

Supplementary materials

Table S1. OHIP-14SP questionnaire (Spanish version with English translation)

Notes: Adapted from the version validated in Spanish by Montero-Martín *et al.*¹ [The list of questions and scores is publicly available at Diaz-Reissner *et al.*² CC BY NC \(<https://creativecommons.org/licenses/by-nc/4.0/deed.es>\)](#)

- References*
1. Montero-Martín J, Bravo-Perez M, Albaladejo-Martínez A, Hernández-Martín LA, Rosel-Gallardo EM. Validation the Oral Health Impact Profile (OHIP-14sp) for adults in Spain. *Med Oral Patol Oral Cir Bucal*. 2009;14(1):E44–E50.
 2. Diaz-Reissner CV, Casas-García I, Roldán-Merino J. Calidad de Vida Relacionada con Salud Oral: Impacto de Diversas Situaciones Clínicas Odontológicas y Factores Socio-Demográficos. Revisión de la Literatura [Quality of Life Related to Oral Health: Impact of Various Socio-Demographic Factors and Dental Clinical Situations. Review of Literature]. *Int J Odontostomat*. 2017;11(1):31-39. Spanish. doi: 10.4067/S0718-381X2017000100005.

Establecer el impacto de la salud oral en la calidad de vida mediante el cuestionario OHIP-14SP. Cada pregunta tiene como respuestas probables: nunca (0), casi nunca (1), ocasionalmente (2), frecuentemente (3) y muy frecuentemente (4). Para obtener el puntaje se suman los valores, pudiendo por tanto tener un mínimo de 0 puntos y un máximo de 56 puntos.

To establish the impact of oral health on quality of life through the OHIP-14SP questionnaire. Each question has as probable answers: never (0), almost never (1), occasionally (2), frequently (3) and very frequently (4). To obtain the score, the values are added, and can therefore have a minimum of 0 points and a maximum of 56 points.

	0	1	2	3	4
Limitación funcional <i>Functional Limitation</i>					
1. ¿Ha tenido dificultad para pronunciar palabras? <i>Have you had trouble pronouncing any word?</i>					
2. ¿El sabor de sus alimentos ha empeorado? <i>Have you felt that your sense of taste has worsened?</i>					
Dolor físico <i>Physical Pain</i>					
1. ¿Ha sentido dolor en su boca? <i>Have you had painful aching in your mouth?</i>					
2. ¿Ha presentado molestia al comer? <i>Have you found it uncomfortable to eat any foods?</i>					
Malestar psicológico <i>Psychological Discomfort</i>					
1. ¿Le preocupan los problemas con su boca? <i>Have you been self-conscious?</i>					
2. ¿Se ha sentido estresado? <i>Have you felt tense?</i>					
Incapacidad física <i>Physical Disability</i>					
1. ¿Ha tenido que cambiar sus alimentos? <i>Has your diet been unsatisfactory?</i>					
2. ¿Ha tenido que interrumpir sus alimentos? <i>Have you had to interrupt meals?</i>					
Incapacidad psicológica <i>Psychological Disability</i>					
1. ¿Ha tenido dificultad para descansar? <i>Have you found it difficult to relax?</i>					
2. ¿Se ha sentido avergonzado por problemas con su boca? <i>Have you been a bit embarrassed?</i>					
Incapacidad social <i>Social Handicap</i>					
1. ¿Ha estado irritable debido a problemas con su boca? <i>Have you been a bit irritable with other people?</i>					
2. ¿Ha tenido dificultad para realizar sus actividades diarias? <i>Have you had difficulty doing your usual jobs?</i>					
Minusvalía <i>Handicap</i>					
1. ¿Ha sentido que la vida en general ha sido menos agradable? <i>Have you felt than life in general was less satisfying?</i>					
2. ¿Ha sido totalmente incapaz de realizar sus actividades diarias? <i>Have you been totally unable to function?</i>					

