

OP 2: LUNG FUNCTION PARAMETERS OF TAMIL STUDENTS AT FACULTY OF MEDICINE, JAFFNA

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Introduction: Lung function tests are important in diagnosis and management of respiratory diseases. Ethnic specific reference equations are essential in interpreting lung function parameters.

Objective: To establish reference norms of lung function parameters for healthy Sri Lankan Tamil young adults.

Methods: A cross sectional study on healthy nonsmoking students of Sri Lankan Tamil ethnic group at the Faculty of Medicine, Jaffna was undertaken. Age, height, weight, BMI and spirometric measurements (Micro Quark) were taken in 137 females and 130 males.

Results: There was a significant correlation of height with all the lung function parameters except FEV1%, PEF and MEF₇₅ in males. VC had significant correlation with all measured anthropometric values in females. Prediction equations were derived by regression analysis based on the height as an independent variable.

Parameter	Equation for Males	Equation for Females
FVC	0.034H-2.117	0.024H-1.356
FEV ₁	0.032H-2.085	0.022H-1.298
VC	0.037H-2.829	0.021H-1.091

As the age range in our study is small it didn't correlate with most of the parameters. The lung function values predicted using the above equations for particular age and height were compared with the values predicted similarly for Sri Lankan Sinhalese. Our FVC values of males and VC of females were closer to the values of Sinhalese. When the mean values are compared with that of Sinhalese FVC, FEV₁, FEF₂₅₋₇₅ of males were significantly higher and FVC, FEV₁, VC and flow rates were significantly lower (p<0.5) in females of our subjects.