



# PRECISION DENTAL MEDICINE

## ORAL HEALTH RELATED QUALITY OF LIFE IN INSTITUTIONALIZED ELDERLY IN VISEU

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### BACKGROUND

Portugal has an increasingly aging population, due to the raise of average life expectancy and low birth rates. This situation constitutes a challenge for public health, particularly regarding oral health related quality of life. The objective of this study is to assess the impact of oral health on the quality of life of institutionalized elderly people in the district of Viseu, Portugal.

### MATERIALS AND METHODS

An observational descriptive cross-sectional study was designed, composed of a population of elderly residents in nursing homes in the district of Viseu. Data collection was accomplished by an application of a questionnaire to assess sociodemographic and oral health aspects, the GOHAI index and the OHIP-14 index.

Índice GOHAI			
	Sempre	As Vezes	Nunca
1			
2			
3			
4			
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6			
7			
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9			
10			
11			
12			

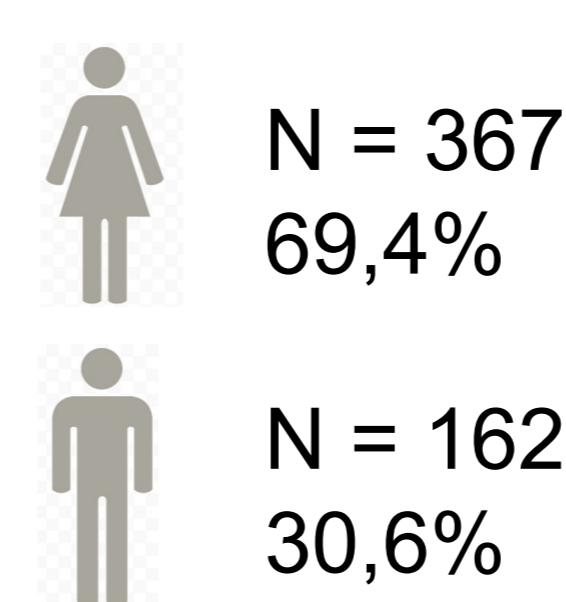
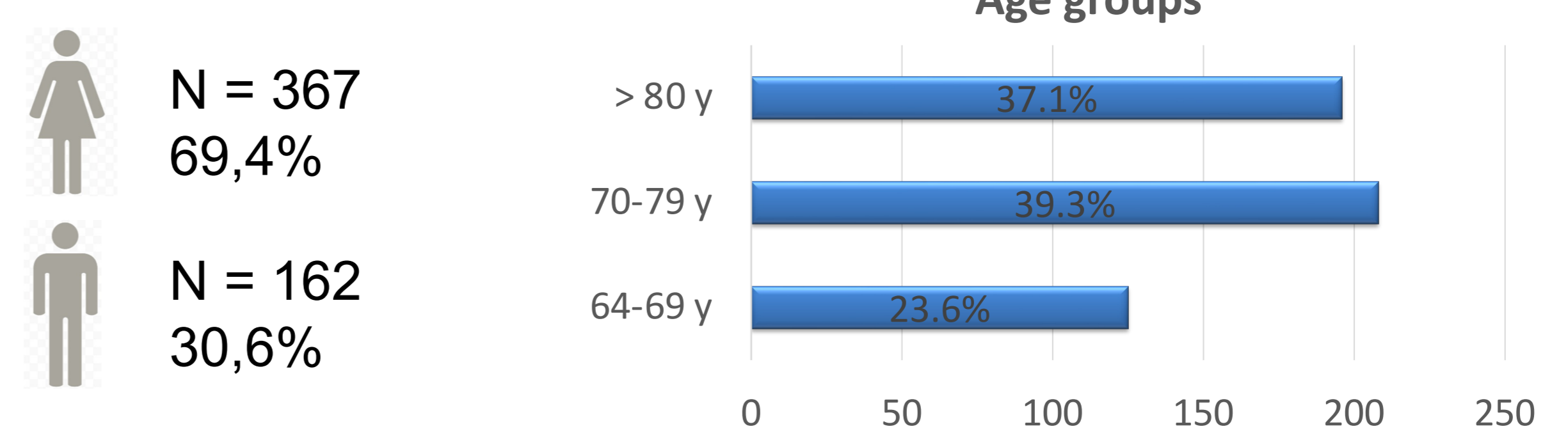
IV - Oral Health Impact Profile - OHIP-14

Responda às questões em baixo fundamentando sempre cada uma da opção que achar mais adequada tendo em conta a frequência em que sente cada um dos aspectos nos últimos 14 dias.

