# SUMMARY AND CONCLUSION

Passive smoking refers to involuntary inhalation of tobacco smoke present in the people breath.

The present study comprised forty asthmatic Egyptian children their age ranged from 4 to 15 years.

The patient were divided into two groups. Group (A) include 20 asthmatics 14 males and 6 females exposed to passive smoke. Group (B) include 20 asthmatics 14 males and 6 females not exposed to passive smoke.

The study also included 40 healthy children subdivided into two groups. Group (C) include 20 healthy children 15 males and 5 females exposed to passive smoke. Group (D) included 20 healthy children 16 males and 4 females not exposed to passive smoke.

All were subjected to the following studies -

- Detailed clinical assessment (history - clinial examination).
- Laboratory investigation including routin labroatory investigation (C.B.C urine and stool enalysis).
- IgE estimation
- Pulmonary function test including:
- Forced vital capacity (FVC)
- Forced expiratory volume at one second (FEV1)
- Forced expiratory volume at one second/forced vital capcity (FEV1/FVC)
- Forced expiratory flow rate over mid portion of the expiratory curve ($FEF_{25-75\%}$).
- Peak expiratory flow rate (PEFR).

The resluts of this study demonstrated reduction between group (A) and group (B) (Patinets) as regards all spiromteric parametes studies including FVC, $FEV_1/FEV_1$, FVC, $FEF_{25-75\%}$ and PEFR indicating that passive exposure to tobacco smoke is one of the risk factors in the development of obstructed airways disease among children.

Passive smoking adversely affects pulmonary function in asthmatic children and causes worsening of upper respiratory symptoms and chest symptoms.

Also in healthy children passive smoking affects on upper respiratory symptoms and causes decrease in pulmonary functions test, however the effect is more profound in asthmatic children.

The significant decrease in $FEF_{25-75\%}$ between asthmatics exposed and asthmatic not exposed indicate involvement of smaller airways in the inflammatory process.

Results of urinary continine was further standardized by comparing them to creatinine excretion and expressing them as cotinine creatinine ratio.

Direct effect of passive smoking on childhood asthma was found to be among exposed children who have a higher cotinine and cotinine/creatinine ratio than non asthmatic group.

Also dirct effect of passive smoking on healthy subjects was found to be among exposed children who have a higher cotinine and cotinine/creatinne ratio than non exposed. This indicate that passive smoking is one of the risk factors in the development of obstructive airway disease among children.

Asthmatic children have more severe disease if their parents smoke. Pediatricians should be advised to council parents about the hamful effects of passive smoking on their asthmatic children and encourage them to stop smoking or to modify their smoking habits.