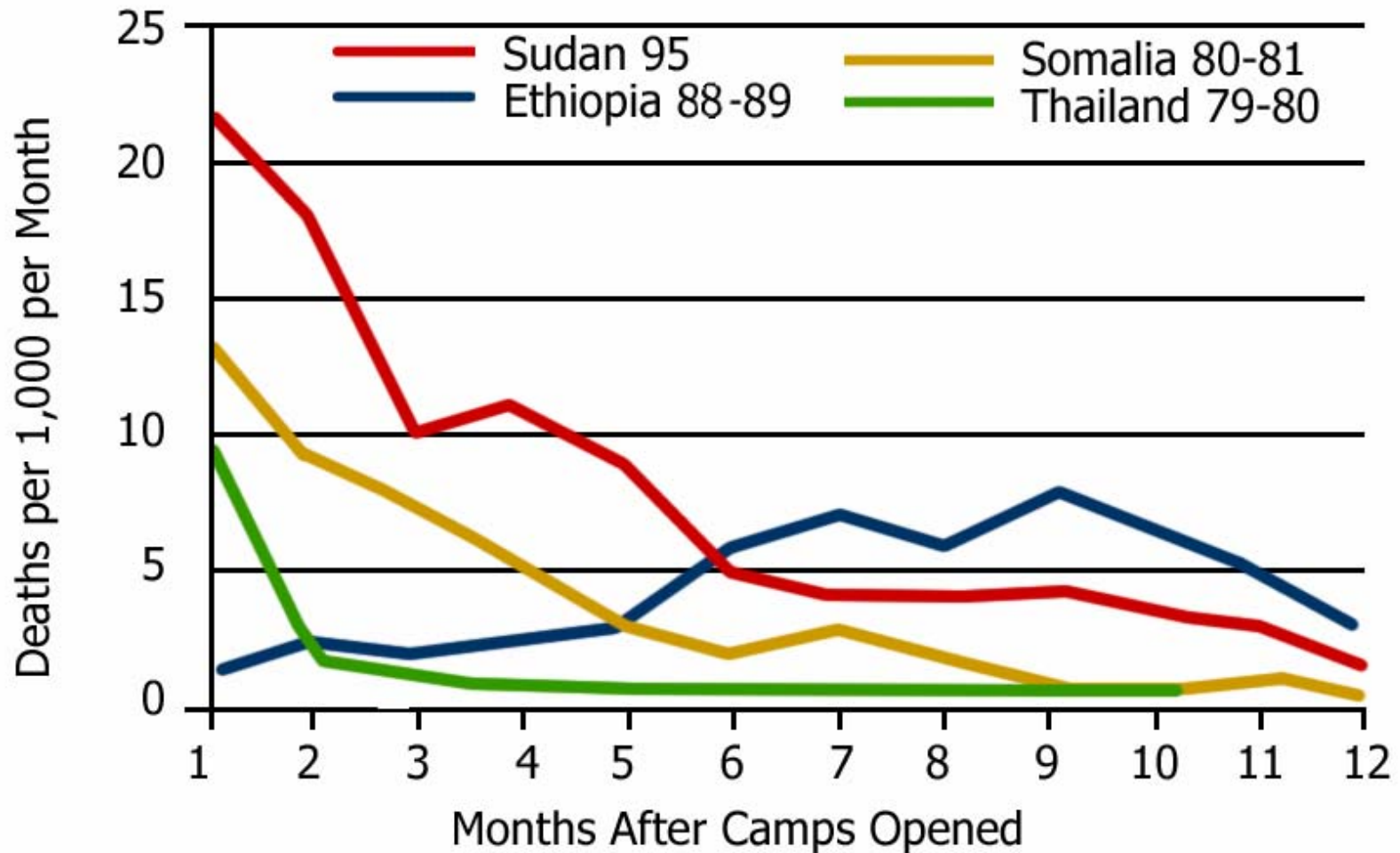
Section A

Emergencies

Phases of Emergencies

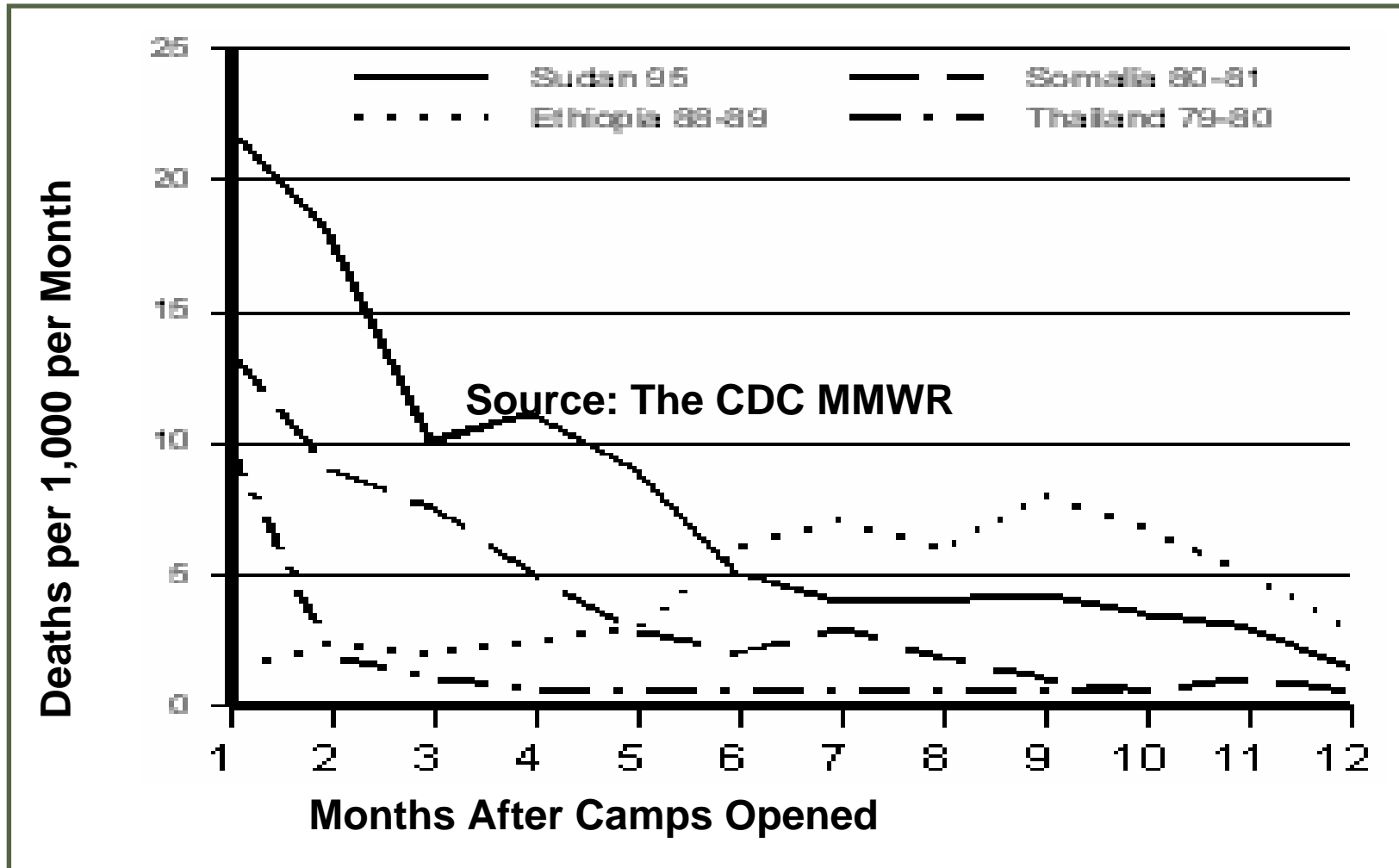
- ◆ Emergencies divided into phases by death rates
 - Mostly among children
- ◆ Needs and services differ for each phase

