

## Supplementary material

**Table S1:** Search terms used in the electronic data examination.

Area covered	Search terms
Socioeconomic circumstances	("socioeconomic factors" OR "socioeconomic position" OR "social class" OR "socioeconomic determinants" OR "socioeconomic class" OR poverty OR education OR income OR occupation OR wealth OR deprivation OR overcrowding OR unemployment)
Respiratory function	("Lung function" OR spirometry OR "FEV1" OR "Forced Expiratory Volume" OR "Forced Vital Capacity" OR "FVC" OR "pulmonary function" OR "respiratory function" OR "total lung capacity" OR tlc)
Early life	(infant OR child* OR "preschool child*" OR adolesc* OR youth OR teenager OR young OR "young adult")

### **Text S1: Newcastle - Ottawa quality assessment scale for cohort studies**

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability

#### **Selection**

- 1) Representativeness of the exposed cohort
- 2) Selection of the non-exposed cohort
- 3) Ascertainment of exposure
- 4) Demonstration that outcome of interest was not present at start of study

#### **Comparability**

- 1) Comparability of cohorts on the basis of the design or analysis

#### **Outcome**

- 1) Assessment of outcome
- 2) Was follow-up long enough for outcomes to occur
- 3) Adequacy of follow up of cohorts

### **Text S2: Newcastle - Ottawa quality assessment scale adapted for cross-sectional association studies**

#### **Selection**

- 1) Representativeness of the exposed cohort
- 2) Selection of the non-exposed cohort
- 3) Ascertainment of exposure

#### **Comparability**

- 1) Comparability of cohorts on the basis of the design or analysis

#### **Associated factor**

- 1) Assessment of associated factor

**Table S2a:** Quality assessment of the cohort studies included, using the Newcastle-Ottawa scale.

[illegible]

**Table S2b:** Quality assessment of the cross-sectional studies included, using the Newcastle-Ottawa scale.

Cross-sectional studies*	Selection			Comparability		Associated factor	Total
Reference, year	1 - Representativeness of the Exposed Cohort	2- Selection of the Non-Exposed Cohort	3- Ascertainment of Exposure	1-Comparability of cohorts on the basis of the design or analysis a) studies control for 1-2 factors	b) studies control for any additional factor	1) Assessment of associated factor	
Goren & Goldsmith, 1986	0	1	0	0	0	1	2/6
Kauffmann <i>et al.</i> , 1989	0	1	1	0	0	1	4/6
Azizi & Henry, 1990	0	1	0	1	1	1	4/6
Demissie <i>et al.</i> , 1996	0	1	0	1	1	1	4/6
Lercher & Schmitzberger, 1997	0	1	1	1	1	1	5/6
Harik-Khan <i>et al.</i> , 2004	1	1	1	0	0	1	5/6
Raju <i>et al.</i> , 2005	1	1	1	1	1	1	6/6
Bennett <i>et al.</i> , 2008	0	1	0	1	1	1	4/6
Suglia <i>et al.</i> , 2008	1	1	0	1	1	1	5/6
Trabelsi <i>et al.</i> , 2008	1	1	0	0	0	1	3/6
Slachtova <i>et al.</i> , 2011	1	1	1	1	1	1	6/6
Wu <i>et al.</i> , 2012	0	1	1	1	1	1	5/6
Rebacz-Marón & Parafiniuk, 2014	0	1	0	1	1	1	4/6
Siniarska <i>et al.</i> , 2014	0	1	1	1	1	1	5/6
Cakmak <i>et al.</i> , 2016	0	1	1	1	1	0	4/6
Lum <i>et al.</i> , 2016	0	1	1	0	0	1	4/6
Kuti <i>et al.</i> , 2017	1	1	1	0	0	1	4/6
Nowakowski <i>et al.</i> , 2017	0	1	1	0	0	1	4/6
Saad <i>et al.</i> , 2017	0	1	1	1	1	1	5/6