ABSTRACT

BACKGROUND

ALRI - Acute lower respiratory tract infection is the important cause of mortality in children in most of the developing countries. The chief risk factor of mortality in babies with acute lower respiratory tract infection is hypoxemia. Several signs and symptoms are evaluated to find their prediction in hypoxemia.

OBJECTIVES

1. To find the “Prevalence of Hypoxemia in children with Acute lower respiratory tract infection”.
2. To determine the symptoms as well as signs that predict Hypoxemia in children presenting with ALRI.
3. To compare “The Clinical outcome in children with Hypoxemia from those without Hypoxemia”.

TYPE OF STUDY:

Case control study

METHODS:

Here 105 children between the age 2 month – 60 month with acute lower respiratory tract are segregated in to two groups. children with SPO2 less than 90% constitute the group 1 and those with SPO2 more than or equal to 90% at the time of admission forms the group 2. The oxygen saturation less than 90% is called – hypoxemia.
The extend to which different signs and symptom predict hypoxemia was thoroughly evaluated

RESULT:

Among the 105 children 48.5% were hypoxemic. Prevalence of hypoxemia is 2 times more in children below 12 months when compared to children between 12 month to 60 month. Cough, fever inability to feed had good sensitivity of 93%, 96.1%, 98% respectively. Difficulty in breathing had high specificity. Difficulty in breathing and inability to feed were statistically associated with hypoxemia.

Among signs tachypnoea had high sensitivity followed by ICR and SCR. Grunting and cyanosis had high specificity. Grunting, nasal flaring, SSR, ICR, SCR were highly significant. None of the observed clinical symptoms and signs had both specificity and sensitivity.

CONCLUSION

None of the observed clinical signs and symptoms had reliable specificity and sensitivity in predicting hypoxemia. The sensitivity to predict hypoxemia is increased by considering combination of symptom.