Phases of Emergencies



Source: The CDC MMWR

Phases of Emergencies



Source: The CDC MMWR

Phases of Emergencies: Crude Death Rate

- ◆ Death rates $> 1/10,000/\text{day}$
 - May approach $1/1,000/\text{day}$
- ◆ Death rates may be 5–60 times higher than the normal rates
 - Normal CMR for sub-Saharan Africa 0.5–0.9 deaths per 10,000 persons per day

Phases of Emergencies

**Pre-Emergency
Phase**



**Emergency
Phase**



**Post-Emergency/
Maintenance Phase**



**Repatriation
Phase**

Pre-Emergency Phase

- ◆ Events developing
- ◆ Access prevents full understanding
- ◆ Political interventions still possible
- ◆ Preparation for mass migration

Emergency Phase

- ◆ Length of emergency phase determined by excess mortality
 - Concentration is in getting mortality rates down as fast as possible
- ◆ Strong emphasis on food, water, sanitation, prevention of epidemics
- ◆ Requires a simple information system

Post-Emergency Phase

- ◆ Death rates $< 1/10,000$ persons/day
- ◆ Basic services in place
 - Food supply
 - Water
 - Sanitation
 - Health care
 - Shelter

Repatriation Phase

- ◆ Return home is usually spontaneous
 - Refugees make their own decisions
 - Most refugees return unassisted



