

OP 17: LUNG FUNCTION PARAMETERS OF MUSLIM STUDENTS AT UNIVERSITY OF JAFFNA

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Introduction: Ethnic differences in lung function parameters are reported in the literature. No published data is available for Muslims in Sri Lanka.

Objective: To study the lung function parameters of young Sri Lankan Muslims.

Methods: A cross sectional study on Muslim students at the University of Jaffna was undertaken. Healthy non smoking Muslim students were enrolled. Age, height, weight, BMI and spirometric (Micro Quark) measurements were taken in 37 subjects (21 females, 16 males). Correlation analysis was done between anthropometric and lung function parameters. $P < 0.05$ was considered as significant.

Results: Mean differences of lung function parameters between both sexes were significant.

Parameter	Mean \pm SD (Males)	Mean \pm SD (Females)
VC(L)	3.2 \pm 0.96	2.32 \pm 0.44
FVC(L)	3.64 \pm 0.57	2.35 \pm 0.45
FEV1(L)	3.4 \pm 0.5	2.22 \pm 0.41
PEFR(L/Min)	475.4 \pm 79	286 \pm 72

FVC and FEV1 (L) had significant correlation with height in both sexes. Prediction equations based on height (H cm) were derived by regression analysis.

Parameter	Equation for Males	Equation for Females
FVC	0.07H-8.205	0.033H-2.701
FEV1	0.066H-7.812	0.034H-3.017

Conclusion: Results are in consistent with the finding of ethnic differences in lung function parameters. Further studies are needed in different age groups of each ethnic group using the same protocol.