Supplementary Table-S2. Demographic and clinical characteristics

Serie	Group	Age (yr)	Sex	Current medical history	Orthodontics	Days of ulcers	Ulcers per year	Type
1	Healthy	23	Woman	Chronic tendinitis	No	0.0	0.0	
2	Healthy	23	Woman	Dermatitis	Yes	0.0	0.0	
3	Healthy	19	Woman	Does not report	No	0.0	0.0	
4	Healthy	25	Woman	Does not report	No	0.0	0.0	
5	Healthy	23	Woman	Does not report	No	0.0	0.0	
6	Healthy	22	Woman	Does not report	No	0.0	0.0	
7	Healthy	25	Man	Does not report	No	0.0	0.0	
8	Healthy	24	Woman	Does not report	No	0.0	0.0	
9	Healthy	22	Woman	Does not report	No	0.0	0.0	
10	Healthy	27	Man	Does not report	No	0.0	0.0	
11	Healthy	31	Woman	Migraine	No	0.0	0.0	
12	Healthy	23	Woman	Does not report	No	0.0	0.0	
13	Healthy	28	Woman	Asthma	No	0.0	0.0	
14	Healthy	24	Woman	Dysautonomia	No	0.0	0.0	
15	Healthy	27	Woman	Dysautonomia	No	0.0	0.0	
16	Healthy	21	Woman	Does not report	No	0.0	0.0	
17	Healthy	30	Man	Does not report	No	0.0	0.0	
18	Healthy	25	Woman	Does not report	No	0.0	0.0	
19	Healthy	25	Woman	Does not report	No	0.0	0.0	
20	Healthy	26	Woman	Hypothyroidism	No	0.0	0.0	
21	Healthy	19	Woman	Does not report	No	0.0	0.0	
22	Healthy	24	Woman	Does not report	No	0.0	0.0	
23	Healthy	41	Woman	Does not report	No	0.0	0.0	
24	Healthy	61	Woman	Arterial hypertension	No	0.0	0.0	
25	Healthy	26	Woman	Does not report	No	0.0	0.0	
26	Healthy	24	Woman	Does not report	No	0.0	0.0	
27	Healthy	35	Woman	Arterial hypertension	No	0.0	0.0	
28	Healthy	18	Man	Does not report	No	0.0	0.0	
29	Healthy	20	Woman	Does not report	No	0.0	0.0	
1	Remission	19	Woman	Does not report	No	0.0	4.0	
2	Remission	21	Man	Does not report	No	0.0	4.0	
3	Remission	24	Woman	Does not report	No	0.0	12.0	

4 Remission	25 Woman	Does not report	No	0.0	0.0
5 Remission	19 Woman	Does not report	No	0.0	0.0
6 Remission	29 Woman	Does not report	No	0.0	0.0
7 Remission	57 Woman	Fatty liver	No	0.0	6.0
8 Remission	25 Woman	Does not report	No	0.0	20.0
9 Remission	23 Woman	Does not report	No	0.0	6.0
10 Remission	26 Woman	Does not report	No	0.0	3.0
11 Remission	35 Man	Does not report	No	0.0	2.0
12 Remission	19 Woman	Does not report	No	0.0	2.0
13 Remission	18 Woman	Does not report	No	0.0	8.0
14 Remission	20 Woman	Does not report	No	0.0	0.0
15 Remission	29 Woman	Does not report	No	0.0	2.0
16 Remission	20 Woman	Does not report	Yes	0.0	3.0
17 Remission	21 Woman	Does not report	No	0.0	8.0
18 Remission	24 Woman	Pregnancy	No	0.0	5.0
19 Remission	29 Woman	Does not report	No	0.0	2.0
20 Remission	20 Woman	Does not report	No	0.0	6.0
21 Remission	26 Woman	Does not report	No	0.0	3.0
22 Remission	24 Woman	Anxiety disorder	No	0.0	3.0
23 Remission	21 Woman	Does not report	No	0.0	3.0
24 Remission	18 Woman	Does not report	No	0.0	10.0
25 Remission	20 Woman	Asthma	No	0.0	24.0
26 Remission	25 Man	Does not report	No	0.0	15.0
27 Remission	20 Man	Does not report	Yes	0.0	8.0
28 Remission	26 Woman	Gastroesophageal reflux, right	No	0.0	12.0
29 Remission	43 Woman	Prediabetes	No	0.0	1.0
30 Remission	55 Woman	Hypothyroidism	No	0.0	6.0
31 Remission	29 Woman	Does not report	No	0.0	10.0
32 Remission	21 Woman	Does not report	No	0.0	8.0 Minor
33 Remission	22 Woman	Does not report	No	0.0	0.0 Minor
1 Ulcer	21 Man	Does not report	No	2.0	4.0 Minor
2 Ulcer	19 Woman	Does not report	No	2.0	0.0 Minor
3 Ulcer	19 Woman	Does not report	No	3.0	4.0 Minor
4 Ulcer	24 Woman	Does not report	No	1.0	12.0 Minor