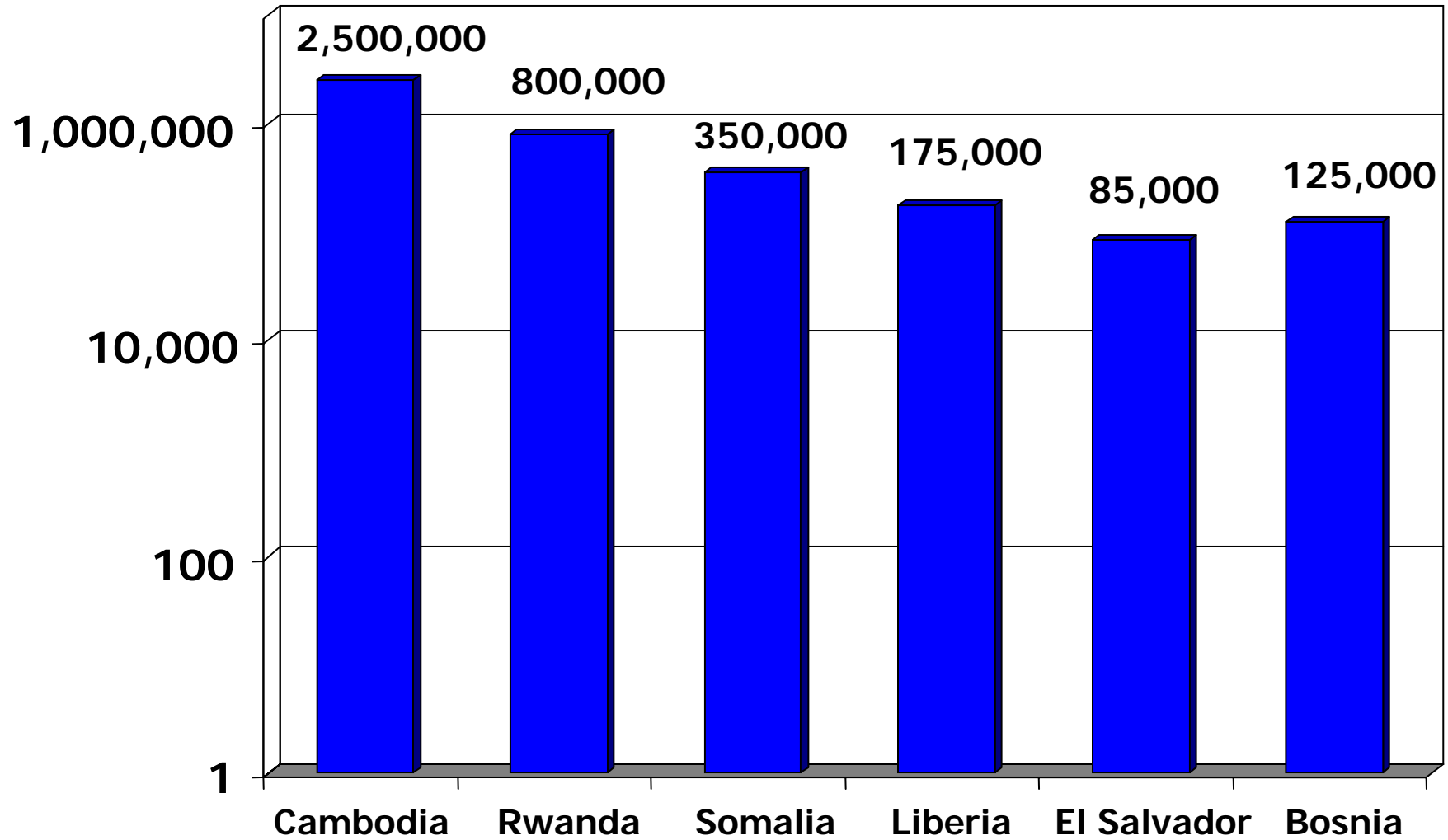
Repatriation Phase

- ◆ Role of NGOs
 - Can provide information to inform decisions
 - Assist refugees returning
 - Rehabilitate essential services in country of origin

Key Indicators

- ◆ Crude mortality rate or death rate is one of the key indicators of health status in all phases

Estimated Excess Mortality



What are Health Needs in Emergencies?

- ◆ Priorities vary with phases of the emergency
 - Protection/security
 - Food
 - Water
 - Sanitation
 - Shelter

Health Care Objectives: Emergency Phase

- ◆ Treatment of common diseases
- ◆ Prevention of epidemic diseases
 - Particularly malaria
 - Excess loss of life
 - Tying up resources

Health Care Objectives: Emergency Phase

- ◆ Prevent endemic diseases
 - Tick-borne typhus, scabies, lice
- ◆ Prevent injuries
 - From hostilities or household

Health Care Objectives: Emergency Phase

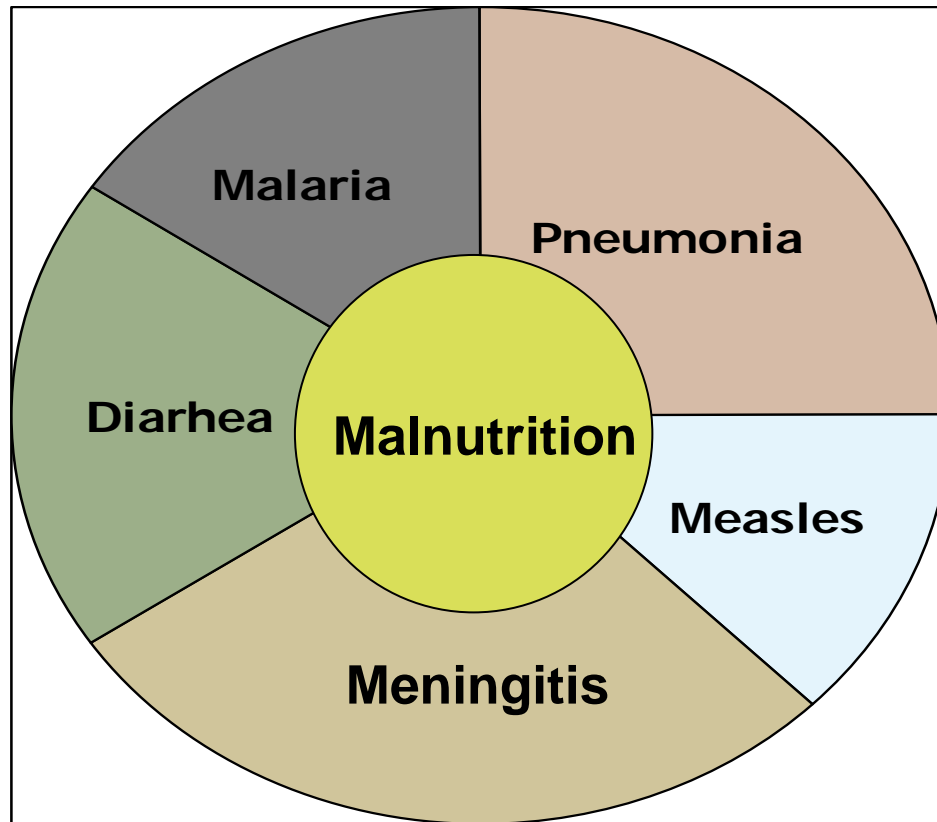
- ◆ Care of the vulnerable
- ◆ Mental health services
- ◆ Reproductive health services
- ◆ Surveillance health information system

