

INTRODUCTION

Pneumonia is major cause of death in children globally, twenty-one percent of deaths in children younger than 5 years of age are caused by pneumonia (*Black et al. ,2010*).

Early diagnosis and prompt treatment of pneumonia with antibiotics are needed to reduce the mortality rate, However, overuse of antibiotics without proper indication results in increasing antimicrobial resistant strains of bacteria and results in a higher cost of the treatment (*jensen-fangel et al., 2010*).

In generally, beside the clinical signs and symptoms of the patient, chest radiograms , c-reactive protien (CRP) and complete blood count (CBC) specifically the total white blood cell (WBC) count and percent of poly-morphonuclear cells (%PMN) are obtained to differentiate between bacterial and viral causes of pneumonia. chest radiography is the most sensitive method for detecting pneumonia (*Cherian T et al., 2009*).

However, interpretation of chest radiography varies by reader and technique; in many situations radiograph is not available. Therefore, CRP , WBC count , % PMN , body temperature , duration of illness , age , and gender , may help in making the diagnosis (*Melbye h, et al., 2009*).

However, the relationship between radiographic findings and such variables is still unclear (*Rerks-ngarm et al., 2009*). To determine this relationship we will analyze data from a prospective population-based study of hospitalized children with suspected pneumonia in toukh fever hospital (Qaliubiya governorate).