

Appendix Table 1 - Regression analysis of the association between oral health outcomes and SEP measures

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	Having ≥3 teeth with untreated caries	Edentulousness	Number of missing teeth
	Prevalence ratio (95% CI) ^b		IRR (95% CI)
SEP			
<i>Educational level</i>			
University (Ref)	1.00	1.00	1.00
Technical	1.18 (0.92, 1.52)	1.46 (0.58, 3.67)	1.08 (0.95, 1.23)
Secondary	1.65 (1.34, 2.03)	2.60 (1.30, 5.20)	1.38 (1.24, 1.53)
Primary or less	1.96 (1.59, 2.42)	3.54 (1.84, 6.81)	1.75 (1.57, 1.94)
<i>p</i> -value for trend	<0.001	<0.001	<0.001
<i>Household income</i>			
≥ 3 NMW ^c	1.00	1.00	1.00
≥ 2 and < 3 NMW	1.63 (1.23, 2.16)	1.28 (0.75, 2.18)	1.26 (1.11, 1.42)
≥ 1 and < 2 NMW	1.86 (1.44, 2.39)	1.79 (1.15, 2.79)	1.33 (1.20, 1.47)
≥ Half and <1 NMW	2.26 (1.76, 2.90)	2.16 (1.40, 3.33)	1.41 (1.27, 1.56)
< Half NMW	2.36 (1.81, 3.07)	2.16 (1.37, 3.40)	1.54 (1.37, 1.73)
<i>p</i> -value for trend	<0.001	<0.001	<0.001
<i>Area level SEP</i>			
Highest (Ref)	1.00	1.00	1.00
Middle	1.44 (1.01, 2.06)	2.71 (1.35, 5.45)	1.54 (1.32, 1.80)
Low	1.54 (1.09, 2.16)	4.01 (2.06, 7.83)	1.71 (1.47, 1.98)
Lowest	1.92 (1.35, 2.73)	3.64 (1.84, 7.24)	1.84 (1.57, 2.15)
<i>p</i> -value for trend	<0.001	<0.001	<0.001
<i>Health insurance scheme</i>			
Exceptional (Ref)	1.00	1.00	1.00
Contributory	1.17 (0.85, 1.60)	0.68 (0.44, 1.03)	0.94 (0.82, 1.08)
Subsidized	1.82 (1.34, 2.48)	0.99 (0.67, 1.49)	1.18 (1.03, 1.35)
Not insured	2.33 (1.67, 3.24)	0.58 (0.28, 1.23)	1.06 (0.88, 1.26)
<i>p</i> -value for trend	<0.001	0.114	<0.001

^a Models adjusted by age, gender, marital status, region, place of residence (urban/rural) and ethnicity

^b Prevalence ratios were used instead of Odds ratios given the high prevalence of the outcomes

^c 2013 Monthly National Minimum Wage (NMW): COP\$589,500

Appendix Table 2 - Absolute inequalities in oral health by different SEP measures and place of residence

	Having ≥3 teeth with untreated caries	Edentulousness	Number of missing teeth
	SII (95% CI)		
Urban areas			
Educational level	19.08 (13.45, 24.71) ***	12.37 (7.02, 17.73) ***	3.99 (3.31, 4.66) ***
Household income	20.87 (15.61, 26.13) ***	10.38 (4.49, 16.27) **	2.13 (1.54, 2.72) ***
Area level SEP	15.62 (9.69, 21.56) ***	7.88 (2.24, 13.53) **	1.95 (1.30, 2.60) ***
Health insurance scheme	25.55 (20.09, 31.00) ***	7.00 (1.25, 12.76) *	1.95 (1.34, 2.56) ***
Rural areas			
Educational level	31.17 (17.43, 44.91) ***	6.83 (-12.11, 25.77)	3.25 (1.95, 4.55) ***
Household income	12.17 (0.17, 24.18) *	9.14 (-3.27, 21.56)	2.31 (0.98, 3.64) **
Area level SEP	7.77 (-11.89, 27.43)	-4.93 (-26.73, 16.88)	0.96 (-1.34, 3.25)
Health insurance scheme	24.73 (9.85, 39.62) **	0.92 (-16.14, 17.97)	2.18 (0.62, 3.75) **