5 Ulcer	43 Woman	Prediabetes	No	3.0	1.0 Minor
6 Ulcer	21 Woman	Does not report	No	3.0	3.0 Minor
7 Ulcer	25 Woman	Does not report	No	2.0	20.0 Minor
8 Ulcer	29 Woman	Does not report	No	2.0	0.0 Minor
9 Ulcer	25 Woman	Does not report	No	1.0	0.0 Minor
10 Ulcer	23 Woman	Does not report	No	1.0	5.0 Minor
11 Ulcer	57 Woman	Fatty liver	No	2.0	6.0 Minor
12 Ulcer	29 Woman	Does not report	No	3.0	2.0 Minor
13 Ulcer	35 Man	Does not report	No	1.0	2.0 Minor
14 Ulcer	35 Man	Does not report	No	2.0	2.0 Minor
15 Ulcer	18 Woman	Does not report	No	3.0	8.0 Minor
16 Ulcer	29 Woman	Does not report	No	2.0	2.0 Minor
17 Ulcer	21 Woman	Does not report	No	2.0	8.0 Minor
18 Ulcer	26 Woman	Gastroesophageal reflux, right	No	3.0	12.0 Minor
19 Ulcer	23 Woman	Does not report	No	3.0	6.0 Minor
20 Ulcer	26 Woman	Does not report	No	1.0	3.0 Minor
21 Ulcer	20 Woman	Does not report	No	2.0	0.0 Minor
22 Ulcer	18 Woman	Does not report	No	2.0	10.0 Minor
23 Ulcer	24 Woman	Pregnancy	No	2.0	5.0 Minor
24 Ulcer	24 Woman	Does not report	No	1.0	2.0 Minor
25 Ulcer	29 Woman	Does not report	No	2.0	10.0 Minor
26 Ulcer	55 Woman	Hypothyroidism	No	1.0	6.0 Minor
27 Ulcer	20 Woman	Does not report	Yes	3.0	0.0 Minor
28 Ulcer	20 Man	Does not report	Yes	3.0	8.0 Minor
29 Ulcer	20 Woman	Asthma	No	2.0	24.0 Minor
30 Ulcer	22 Woman	Does not report	No	3.0	0.0 Minor
31 Ulcer	25 Man	Does not report	No	2.0	15.0 Minor
32 Ulcer	19 Woman	Does not report	No	2.0	2.0 Minor
33 Ulcer	42 Man	Does not report	No	2.0	12.0 Minor