Health Care Objectives: Emergency Phase

- ◆ Services based on PHC principles
 - Community-based services
- ◆ Social and educational services
 - Needs of adolescents
- ◆ Need for information

Health Concerns in Emergency Phase

- ◆ Most deaths from five conditions
 - CFR ↑



Health Concerns in Emergency Phase

- ◆ Risk of meningitis
 - Frightening but not often large-scale

Health Concerns of Middle Development Countries

- ◆ New problems in former Soviet bloc
 - Some epidemic diseases, e.g., head lice, typhoid
 - More concern with chronic diseases – e.g., diabetes, hyper-tension, heart disease

Health Concerns of Middle Development Countries

- ◆ Lack of medication and specialized care
 - Difficulty with existing health care protocols
- ◆ Hypothermia among the aged who cannot move

Priorities in Emergency Phase

- ◆ General health priorities
 - Water (quantity more important than quality)
 - Short-term sanitation provisions, including soap

Priorities in Emergency Phase

- ◆ General health priorities
 - Food distribution
 - Shelter

Priority Health Activities

- ◆ Disease prevention and control
 - Epidemic diseases – e.g., measles, shigella, cholera
 - Less common diseases – e.g., typhus, relapsing fever, conjunctivitis
- ◆ May require special feeding programs

Priority Health Activities

- ◆ Immunization against measles
- ◆ Basic PHC with outreach to increase coverage
- ◆ Basic health information system as early as possible

Late Emergency Phase

- ◆ Death rates generally decline
 - Both the Crude Mortality Rate and Case Fatality Rate drop
- ◆ Threats from epidemic disease may cause increases in death rates

Programs Reaching for Basic Standards

<i>Food</i>	2,100 kcal/person/day (Be alert for micronutrient deficiencies)
<i>Water Availability</i>	15–20 Liters/person/day
<i>Sanitation</i>	1 latrine/20 persons <i>or</i> 1 latrine/family (better)
<i>Health Care</i>	Death rates <2/10,000/day

Programs Reaching for Basic Standards

<i>Solid Waste</i>	Appropriate disposal, includes safe disposal of medical waste
<i>Space</i>	30m ² /person in settlement 3m ² /person in shelters
<i>Fuel</i>	Adequate fuel at hand, i.e., 1kg fuel wood/person/day

Late Emergency Phase Concerns

- ◆ Concern over security increases
- ◆ Infrastructure-building activities

Late Emergency Phase Concerns

- ◆ Community-based activities
 - Community health workers
 - Community mobilizers

Late Emergency Phase Concerns

- ◆ Standard case definitions established
 - Standard treatment protocols
- ◆ Information system should expand
 - Good idea of denominators
- ◆ Increased concern for vulnerable population

Late Emergency Phase Concerns

- ◆ Promotion of community structure
 - Entails risks, how to control?
- ◆ Schools linked with health care

Late Emergency Phase Concerns

- ◆ Introduce income-generating activities
 - Especially for women
- ◆ Promote gardens

