

Appendix 3. Results of regression models fitted to assess the association between oral health and SEP while adjusting for age, gender, ethnicity, and marital status. For the binary outcomes of less than good self-rated oral health and presence of oral impacts, we estimated prevalence ratios (PR). Prevalence ratios were used instead of odds ratios since previous studies suggest that it is a better alternative for the analysis of outcomes with relatively high prevalence (>10%) [1 2]. For the count outcome of number of missing teeth, we report Incidence rate ratios (IRR) that can be interpreted as the ratio of the mean number of missing teeth in certain educational or income level compared with that in the reference level adjusted for covariates.

Oral health outcome and SEP level	Educational level		Household income	
	England	US	England	US
	PR or IRR (95% CI)		PR or IRR (95% CI)	
Number of missing teeth ^a				
High (Ref)	1.00	1.00	1.00	1.00
Medium	1.26 (1.20, 1.33)	1.31 (1.23, 1.40)	1.16 (1.10, 1.23)	1.14 (1.08, 1.21)
Low	1.47 (1.38, 1.57)	1.63 (1.50, 1.77)	1.33 (1.25, 1.42)	1.33 (1.24, 1.42)
<i>P</i> for trend	<0.001	<0.001	<0.001	<0.001
Self-rated oral health (less than good) ^b				
High (Ref)	1.00	1.00	1.00	1.00
Medium	1.35 (1.22, 1.50)	2.14 (1.85, 2.48)	1.24 (1.11, 1.39)	1.51 (1.36, 1.67)
Low	1.59 (1.42, 1.78)	2.97 (2.58, 3.42)	1.49 (1.34, 1.65)	2.00 (1.78, 2.25)
<i>P</i> for trend	<0.001	<0.001	<0.001	<0.001
Reporting ≥1 Oral impact ^b				
High (Ref)	1.00	1.00	1.00	1.00
Medium	1.72 (1.48, 2.00)	1.75 (1.44, 2.12)	1.35 (1.10, 1.66)	1.78 (1.41, 2.23)
Low	2.06 (1.68, 2.52)	2.58 (2.04, 3.27)	1.84 (1.55, 2.20)	2.49 (1.96, 3.17)
<i>P</i> for trend	<0.001	<0.001	<0.001	<0.001

All models are weighted and adjusted for age, gender, ethnicity, and marital status.

^a Estimates reported are incidence rate ratios (IRRs).

^b Estimates reported are prevalence ratios (PRs).

1. Barros AJD, Hiraakata VN. Alternatives for logistic regression in cross-sectional studies: an empirical comparison of models that directly estimate the prevalence ratio. *BMC Med Res Methodol* 2003;3:21
2. Khang Y-H, Yun S-C, Lynch JW. Monitoring trends in socioeconomic health inequalities: it matters how you measure. *BMC Public Health* 2008;8:66