Supplementary material

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

Area covered	Search terms			
Socioeconomic	("socioeconomic factors" OR "socioeconomic position" OR "social class"			
circumstances	OR "socioeconomic determinants" OR "socioeconomic class" OR poverty			
	OR education OR income OR occupation OR wealth OR deprivation OR			
	overcrowding OR unemployment)			
Respiratory	("Lung function" OR spirometry OR "FEV1" OR "Forced Expiratory			
function	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

<u>Note</u>: 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.

Cohort studies	Selection				Comparability			Outcome		
Reference, year	1 - Representativen ess of the exposed cohort	2- Selection of the non-exposed cohort	3- Ascertainme nt of exposure	4- Demonstration that outcome of interest was not present at start of study	1-Comparability of basis of the design a) studies control for most important factors		1- Assessmen t of outcome	2-Was follow-up long enough for outcomes to occur	3-Adequacy of follow up of cohorts	
Ware <i>et al.,</i> 1984	0	1	1	1	0	0	1	1	1	6/9
Kitchen et al., 1992	1	1	0	1	0	0	1	1	1	6/9
Hancox et al., 2004	1	1	1	1	1	1	1	1	1	9/9
Balmer et al., 2008	1	1	1	0	1	0	1	1	1	7/9
Tennant et al.,2010	1	1	1	1	1	0	1	1	1	8/9
Yogev-Baggio et al., 2010	1	1	1	1	0	0	1	1	1	7/9
Menezes et al., 2011	1	1	1	1	1	1	1	0	1	8/9
Taylor-Robinson et al., 2013	1	1	1	0	1	1	1	1	1	8/9
Cogen <i>et al.</i> , 2015	1	1	1	1	0	0	1	1	0	6/9
Galobardes et al., 2015	1	1	1	1	1	0	1	1	1	8/9
Lum <i>et al.</i> , 2015	1	1	1	0	1	1	1	1	1	8/9
Martínez-Briseño et al., 2015	1	1	1	0	1	1	1	1	0	7/9
Sanders et al., 2015	1	1	1	1	1	1	0	1	0	7/9
Ong <i>et al.</i> , 2017	1	1	1	1	1	1	1	1	1	9/9

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

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