Maintenance or Post-Emergency Phase

- ◆ Defined by death rates
 - Approaching pre-flight or host community levels
 - Below 1 /10,000 persons/day

Maintenance Phase: Approach to Health Services

- ◆ Health services integrated with host country health services (if possible)
 - Using local referral system
 - Using host country essential drug program and treatment protocols
- ◆ May be oriented toward country of origin

Maintenance Phase: Approach to Health Services

- ◆ Health promotion and preventive services functioning well
- ◆ Services pitched at level of host or country of origin

Maintenance Phase: Approach to Health Services

- ◆ More refugee health personnel involved
- ◆ Increasing concern for health of host country community

Maintenance Phase: More Specialized Programs

- ◆ Implementation of more specialized health care programs
 - Control of tuberculosis and leprosy
 - Reproductive health care, including control of STI, and HIV/AIDS
 - Mental health programs for persistent mental disorders

Maintenance Phase: Other Concerns

- ◆ Emphasis on improving efficiency and effectiveness of program
- ◆ Increasing concern about damage to the environment

Moving out of Program (Closure)

- ◆ Handing over of services from relief organizations
 - National NGOs
 - “Development-oriented” NGOs
 - Community-based organizations
 - Reliance on refugees for sustainability
 - Training to promote repatriation



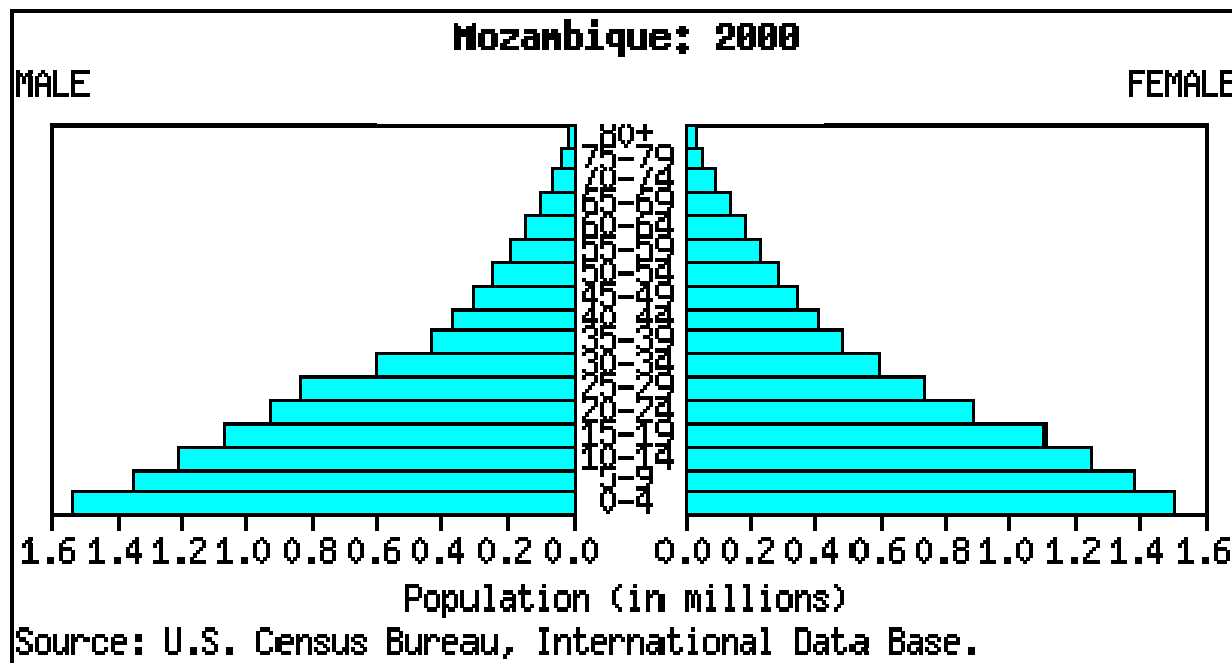
JOHNS HOPKINS
BLOOMBERG
SCHOOL *of* PUBLIC HEALTH

