

# PREVALENCE OF MYCOPLASMA PNEUMONIAE AND CHLAMYDIA PNEUMONIAE IN PNEUMONIA PATIENTS IN FOUR MAJOR HOSPITALS IN TRINIDAD

N.A. Nagalingam<sup>1</sup>, A.A. Adesiyun<sup>2</sup>, W.H. Swanston<sup>1</sup>, M. Bartholomew<sup>1</sup>

<sup>1</sup>School of Medicine; <sup>2</sup>School of Veterinary Science, Faculty of Medicine, University of the West Indies, St. Augustine,  
Trinidad and Tobago

## SUMMARY

*The prevalence of current Mycoplasma pneumoniae and Chlamydia pneumoniae infections in patients with pneumonia in Trinidad, and the relationship between pneumonia and risk factors were investigated. Blood samples were collected from 132 patients diagnosed by attending physicians, as suffering from pneumonia at four hospitals in Trinidad. Serum samples were tested for M. pneumoniae Ig M and Ig G and C. pneumoniae Ig M by the enzyme immunoassay (EIA). In addition, C. pneumoniae Ig M and Ig G were detected using microimmunofluorescence (MIF). A comprehensive questionnaire which addressed demographic information as well as risk factors for pneumonia was administered to patients.*

*All analyses were done using the Statistical Package for Social Sciences (SPSS), version 9. Seroprevalences of 46.0% (58 of 126) were found for C. pneumoniae Ig M/G, and 66.7% (88 of 132) for M. pneumoniae Ig M/G.*

*The difference was statistically significant ( $p < 0.01; \chi^2$ ). Thirty-four percent (43 of 125) for C. pneumoniae Ig M /acute Ig G and 28.8% (36 of 125) of M. pneumoniae Ig M were not statistically significant ( $p > 0.05; \chi^2$ ).*

*Hospital, gender and ethnicity of patients did not significantly ( $p > 0.05; \chi^2$ ) affect the seroprevalence of the bacteria assayed for.*

*However, the prevalence of C. pneumoniae (23.3%) in patients under 21 years old compared to other age groups was statistically significant ( $p = 0.043; \chi^2$ ).*

*Overall, the seroprevalence to both pathogens was not significantly ( $p > 0.05; \chi^2$ ) affected by co-morbidities and signs/symptoms.*

*It was concluded that new infections by C. pneumoniae in pneumonia patients may be an important aetiological agent for the condition in Trinidad.*

**KEY WORDS:** Pneumonia, bacteria, Mycoplasma, Chlamydia, Trinidad.