SUMMARY

Pneumonia is an inflammation of the parenchyma of the lungs. Most cases of pneumonia are caused by microorganisms or noninfectious causes. Pneumonia is a substantial cause of morbidity and mortality in childhood (particularly among children <5 year of age) throughout the world.

Chest radiograph laboratory finding help in early diagnosis of pneumonia in children without need for culture and the hospitals is not well equiped to do all the investigations.

Our goal is to study factors associated with diagnosis of bacterial pneumonia in children.

A total of 50 case was enrolled in the study. children with suspected pneumonia diagnosed by physician was admitted to hospital to be enrolled in the study. Achest radiograph , CRP , WBC count and % PMN was performed on enrollment.

Cases of pneumonia was classified to 2 suggestive types (bacterial and viral) pneumonia by chest X-ray(following the recommendation of WHO).

Suggestive cases of bacterial and viral pneumonias were differentiated by a combination of radiographic findings and laboratory findings. We Follow recommedations of WHO to classify types of pneumonia into 2 types of infection that chest x-ray of bacterial pneumonia infection appear as lobar dence opacity or bronchopneumonic patches but chest x-ray of Viral pneumonia infection appear as bronchopneumonic patches or interstitial infiltrates.

All cases was subjected to the following :

1. Full history and Complete clinical examination .
2. Investigations:

   A - Chest X-ray .

   B - Blood sample was withdrawn for :

   - C-reactive protien (CRP).
   - White blood cell count (WBC count).
   -Percentage of polymorphnuclear cells(%PMN)
   - lymphocytes %

3. Statistical analysis of the study.