Section B

Public Health Issues to Consider

Population Distribution of IDPs and Refugees

- ◆ Population distribution usually skewed
- ◆ Increase in vulnerable populations
- ◆ Protection issues



Women and Children

- ◆ Health services to address needs
- ◆ Gender roles change
- ◆ Unaccompanied minors or separated children

Food and Nutrition

- ◆ Feeding refugees
 - Food sources and preferences
 - Logistics and distribution
 - Targeting populations
 - Composition of general rations
 - Special feeding programs?
 - Monitoring for micronutrient deficiencies

Environmental Concerns

- ◆ Water
- ◆ Latrines
- ◆ Solid waste
- ◆ Vector control
- ◆ Environmental damage
 - Fuel wood
 - Shelter
 - Planting

Psychosocial Issues

- ◆ Emotional stress
- ◆ Dealing with stress
- ◆ Pre-existing mental illness exacerbated

Psychosocial Issues

- ◆ Resettlement/repatriation stress
- ◆ Adolescent issues



Mental Health Services

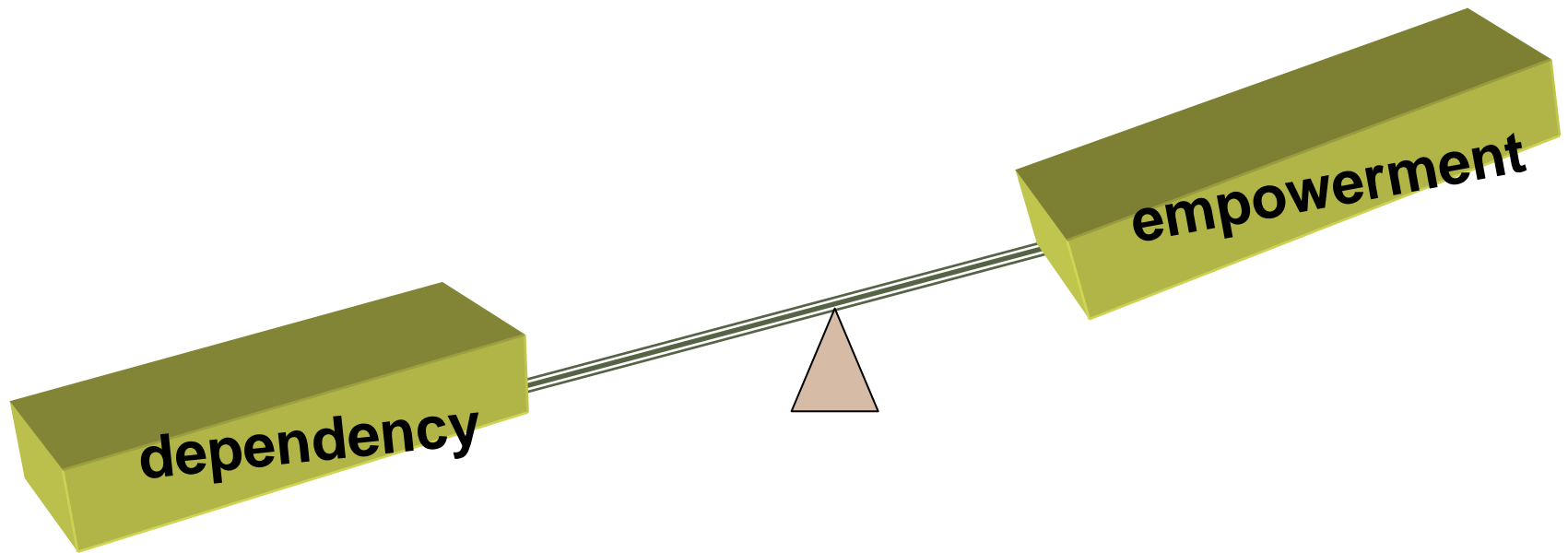
- ◆ Low priority in acute settings
- ◆ Single episodes of emotional disorders common
- ◆ Community efforts major resource
- ◆ Violence and delayed social development
- ◆ Role of traditions and cultural activities
- ◆ Use of refugee resources

