

SUMMARY OF THESIS*

WOLF, Bartholomeus Hubertus Maria – **Acute bacterial infections of the lower respiratory tract: epidemiological, clinicopathologic and molecular-genetic findings in children from warm-climate countries.** Amsterdam, 2000. (Thesis – Vrije Universiteit).

ACUTE BACTERIAL INFECTIONS OF THE LOWER RESPIRATORY TRACT: EPIDEMIOLOGICAL, CLINICOPATHOLOGIC AND MOLECULAR-GENETIC FINDINGS IN CHILDREN FROM WARM-CLIMATE COUNTRIES

This thesis describes the importance of acute bacterial infections of the lower respiratory tract on the morbidity and mortality in young children from warm-climate countries. Acute lower respiratory tract infection (ALRI) is the major cause of preventable death in children worldwide and responsible for 4 million childhood deaths every year. Most of these deaths are caused by pneumonia and occur in young children in the poorest countries of the world, where fatality rates of severe pneumonia in children under 5 years of age are substantially higher than those in industrialized countries. Severe ALRI are also much more common in poor than in rich countries and the reasons for this high mortality and morbidity are not fully understood but poverty, malnutrition, coincident diseases (HIV infection), low levels of health care and the relative greater role of bacterial pathogens in

the etiology of pneumonia in low-income countries may be important factors.

Prior use of antibiotics, severity of disease, young age, nutritional status and underlying HIV-infection may all influence the spectrum of an organisms isolated at a referral hospital. Studies on the etiology of community-acquired pneumonia have consistently shown *Streptococcus pneumoniae* and to a lesser extent *Haemophilus influenzae* to be the leading bacterial causes of pneumonia worldwide, but gram-negative bacilli (GNB) are not infrequently encountered as etiologic agents in warm-climate countries and may even predominate in children who present with pneumonia during the wet season in Africa or who are immunocompromized due to malnutrition and HIV infection.

*This thesis is available at the Library of the Instituto de Medicina Tropical de São Paulo