

*Conclusion*

## CONCLUSION

In accordance with the objective of this study we conclude that:-

- \* Group A beta-hemolytic streptococcal pharyngitis is present in a small proportion of school going children, who themselves are at a risk of developing nonsuppurative sequelae, and are also a potential threat to the other healthy children, as a source of infection. Hence, a constant monitoring and therapy is necessary to prevent the spread of GABHS pharyngitis, rheumatic fever and carditis among school going children in Pondicherry.
  
- \* Rapid detection of GABHS antigen directly from the throat swab of school children although sensitive and specific is not cost-effective as a field test.
  
- \* Antistreptolysin O test revealed high antibody titre in a significant number of school children with culture proven pharyngitis, thus differentiating acute infection from carriers, although all of them were symptomatic.
  
- \* Colonization of *S.pneumoniae* and *H.influenzae* was found among a small group of children with ARI in selected primary health centres and general hospital outpatient department, as well as children with acute lower respiratory tract infection requiring hospitalisation. Healthy age and sex-matched controls were also revealed to be colonized to the same degree as cases.

\* Antibiotic susceptibility pattern and minimum inhibitory concentration of various antibiotics revealed penicillin resistance among pneumococcal isolates, along with resistance to erythromycin, tetracycline, chloramphenicol, and cotrimoxazole. *H.influenzae* isolates were also seen to be resistant to these antibiotics with substantial number of strains producing beta-lactamase. *M.catarrhalis* and GABHS were also found to be variably resistant to antibiotics.

\* Serotype distribution of *H.influenzae* revealed type b to be predominant followed by nontypeable strains. Resistance was seen to be higher among the type b strains, than the others.

\* History of previous antibiotic therapy in the children hospitalized with ALRI was shown to have a positive correlation with serum bactericidal activity, thus reflecting on the low blood culture outcome.

\* Antigen detection assays were not found to be very sensitive, although they were highly specific and had high negative predictive values. Their use in diagnosing ALRI at the present performance level seems limited.