

The objective of the present study was undertaking to estimate the physiological standard curves of predicted PFT parameters (VC, FVC, FEV1, FEV1/FVC, FEF25-75, and PEF) impacted by body surface area in Student College.

The study was conducted on 160 healthy non-smoking healthy college students who the aged group 18-25 yrs. Measured the height and weight to calculate the BSA by Mosteller formula and measured PFTs by spirometry.

The statistical analysis that used to get the best physiological standard curves of impact BSA on studied pulmonary parameters showed the effectiveness of BSA by linear- shape regression model on FEF25-75 estimated the highly significant( $P<0.01$ ) highly significant negative correlation coefficients, and on VC that observed significant ( $P<0.05$ ) with significant negative correlation, while on FEV1/FVC that showed non-significant( $P>0.05$ ) with non- significant correlation coefficient. The compound–shape regression model recorded strong highly significant( $P<0.01$ ) with positive and negative highly significant correlation coefficient on the FVC and FEV1 respectively, while by the inverse–shape regression model recorded highly significant ( $P<0.01$ ) with highly significant negative correlation coefficients on PEF.

Firstly we got the best physiological standard curves of predicted PFT parameters impacted by BSA after used linear and non-linear regression various models and various simple linear regression models and their estimates were selected from common bioassay fields. Secondly increases of BSA has impact on PFT values that lead to trouble of airflow rate due to resistance to flowing air in and out of the lung or gaseous exchanges of body demand or chest muscles can't expand enough.