two groups with regard to the associated risk factors.

OP 8

Does training improve the pulmonary function amongst Sri Lankan national level athletes?

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Objectives: To determine the status of pulmonary functions amongst Sri Lankan national level athletes in comparison to matched controls

Methods: National level athletes (n = 63) engaged in resistance and endurance sports were studied. Baseline data were collected by a questionnaire and clinical examination. Pulmonary functions were assessed by a Vitallograph spirometer. Results were compared with age, height, weight and gender matched controls (n= 63). Data were analyzed using SPSS version 16 statistical package.

Results: Inspiratory function as indicated by the Forced Inspiratory Vital Capacity (FIVC), Forced Vital Capacity (FVC) and Forced Expiratory Volume in 1st second (FEV1) were significantly higher amongst the athletes ($p< 0.05$). The small air way function as determined by mid stream Forced Expiratory Flow (FEF25%-75%) of the athletes was similar to the controls ($p>0.05$). The expiratory muscle efficiency as indicated by Peak Expiratory Flow Rate (PEFR) and FEV1/ FVC ratio was not significantly different between the athletes and the controls ($p> 0.05$).

Conclusions: The study concludes that training programmes for the athletes must consist of exercise schedules to optimize the strength of respiratory muscles. This will achieve optimal pulmonary function amongst athletes. Improvement of pulmonary function may in turn promote better performance of athletes at competition.