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Childhood maltreatment and lung function: findings from the general population

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This general population study calls into question the well-documented link between childhood maltreatment and obstructive pulmonary diseases by indicating that spirometrically assessed lung function is not related to any type of childhood abuse or neglect <https://bit.ly/2GVinFt>

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ABSTRACT

Objective: Cumulative evidence indicates that childhood maltreatment is linked to self-reported asthma and COPD. However, the relationship between childhood maltreatment and objective measures of lung function as determined by spirometry has not yet been assessed.

Methods: Medical histories and spirometric lung function were taken in 1386 adults from the general population. Participants completed the Childhood Trauma Questionnaire for the assessment of emotional, physical and sexual abuse as well as emotional and physical neglect.

Results: 25.3% of the participants reported at least one type of childhood maltreatment. Among them, use of medication for obstructive airway diseases as well as typical signs and symptoms of airflow limitation were significantly more frequent than in the group without exposure to childhood maltreatment. Although participants with childhood maltreatment had numerically lower values for forced expiratory volume in 1 s (FEV₁), forced vital capacity (FVC) and peak expiratory flow than those without, these differences were nonsignificant when accounting for relevant covariates such as age, sex, height and smoking. Likewise, there were no differences in the FEV₁/FVC ratio nor in the frequency of airflow limitation regardless of its definition. No specific type of childhood maltreatment was related to spirometrically determined parameters of lung function.

Conclusions: Our findings call into question the association of childhood maltreatment with obstructive lung diseases as indicated by prior research relying on self-reported diagnoses. We consider several explanations for these discrepancies.