5.0	1.0	5.0 C06.1 Vestibule of mouth	6.0	0
2.0	1.0	2.0 C02.1 Border of tongue	3.0	0
4.0	2.0	3.0 C02.0 Dorsal surface of tongue	2.0	2
3.0	2.0	2.0 C00.4 Mucosa of lower lip	2.0	1
3.0	1.0	3.0 C00.4 Mucosa of lower lip	0.0	0
3.0	1.0	3.0 C02.1 Border of tongue	7.0	0
4.0	1.0	4.0 C00.4 Mucosa of lower lip	2.0	2
2.0	1.0	2.0 C00.4 Mucosa of lower lip	7.0	1
2.0	2.0	1.0 C06.1 Vestibule of mouth	4.0	0
3.0	2.0	2.0 C06.1 Vestibule of mouth	4.0	0
3.0	1.0	3.0 C00.4 Mucosa of lower lip	5.0	0
3.0	1.0	3.0 C00.4 Mucosa of lower lip	4.0	4
9.0	2.0	5.0 C04.9 Floor of mouth, NOS	6.0	0
6.0	1.0	6.0 C04.9 Floor of mouth, NOS	7.0	3
5.0	1.0	5.0 C00.4 Mucosa of lower lip	6.0	1
1.0	1.0	1.0 C06.0 Cheek mucosa	0.0	0
4.0	1.0	4.0 C06.1 Vestibule of mouth	5.0	0
4.0	1.0	4.0 C02.2 Ventral surface of tongue	4.0	0
7.0	1.0	7.0 C00.4 Mucosa of lower lip	8.0	0
2.0	1.0	2.0 C06.0 Cheek mucosa	2.0	0
3.0	1.0	3.0 C02.2 Ventral surface of tongue	5.0	0
10.0	3.0	3.3 C00.3 Mucosa of upper lip	8.0	4
5.0	1.0	5.0 C05.1 Soft palate, NOS	3.0	0
5.0	2.0	2.5 C00.3 Mucosa of upper lip	4.0	0
3.0	2.0	3.0 C03.1 Lower gum	7.0	0
2.0	1.0	2.0 C03.0 Upper gum	6.0	0
3.0	1.0	3.0 C05.1 Soft palate, NOS	3.0	0
3.0	1.0	3.0 C06.0 Cheek mucosa	4.0	3
5.0	4.0	5.0 C06.1 Vestibule of mouth	4.0	0

OHIP14Sp 2	OHIP14Sp 3	OHIP14Sp 4	OHIP14Sp 5	OHIP14Sp 6	OHIP14Sp 7	OHIP14Sp 8	OHIP14Sp 9	OHIP14Sp 10
0	0	0	4	4	3	3	3	0
0	0	2	3	3	0	0	4	0
0	0	0	0	3	3	2	2	0
3	0	0	4	3	2	0	3	2
0	1	0	3	3	0	0	2	0
0	1	0	2	3	1	1	2	1
0	0	0	2	4	2	4	2	0
0	1	0	0	3	2	0	2	0
1	0	0	0	3	0	0	2	0
0	0	0	1	2	0	0	2	0
0	0	0	0	4	0	0	3	0
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0	0	0	0	2	0	0	2	0
2	0	0	3	4	1	0	4	3
0	0	0	2	2	0	0	0	0
0	0	0	4	4	2	0	4	3
0	0	0	1	2	0	0	0	0
2	0	0	3	0	0	0	0	0
0	2	3	3	1	0	0	1	1
1	0	1	4	1	1	1	0	0
0	0	0	0	4	0	0	2	0
0	0	0	2	2	0	0	1	0
0	0	0	0	3	0	0	0	0

0	0	0	3	0	0	0	0	0	0
0	0	0	0	3	0	0	0	0	0
0	0	0	3	2	2	0	0	0	0
0	0	0	2	3	2	0	3	2	2
0	0	0	3	0	0	0	0	3	3
0	0	0	0	4	1	0	0	0	0
0	4	4	4	4	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0
0	0	0	4	3	0	0	3	3	0
0	0	0	1	2	2	2	0	0	0
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0	3	3	0	2	0	0	0	0	0
0	2	1	0	0	0	0	0	0	0
0	4	3	2	4	1	1	0	0	0
2	3	3	3	4	0	0	3	0	0

