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### Peak expiratory flow rate of Sri Lankan Tamil adults aged between 20 to 60 years in Jaffna district: A preliminary finding

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**Objectives:** As variations in PEFR amongst ethnic groups have been observed in many studies and a lack of normal values amongst the Tamil adult population hampers clinical use of the PEFR as an indicator of respiratory dysfunction, objective of this study was to measure the normal peak expiratory flow rate (PEFR) of Sri Lankan Tamil adults.

**Methods:** Healthy adults (n=267) aged between 20-60 years from regions of Jaffna district were studied. Standing height, sitting height and weight were measured. Age, BMI, sitting height to standing height ratio were calculated. PEFR was measured with (mini - Wright compatible) Asthma Plan peak flowmeter. Independent t test and Pearson correlation were used in SPSS for analysis. A p value of <0.05 was set as significant.

**Results:** There were 125 males and 142 females. The mean age was 41± 10 years, and 37± 10 years in males and females respectively. The mean PEFR were 458 ±70 l/min in males and 316 ± 46 l/min in females. The mean PEFR differed significantly between both sexes. Reduction in PEFR after fifth decade (37 males, 26 females) was significant in males. There was a significant negative correlation (r = - 0.281) between PEFR and age amongst the males. Significant correlations of PEFR were observed with standing height (0.428), weight (0.327) and sitting height (0.374) in males. In females standing height (0.211) and sitting height (0.264) had significant correlation with PEFR.

**Conclusions:** Normal values of PEFR in Sri Lankan Tamil adults were studied. A reduction in the PEFR was observed after the fifth decade of life in this population.