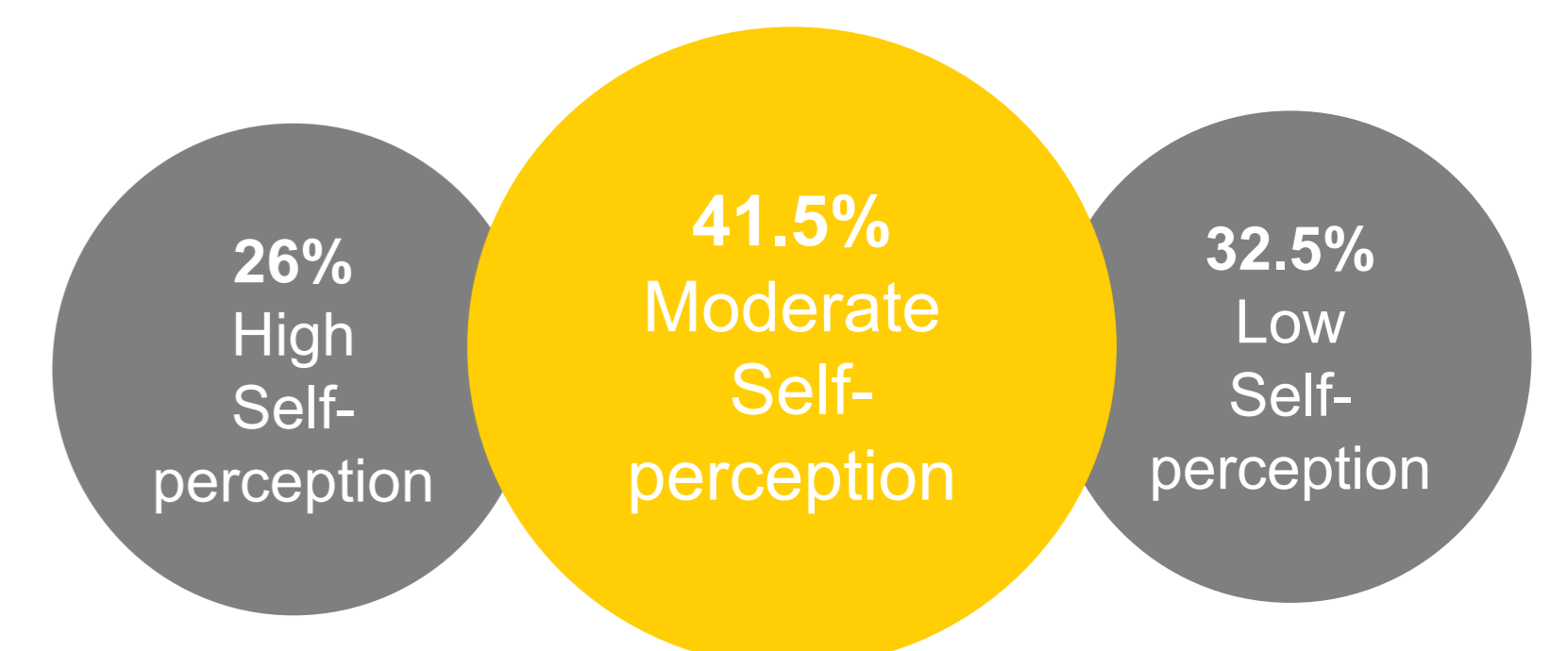
1. Tem problemas em pronunciar algumas palavras?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
2. Sente que o sabor dos alimentos tem piorado?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
3. Sente dor na sua boca ou nos seus dentes?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
4. Sente-se desconfortável ao comer algum alimento?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
5. Sente-se preocupado(a)?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
6. Sente-se nervoso(a)?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
7. A sua alimentação ficou prejudicada?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
8. Tem que interromper as suas refeições?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
9. Encontrou dificuldade para relaxar?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
10. Sente-se cansado(a)?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
11. Faltou (irritação) com as outras pessoas?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
12. Tem dificuldade em realizar as suas tarefas diárias?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
13. Sente que a sua vida, em geral, ficou pior?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre
14. Faltou totalmente capacidade para realizar as suas atividades?	<input type="checkbox"/> Nunca	<input type="checkbox"/> Raramente	<input type="checkbox"/> Às vezes	<input type="checkbox"/> Repetidamente	<input type="checkbox"/> Sempre