* p<0.05, **p<0.01, ***p<0.001

SII: Slope Index of Inequality

Models adjusted by age, gender, marital status, region and ethnicity

Appendix Table 3 - Relative inequalities in oral health by different SEP measures and age groups

	Education	Income	Area level SEP	Health insurance
Age (years)	RII (95% CI)			
<i>Severe untreated caries</i>				
20-39	2.53 (1.90, 3.38) ***	2.27 (1.90, 3.38) ***	1.80 (1.32, 2.45) ***	3.16 (2.36, 4.23) ***
40-59	1.85 (1.39, 2.47) ***	2.06 (1.57, 2.70) ***	1.63 (1.19, 2.25) **	2.06 (1.53, 2.77) ***
60-79	1.75 (0.97, 3.16)	1.41 (0.91, 2.20)	1.76 (1.02, 3.03) *	2.91 (1.70, 5.00) ***
<i>Number of missing teeth</i>				
20-39	1.91 (1.54, 2.36) ***	1.46 (1.21, 1.76) ***	1.80 (1.44, 2.26) ***	1.39 (1.14, 1.70) **
40-59	2.09 (1.79, 2.43) ***	1.51 (1.32, 1.74) ***	1.50 (1.28, 1.77) ***	1.42 (1.22, 1.66) ***
60-79	1.72 (1.43, 2.06) ***	1.33 (1.17, 1.51) ***	1.16 (1.00, 1.35) *	1.43 (1.21, 1.68) ***
<i>Edentulousness</i>				
45 - 54	0.75 (0.14, 3.98)	1.35 (0.43, 4.18)	2.95 (0.85, 10.17)	2.04 (0.53, 7.87)
55 - 64	6.96 (2.55, 18.98) ***	3.91 (1.83, 8.34) ***	1.39 (0.60, 3.22)	4.46 (2.04, 9.76) ***
65 - 79	2.63 (1.34, 5.14) **	1.65 (1.11, 2.46) *	1.58 (1.01, 2.47) *	1.09 (0.69, 1.73)

* p<0.05, **p<0.01, ***p<0.001

RII: Relative Index of Inequality

Models adjusted by age, gender, marital status, region, place of residence (urban/rural) and ethnicity

Interactions between the SEP measures and gender

Significant interactions ($p < 0.05$) were found between education and gender for the outcomes of edentulousness and number of missing teeth. In both cases, inequalities were larger among women.

Appendix Table 4 - Relative educational inequalities in edentulousness and number of missing teeth by gender

Gender	<i>Edentulousness</i>	<i>Number of missing teeth</i>
	RII (95% CI)	
Male	1.96 (0.83, 4.62)	1.80 (1.51, 2.15) ***
Female	4.65 (2.32, 9.30) ***	2.23 (1.93, 2.58) ***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

RII: Relative Index of Inequality

Models adjusted by age, marital status, region, place of residence (urban/rural) and ethnicity

Appendix Table 5 - Relative and absolute inequalities in oral health outcomes by different SEP measures
RII and SII estimates obtained from log-binomial regression models

SEP	Having ≥ 3 teeth with untreated caries	Edentulousness
	Relative inequalities - RII (95% CI)	
Educational level	2.11 (1.73, 2.57) ***	3.30 (1.89, 5.74) ***
Household income	1.89 (1.59, 2.26) ***	No convergence
Area level SEP	1.69 (1.37, 2.10) ***	1.56 (1.12, 2.17) **
Health insurance scheme	2.50 (2.06, 3.03) ***	No convergence
	Absolute inequalities - SII (95% CI)	
Educational level	21.57 (16.33, 26.81) ***	No convergence
Household income	19.67 (14.74, 24.61) ***	No convergence
Area level SEP	14.74 (9.30, 20.19) ***	No convergence
Health insurance scheme	24.81 (19.88, 29.73) ***	No convergence

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

RII: Relative Index of Inequality, SII: Slope Index of Inequality

Models adjusted by age, gender, marital status, region, place of residence (urban/rural) and ethnicity