



## SCIENTIFIC LETTERS

## Self-perceived oral health among the elderly in four family health units



### Autopercepción de la salud oral en el adulto mayor en cuatro Unidades de Salud Familiar

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Oral health has been defined by the WHO (World Health Organization) as the absence of chronic facial and mouth pain, oral and oropharyngeal cancer, oral infections, periodontal disease, teeth loss and other diseases or oral disturbances affecting the oral and mouth cavity and that limit the individual's ability to bite, chew, smile and talk in addition to his/her own psychosocial wellbeing.<sup>1</sup> According to the 2019 Oral Health Barometer,<sup>2</sup> almost 70% of the Portuguese population has missing natural teeth and 48.6% of those do not have replacement teeth; 31.6% have never visited a dentist or only in case of emergency, while 65.3% claim they have no need to do so.

Elderly display multiple risk factors, including higher susceptibility to oral disease and infection, poly pathology, xerostomia, physical dependency and cognitive issues<sup>3</sup> and several studies have shown that deficient oral health is a risk factor for cardiovascular, pulmonary, gastric diseases and

diabetes. Oral health state equally influences the elderly's nutrition as well as his/her wellbeing.<sup>4</sup>

Family Doctors play a role in the assessment of oral health self-perception as well as providing counseling and preventing dental issues and maintaining adequate oral health and overall health state.<sup>5</sup>

This multicentre, observational and cross-sectional study, approved by the Ethics Committee of ARS-Norte, aimed at evaluating elderly's perception of their own Oral Health and the way in which it affects their Quality of Life. It was used a convenience sample of users ( $n = 365$ ) aged  $\geq 65$  years from Healthcare Units AmareSaúde, Vida+, +Carandá and Ruães who answered the *Geriatric Oral Health Assessment Index* (GOHAI) questionnaire, in its adapted version for the Portuguese population<sup>6</sup> between January and May 2021.

This study evaluated the relationships between GOHAI scores and gender, age, marital status, education, household and family income, degree of autonomy, oral hygiene and dental assessments. Scores obtained via the GOHAI survey were categorized in the following groups: high self-perception (34–36 points); moderate self-perception (30–33

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**Table 1** Correlation of Geriatric Oral Health Assessment Index (GOHAI) results with different variables.

| Variables                                  | $\chi^2/r_s/r_{pb}^*$ | <i>p</i> |
|--|-----------------------|----------|
| Gender                                     | $\chi^2 (2) = 7.72$   | 0.021    |
| Educational level                          | $r_s = 0.266$         | <0.001   |
| Family income                              | $r_s = 0.139$         | <0.01    |
| Healthcare unit                            | $\chi^2 (6) = 49.44$  | <0.001   |
| Level of autonomy<br>(Barthel Index score) | $r_s = 0.177$         | 0.01     |
| Toothbrushing frequency                    | $r_s = 0.232$         | 0.001    |
| Use of dental floss                        | $r_{pb} = 0.111$      | 0.05     |
| Last visit to the dentist                  | $r_s = -0.039$        | 0.460    |
| Age  | $r_s = -0.03$         | 0.631    |
| Marital status                             | $\chi^2 (6) = 16.15$  | 0.13     |
| Household dimension of<br>family           | $r_s = -0.015$        | 0.771    |
| Use of mouthwash                           | $r_{pb} = 0.033$      | 0.53     |
| Rural/urban<br>environment                 | $\chi^2 (2) = 1.93$   | 0.380    |

USF: Unidade de Saúde Familiar (Healthcare unit).

\*  $\chi^2$ : Chi-squared test;  $r_s$ : Spearman's rank correlation coefficient;  $r_{pb}$ : point-biserial correlation coefficient.

points) and low self-perception (<30 points). Data analysis, made in SPSS®, showed a mean score of 31.8 in the GOHAI was obtained from the 365 patients under study, revealing a moderate self-perception of oral health. Statistically significant differences were found, with higher scores for males ( $p = .021$ ). There were no differences between rural and urban environments. There was also no relationship between GOHAI and age, marital status, household size and frequency of assessment at a dentist. However, higher education ( $p < .001$ ), family income ( $p < .01$ ), degree of autonomy ( $p < .01$ ), tooth brushing ( $p < .001$ ) and use of dental floss ( $p < .05$ ) were associated with higher GOHAI as shown in Table 1.

Existing belief that precarious oral health is a natural consequence of aging and that it cannot be changed is naturally accepted among the elderly, and it may often be overlooked in a medical consultation. Since they are able to modulate factors related with oral health self-perception

(such as health literacy and elderly autonomy as shown in the study) Primary Health Care are in a privileged position to help prevent and tackle oral pathologies, thus diminishing related systemic pathologies, and translating into significant (and even measurable) health improvements. Therefore, we propose that active inspection of the oral cavity and dental hygiene education as key additions to the elderly consultation.

## Ethical approval

Approved by Ethical Committee of ARS Norte.

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## Conflict of interest

None declared.

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