Characterization of the self-perception of oral health in the Brazilian adult population

Caracterização da condição percebida de saúde bucal na população adulta brasileira

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Abstract This article aims to perform an analysis of the factors that determine the self-perception of oral health of Brazilians, based on a multidimensional methodology basis. This is a cross-sectional study with data from a national survey. A household interview was conducted with a sample of 60,202 adults. Self-perception of oral health was considered the outcome variable and sociodemographic characteristics, self-care and oral health condition, use of dental services, general health and work condition as independent variables. The dimensionality reduction test was used and the variables that showed a relationship were submitted to logistic regression. The negative oral health condition was related to difficulty feeding, negative evaluation of the last dental appointment, negative self-perception of general health condition, not flossing, upper dental loss, and reason for the last dental appointment. The use of a multidimensional methodological basis was able to design explanatory models for the self-perception of oral health of Brazilian adults, and these results should be considered in the implementation, evaluation, and qualification of the oral health network.

Key words Oral Health, Perception, Self-evaluation, Cross-Sectional Studies, Data Mining

Resumo O objetivo deste artigo é realizar uma análise dos fatores que determinam a autopercepção de saúde bucal dos brasileiros sob base metodológica multidimensional. Estudo transversal, com dados provenientes de inquérito em âmbito nacional. Foi realizada entrevista domiciliar com uma amostra de 60.202 adultos. Considerou-se a autopercepção de saúde bucal como variável desfecho e características sociodemográficas, de auto-cuidado e condição de saúde bucal, de utilização de serviços odontológicos, de condição de saúde geral e de trabalho como variáveis independentes. Empregou-se o teste de redução de dimensionalidade e as variáveis que apresentaram relação passaram pelo teste de regressão logística. A autopercepção negativa de saúde bucal apresentou-se relacionada à dificuldade para se alimentar, avaliação negativa do atendimento recebido durante a última consulta odontológica, autopercepção ruim da condição de saúde geral, não utilização de fio dental, perda dental superior e motivo da última consulta com o cirurgião dentista. A utilização de base metodológica multidimensional foi capaz de (re)desenhar modelos explicativos para a condição percebida de saúde bucal de adultos brasileiros, devendo os seus resultados serem considerados na implementação, avaliação e qualificação da rede de saúde bucal.

Palavras-chave Saúde bucal, Percepção, Autoavaliação, Estudos transversais, Mineração de dados
**Introduction**

The personal assessment of living and becoming ill is characterized by the interpretation that an individual performs on his/her own health. Several factors have been pointed out in the literature as capable of influencing this self-assessment: personal characteristics, especially the access to information, demographic aspects, level of acculturation, beliefs, values, health practices, physical and cognitive ability, and emotional relationships.

Due to the subjective nature of the object, classical epidemiological studies are not able to apprehend the elements that are related to the evaluation of the health status of the individuals, since they are mainly devoted to aspects of human biology, clinical, and laboratorial methods. Although biologically based information is essential for the quantification of the population health conditions, since they subsidize the planning, organization, and monitoring of health services, personal measures are increasingly recommended by the World Health Organization. Authors affirm that through these measures the individual conscience on health status is reflected, constituting also an important contribution to the orientation of political and social decisions that have as a goal the quality of life and to increase the search, adherence, and motivation of individuals for treatment and self-care.

In the oral health field in Brazil, despite the importance of assessing patients' self-perception on broad and effective bases, most studies have focused on isolated conditions such as clinical (use of dental prosthesis, cavities, and periodontal disease), socioeconomic (income and level of education), socio-demographic (gender, age, and ethnicity), and behavioral factors (consumption of tobacco, alcohol, and other drugs), as well as specific habits of oral hygiene.

The empirical evaluation of self-perception of oral health should incorporate as many critical, social, and biological indicators as possible, aiming at the formation of a synthesis measure, influenced in a micro and macro dimensional way, with repercussions on people's quality of life.

Thus, the objective of the present study was to perform a more comprehensive analysis of the factors that determine self-perception of oral health of Brazilians, based on a multidimensional methodological basis.

It is believed that the results of this study will contribute to the effectiveness of evaluation and planning of public oral health actions, making it possible to resize and qualify them.

**Methods**

This is a cross-sectional quantitative study with data from the population-based survey – National Health Survey (NHS), proposed by the Ministry of Health and conducted in 2013 by the Brazilian Institute of Geography and Statistics (IBGE).

The research is in a household level and the sampling plan used was based on a cluster sampling in three stages, with the sectors or groups of census tracts being the primary sampling units, the households the secondary, and the selected elderly inhabitants, the tertiary units.

The sample size was defined considering the level of precision desired for the estimates of some indicators of interest, resulting in a sample of 60,202 adults interviewed. Details on the sampling and weighting process are available in the NHS report.

Previously calibrated researchers collected the data. The information was obtained through individual interviews and stored on handheld computers. Only individuals older than 18 years old participated in the research. The interview was directed by three forms: the domicile, referring to the characteristics of the house; the residents of the house; and the individual, answered by a drawn resident of the house. For the present study it was considered exclusively the data of the drawn resident from the last two forms.

The survey was approved by the National Commission for the Protection of Human Subjects of the Ministry of Health. The data used are in the public domain from the National Health Survey. Being the data available without link: http://www.pns.icict.fiocruz.br/index.php?pa=resultados.
Treatment and data analysis

The outcome variable “self-perception of oral health” is the result of the question: *In general, how do you evaluate your oral health (teeth and gums)?* Possible answers were: very good, good, regular, poor and very poor. For the purpose of analysis in the present study, the responses were grouped into positive (very good and good) and negative (regular, poor and very poor).

