PREVALENCE AND FACTORS ASSOCIATED WITH PULMONARY TUBERCULOSIS IN CHILDREN ADMITTED WITH SEVERE PNEUMONIA IN MULAGO HOSPITAL

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ABSTRACT

Introduction: Tuberculosis is a major cause of morbidity and mortality in children with severe pneumonia. A study done in Uganda by Bakeera et al in 2001 found 2% TB in children with severe pneumonia, while a similar study done in 2007 in South Africa found 15%. We did not know how many of the children who presented with pneumonia in our setting had pulmonary tuberculosis.

This study therefore established the burden and factors associated with PTB in children admitted with severe pneumonia in our setting.

Methods: In a cross sectional analytical study 270 children aged 2 months to 12 years admitted with symptoms of severe pneumonia according to WHO guidelines were enrolled from February to June 2011. Investigations done included; Ziehl Neelsen (ZN) smears, cultures on specimens from sputum induction, and lymph nodes where indicated. Other tests done were; chest x-rays, Mantoux test, blood culture for mycobacteria, a full blood count and HIV test. A structured data collection tool was used to collect the study information. Data was captured using Epidata version 3.1 and exported to SPSS version 14 for analysis.

Results: Fifty one (18.9%) participants had pulmonary tuberculosis, of which 17 (6.3%) had confirmed PTB and 34(12.6%) had probable pulmonary tuberculosis. The factors found to be associated with PTB were age group 25-59 months (OR 3.6, 95% CI 1.4-9.1, p-value 0.007 and history of TB contact (OR 3.3, 95% CI 1.5-7.3, p - value = 0.003).

Conclusions: The prevalence of pulmonary tuberculosis in children admitted with severe pneumonia in Mulago hospital is high.

The factors associated with pulmonary tuberculosis in children admitted with severe pneumonia are age group 25-59 months and history of TB contact.