2	3	4	4	4	0	0	3	0
1	4	4	4	4	3	4	2	0
2	2	3	2	0	1	2	1	0
0	2	3	2	3	2	0	0	0
0	0	0	3	0	0	0	0	0
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0	4	3	2	2	0	0	3	1
1	4	4	4	4	2	2	4	0
0	1	0	3	2	0	0	0	0
1	3	2	2	1	0	0	2	0
2	4	3	4	2	2	3	2	0
1	4	3	4	3	0	0	0	2
0	3	3	2	1	2	1	0	0
0	4	4	0	0	0	2	1	0
4	4	4	4	4	4	2	0	3
0	2	1	4	2	0	0	0	0
0	4	4	4	2	0	2	2	0
0	3	3	4	2	0	0	0	0
0	2	2	2	4	2	2	3	1
0	4	3	3	1	0	1	2	0
2	4	4	4	4	0	1	3	0
0	4	2	3	3	3	2	0	0

OHIP14Sp 11	OHIP14Sp 12	OHIP14Sp 13	OHIP14Sp 14	OHIP14Sp total score
0	0	0	0	17.00
0	0	0	2	14.00
0	0	0	0	13.00
0	0	0	0	17.00
0	0	0	0	9.00
0	0	0	0	11.00
0	0	0	0	14.00
0	0	2	0	12.00
0	0	1	0	7.00
0	0	0	0	5.00
0	0	0	0	7.00
0	0	2	0	12.00
0	0	0	0	5.00
0	2	2	1	15.00
0	0	0	0	10.00
0	0	0	0	10.00
0	1	0	0	12.00
0	0	0	0	7.00
0	2	3	0	23.00
0	0	3	0	17.00
0	0	0	0	11.00
0	0	0	0	4.00
0	0	1	0	18.00
0	0	1	0	5.00
3	0	0	0	20.00
0	0	0	0	4.00
0	0	0	0	5.00
0	0	0	0	11.00
0	0	0	0	9.00
0	0	0	0	6.00
0	0	0	0	5.00
0	0	0	0	3.00

0	0	0	0	3.00
1	0	0	0	4.00
0	0	0	0	7.00
2	0	1	0	15.00
2	0	0	0	8.00
0	0	0	0	5.00
0	0	0	0	16.00
0	0	0	0	1.00
0	0	0	0	10.00
0	0	0	0	7.00
0	0	0	0	8.00
0	0	0	0	11.00
0	0	0	0	9.00
1	1	1	0	21.00
0	0	0	0	1.00
0	0	0	0	2.00
3	0	0	0	14.00
0	0	0	0	2.00
0	0	3	1	11.00
0	0	0	0	8.00
0	0	0	0	10.00
0	0	0	0	3.00
2	1	0	0	10.00
0	0	0	0	3.00
0	0	0	0	12.00
1	0	0	0	4.00
0	0	0	0	9.00
0	0	0	0	3.00
0	0	0	0	9.00
0	0	0	0	7.00
0	0	0	0	8.00
0	0	0	0	0.00
0	0	1	0	17.00
1	0	0	0	19.00

1	0	0	0	21.00
1	3	3	0	33.00
1	1	2	2	21.00
0	0	0	0	13.00
0	0	0	0	3.00
1	2	1	0	19.00
2	2	0	0	26.00
1	3	0	0	24.00
0	0	0	0	5.00
0	0	0	0	7.00
0	0	0	0	8.00
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3	2	3	1	29.00
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2	1	1	0	30.00
0	0	0	0	6.00
2	0	1	0	14.00
2	0	0	0	24.00
2	2	1	0	22.00
1	0	3	0	16.00
0	0	0	0	11.00
1	0	2	0	36.00
0	0	0	0	9.00
0	1	1	0	20.00
2	0	0	0	14.00
2	1	1	0	22.00
3	1	2	0	20.00
0	0	0	0	25.00
2	0	2	0	21.00