Security and Protection Issues

- ◆ Raids from country of origin
- ◆ Recruitment by insurgents
- ◆ Exploitation by host country
- ◆ Protection of vulnerable
- ◆ Protection of relief workers
- ◆ Prevention of forced repatriation

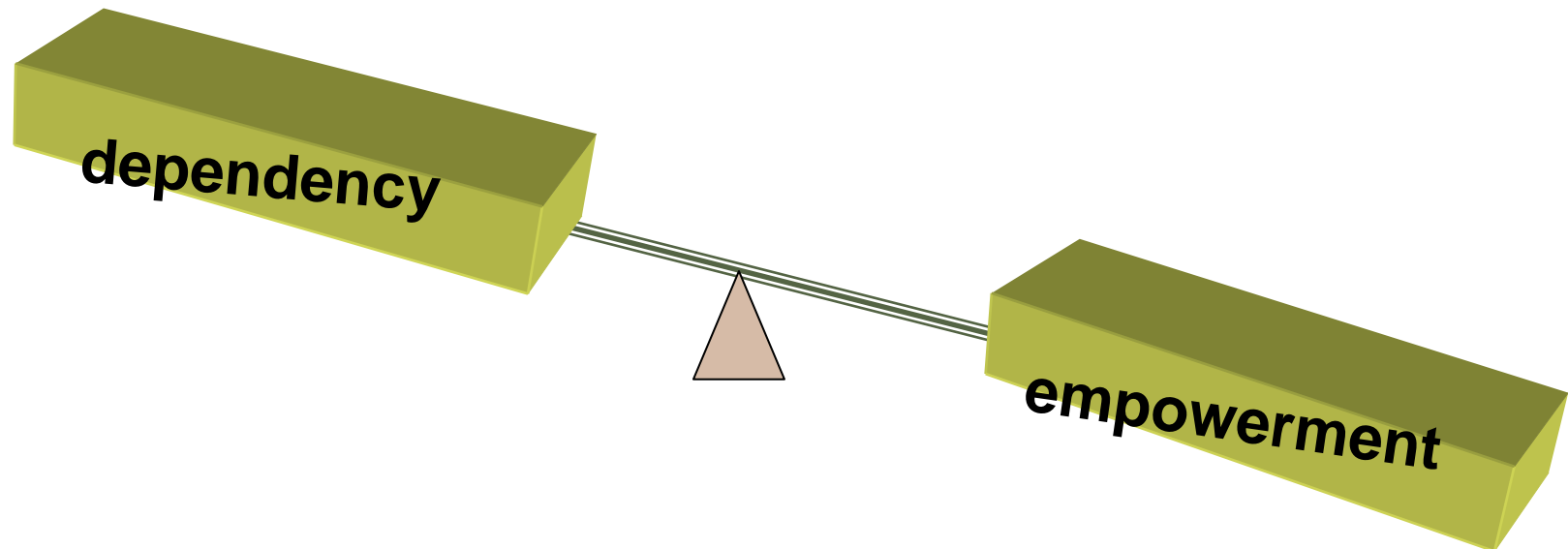
Programming Issues

- ◆ Create dependency by contracting provision of essential services
 - Food, health care, environmental health



Programming Issues

- ◆ Or enabling community to meet needs
 - Community organization
 - Community power structure
 - Volunteer vs. incentive vs. pay



Principles of Health Care to Consider

- ◆ Displaced camp
- ◆ Camp
- ◆ Dependent on rations
- ◆ Treatment at home
- ◆ Own house
- ◆ Self-settled
- ◆ Growing some food
- ◆ Treatment in health facilities

How a Health System Should Be

- ◆ Nature of health care system
 - Integration
 - PHC-based
 - Nature of illness
 - Health care workers
 - Curative vs. preventive care