

Chapter 8

SUMMARY AND CONCLUSION

In the present work, some epidemiological and immunological aspects of childhood asthma in Benha city were studied. In the epidemiological study, 7285 school children of 15 schools were surveyed for the prevalence of bronchial asthma and factors affecting it. The studied pupils were 3936 males and 3322 females and their ages ranged from 5 up to 15 years old. The following results were obtained:

- . The overall point prevalence of childhood asthma was 3.6%.
- . Male showed preponderance in prevalence of asthma over females. The ratio was 1.1:1.
- . Prevalence of asthma was highest in children aged > 8-9 years and least in those aged > 14-15 years but the difference was insignificant.
- . Regarding educational status of parents, bronchial asthma was significantly more prevalent among children of illiterate parents than those of educated parents.
- . Asthma prevalence was higher in semiskilled, and unskilled fathers (lower social class) than skilled and professionals (higher social class).

- . Asthma prevalence was significantly higher in children of non-working mothers than those of working mothers.
- . Asthma prevalence was highest among children whose family income was \leq 50 L.E/month and it decreased significantly with rise in income.
- . No significant difference in prevalence of asthma in relation to family size was found.
- . Asthma was most prevalent in overcrowded houses or bed-rooms.
- . Positive family history of asthma caused significant increase in asthma prevalence among children.
- . With positive family or personal history of allergic diseases, asthma prevalence was significantly higher than with negative history.
- . Most of the asthmatic children developed their illness before the age of 5 years.

For the immunologic study, 30 asthmatic children were examined. They were 17 boys and 13 females. Their ages ranged from 3 up to 14 years. They were subjected to detailed history, repeated clinical examination, routine laboratory tests, skin testing and total serum IgE determination. The following results were recorded:

- . 22 patients had asthma only and 8 patients had another atopic illness besides their asthma.
- . Six patients were diagnosed to have severe asthma while the rest had non-severe asthma.
- . School attendance was not regular due to illness, and number of days of school absence varied with severity of asthma.
- . Positive family history of asthma or other atopic disease was present in most of patients.
- . X-ray chest was normal in all asthmatics except four cases had overinflated lungs.
- . Positive skin test reactions to more than 2 of the allergens used were found in all cases.
- . Mean total serum IgE was significantly higher in asthmatics than normal children.
- . No significant difference between mean serum IgE level in cases of severe asthma and non-severe asthma was noticed.
- . Serum IgE level in cases of athmatic children with other atopic illness as well was significantly higher than those with asthma only.

The immunological aspects of bronchial asthma and the role of IgE in its pathogenesis were discussed.