

Introduction to Global Child Health
Elective for Pediatric Residents and Fellows
Children's National Medical Center, Washington, DC

Overall Objectives

- Prepare participants for future international elective experiences or work in a developing country setting
- Increase exposure to global health issues including health care delivery, disease management and resource allocation
- Increase knowledge of epidemiology, diagnosis and management of common illnesses and tropical diseases affecting children in developing countries
- Provide exposure to local health care professionals working in the fields of global health research, policy and clinical care

Specific Objectives

Each of the following sessions is designed to meet specific objectives of the Global Health Curriculum:

Child Survival

- Describe the epidemiology of child morbidity and mortality worldwide and by region
- Identify risk factors for child mortality
- Become aware of international policies/strategies to improve child survival

Newborn Survival

- Describe the epidemiology of newborn mortality in developing countries including causes and risk factors, and understand how this population differs from the under-5 population
- Understand the role of maternal health in newborn survival
- Identify strategies and programs to improve newborn survival

Malnutrition/Micronutrient Deficiencies

- Define malnutrition and describe epidemiology of childhood malnutrition worldwide
- Know the major micronutrient deficiencies and their impact on childhood illness and child survival
- Understand current strategies/policies for improving nutrition (breastfeeding, complementary feeding, micronutrient supplementation and fortification, etc.)

Sanitation, Clean Water and Hygiene

- Understand the role of sanitation, clean water and personal hygiene in preventing childhood disease and mortality
- Describe methods of providing clean water and improving hygiene for children, families and communities in developing countries

Parasitic Diseases in Children

- Know the parasitic infections that most commonly cause disease in children
- Recognize the clinical manifestations of these diseases and know how to diagnosis them
- Identify treatment and control strategies for parasitic infection, specifically intestinal helminths
- Develop awareness of international policies/strategies toward control of parasitic infections

Malaria in Children

- Describe the epidemiology and burden of disease of childhood malaria in the world
- Know the common clinical presentations of malaria in children, including severe malaria
- Know how malaria is diagnosed (practical session to follow)
- Understand the current treatment recommendations and issues with drug resistance
- Identify strategies to prevent malaria in children in endemic areas

Laboratory Diagnosis

- Understand use of thick and thin smear in diagnosing malaria
- Identify malaria parasites in blood smears

Pediatric HIV in Developing Countries

- Describe the epidemiology of HIV in children in developing countries
- Know the common clinical presentation and methods of diagnosis
- Know the general approach and barriers to treating children with HIV
- Describe HIV prevention strategies

Birth Spacing and Impact on Child Health

- Understand concept of healthy timing and spacing of pregnancies
- Recognize the impact of birth spacing on maternal and newborn survival
- Know the interval between pregnancies recommended to minimize risk of adverse outcomes

Pediatric Tuberculosis: Diagnosis and Management in Developing Countries

- Describe the epidemiology/burden of disease of TB in children in the developing world

- Know the common clinical presentations of TB in children
- Describe the diagnosis and treatment of TB in children in developing countries

Diarrhea Treatment and Prevention

- Know the most current guidelines and practice for managing diarrhea and dehydration in the developing world
- Understand the principles of oral rehydration therapy and other components of treatment
- Describe strategies and challenges to implementing these practices in a community setting

Care of Orphans in Developing Countries

- Recognize the health issues of orphans in developing countries
- Understand risk factors for morbidity and mortality in this population
- Become familiar with social, environmental and cultural issues surrounding health and well-being of orphans

Vaccine-Preventable Diseases and Immunizations

- Understand the current status of vaccine-preventable diseases in the developing world, and their impact on childhood illness and mortality
- Know the immunizations that are provided in developing countries and the guidelines of the WHO EPI Program
- Recognize successes and current challenges in controlling/eradicating VPDS
- Identify challenges to introducing new vaccines into developing countries

Preparing for your International Elective

- Identify and utilize the resources needed to prepare for an international rotation or work in a less developed country.

Ethics Case Discussion

- Recognize ethical issues that commonly arise in international volunteer work
- Understand how to address ethical problems that are related to volunteer work and patient care in developing countries

Clinical Case Discussions

Severe Acute Malnutrition

- Recognize signs of severe acute malnutrition in children
- Know the principles of management of SAM

Undernutrition

- Understand the WHO Child Growth Standards, the principles behind their development and compare to other growth standards
- Know the anthropometric measures to assess acute vs. chronic malnutrition and how to apply in a clinical setting

Diarrhea and Dehydration

- Be able to assess children with diarrhea and dehydration
- Know the common pathogens as well as clinical presentation
- Know the most current guidelines and practice for managing diarrhea and dehydration in the developing world
- Understand how to evaluate, diagnose and manage patients in limited resource settings

Lower Respiratory Tract Infections

- Develop a differential diagnosis for children presenting with respiratory distress in developing countries
- Understand how to evaluate, diagnose and manage patients in limited resource settings
- Know the WHO guidelines for managing acute lower respiratory tract infections in children

Fever

- Develop a differential diagnosis for children presenting with fever in developing countries
- Understand how to evaluate, diagnose and manage patients in limited resource settings