### RESULTS

The sample consisted of 529 institutionalized elderly aged 65 years or older.



According to the **GOHAI index**, a considerable number of participants (41.5%) have a **moderate self-perception of oral health**.



Regarding the **OHIP-14 index**, it appears that the **impact of oral health on quality of life is low**, since the average of the global OHIP-14 was 15 (0-56). "Physical pain" was the most affected dimension (2,70), while the dimension with the least impact was "Social limitation" (1,52).

	Minimum	Maximum	Mean	Standard Deviation
Final OHIP	,00	56,00	15,0070	16,03296
Functional Limitation	,00	8,00	2,4638	2,57712
Physical Pain	,00	8,00	2,7047	2,47278
Psychological discomfort	,00	8,00	2,2333	2,60555
Physical Limitation	,00	8,00	2,4570	2,82931
Psychological Limitation	,00	8,00	1,7510	2,44236
Social Limitation	,00	8,00	1,5285	2,49643
Inability	,00	8,00	1,6784	2,44688

### CONCLUSIONS

In this research, oral health related quality of life was considered reasonable. However, there are participants in whom the impact of oral health in the quality of life is significant. Therefore, it is important to continue to develop strategies and join efforts to improve oral health and, consequently, the systemic health and quality of life of institutionalized elderly.



The study protocol was approved by the Ethics Commission for Health of the University (Health Ethics Committee of UCP, Report number 165, 21<sup>st</sup> of January 2022). Informed consent was obtained from all participants and all methods were performed in accordance with the Declaration of Helsinki principles for medical research involving human subjects and following the requirements established by Portuguese Law nr 21/2014 for clinical research.

### REFERENCES

- Côrte-Real IS, Figueiral MH, Reis Campos JC. As doenças orais no idoso – Considerações gerais. Rev Port Estomatol Med Dent Cir Maxilofac. 2011 Jul 1;52(3):175–80.
- Lauritano D, Moreo G, della Vella F, Stasio D di, Carinci F, Lucchese A, et al. Oral Health Status and Need for Oral Care in an Aging Population: A Systematic Review. Int J Environ Res Public Health. 2019;16(22):1–23.
- Khanagar SB, Al-Ehaidab A, Shivanna MM, Ul-Haq I, al-Kheraif AA, Naik S, et al. Age-related Oral Changes and Their Impact on Oral Health-related Quality of Life among Frail Elderly Population: A Review. Vol. 21, J Contemp Dent Pract. Jaypee Brothers Medical Publishers (P) Ltd; 2020. p. 1298–303.
- Veiga N, Castro A, Mendes J, Marques M, Domingues M, Maravilha T, et al. Oral Health and Physical and Mental Limitations among the Elderly. Int J Dent Oral Heal. 2016;2(6):1–3.
- Atchison KA, Dolan TA. Development of the geriatric Oral health assessment index. J Dent Educ. 1990;54(11):680–7.
- Carvalho C, Manso AC, Escóval A, Salvado F, Nunes C. Tradução e validação da versão portuguesa do Geriátrico Oral Health Assessment Index (GOHAI). Rev Port Saúde Pública. 2013 Jul;31(2):153–9.
- Afonso A, Silva I, Meneses R, Frias-Bulhosa J. Oral Health-related Quality of Life: Portuguese Linguistic and Cultural Adaptation of OHIP-14. Psicologia, Saúde & Doença. 2017 Jul 25;18(2):374–88.
- Slade GD. Derivation and validation of a short-form oral health impact profile. Community Dent Oral Epidemiol. 1997 Aug;25(4):284–90.