In the exploration phase of the data, 47 variables of interest were cataloged in order to compose the independent variables, related to: sociodemographic characteristics (eight variables); oral self-care (five variables); oral health condition (five variables); use of dental services (five variables); general health condition (eighteen variables); job characteristics (six variables).

In order to verify the existence of one or more chronic diseases, regardless of the disease installed, a new variable grouping all the diseases listed above was created, entitled “presence of one or more chronic diseases.”

The variable ‘number of natural teeth present in the mouth’ was also developed. For that, it was subtracted the number of upper and lower teeth lost from all natural teeth (n = 32). Subsequently, the variable was categorized, according to a previous study, into more than 10 natural teeth present and 10 natural teeth present or less.

After the complete database treatment, dimensionality reduction was performed using the *Correlation-based Feature Selection* (CFS) algorithm using the 10-fold cross validation technique. This data mining test is recommended to be used in a large set of data and variables as proposed in the present study. It evaluated, according to response patterns, the entire data set and the 47 variables at a single time to look for variables highly related to the outcome variable and not related to each other. In this way, it does not only consider the utility of variables individually, but also the correlation level between them, thereby eliminating any and all confounding relationships. The variables with nonexistent or weak and/or redundant relations, which do not bring information gain to the model, are all eliminated by the algorithm, without needing any researcher’s influence.

Thus, it is possible to validate the pure and strict relations of the independent variables to the outcome variable with much more precision than other tests commonly used in the literature.

After, the variables related to ‘Self-perception of oral health’ were evaluated through logistic regression to measure the magnitude of the associations. The model had an explanatory capacity of 73%. All analyzes were performed using the software WEKA (Waikato Environment for Knowledge Analysis) environment.

The WEKA software does not report the individual confidence intervals and p values for each OR; it considers the default values of 95% confidence interval and p value < 0.05. In this type of analysis, the possibility of influencing the confidence interval due to the sample size is eliminated in the steps preceding the regression analysis.

Results

The descriptive analysis shows that about 34% of the individuals interviewed evaluated their oral health negatively (Table 1). In the results of the attribute selection analysis, it was verified that the variables most strongly related to self-perception of oral health were: difficulty feeding, upper dental loss, self-perception of the general health condition, evaluation of the last dental appointment, reason for last dental appointment and flossing. No variables related to sociodemographic and job characteristics were related to self-perception of health.

Table 1 shows the distribution of adults, considering the variables used in the study that did not present a strong relation with the dependent variable. Table 2 also describes the sample according to the independent variables that presented a relation with the self-perception of oral health. Table 3 shows the reasons for the chance of reporting negative oral health status according to independent variables.

The variable that most influenced the evaluation of oral health was the difficulty in feeding, where individuals who reported difficulty (11%) presented 5.81 more chance of having a poor perception of health in detriment to those without difficulty. The upper tooth loss was also linked to self-perception of health. The partial loss of upper teeth increases the probability of having a negative perception of oral health in 1.49, while the total loss of teeth was shown to be a protective factor (OR = 0.86).

Individuals who negatively evaluated their overall health (49%), presented 1.91 more chance of evaluating their oral health as bad. Regarding to the use of dental services, the search for dental consultations for reasons other than prevention (treatment or others) and negative evaluation of care increases the chances of the individual to have a negative perception of oral health.

Still, most of the individuals reported using dental floss, this condition linked to a good per-
Table 1. Descriptive analysis of the independent variables that do not presented a relation with the self-perception of oral health. Brazil, 2013 (n = 60202).

| Variables                  | Class          | Total   | Positive Perception | Negative Perception |
|----------------------------|----------------|---------|---------------------|---------------------|
|                            | n   | %   | n   | %   | n   | %   |
| Self-perception of oral health | 60202 | 100 | 39572 | 66 | 20630 | 34 |
| **Sociodemographic Characteristics** | | | | | | |
| Gender                     | Male | 25920 | 43 | 16570 | 64 | 9350 | 36 |
|                            | Female | 34282 | 57 | 23002 | 67 | 11280 | 33 |
| Age                        | 18 a 30 | 15750 | 26 | 11309 | 72 | 4441 | 28 |
|                            | 31 a 40 | 14139 | 23 | 9629 | 68 | 4510 | 32 |
|                            | 41 a 50 | 11160 | 19 | 7075 | 63 | 4085 | 37 |
|                            | 51 a 60 | 10426 | 17 | 5279 | 51 | 5147 | 49 |
|                            | More than 60 | 8727 | 14 | 6280 | 72 | 2447 | 28 |
| Skin color/ethnicity       | White | 24106 | 40 | 17183 | 71 | 6923 | 29 |
|                            | Black | 5631 | 9 | 3411 | 61 | 2220 | 39 |
|                            | Asian | 533 | 1 | 344 | 65 | 189 | 35 |
|                            | Mixed-race | 29512 | 49 | 18390 | 62 | 11122 | 38 |
|                            | Indian | 417 | 1 | 242 | 58 | 175 | 42 |
|                            | Ignored | 03 | 0 | 2 | 67 | 1 | 33 |
| Live with spouse           | Yes | 34522 | 57 | 22433 | 65 | 12089 | 35 |
|                            | No | 25680 | 43 | 17139 | 67 | 8541 | 33 |
| Marital status             | Married | 23741 | 39 | 15800 | 67 | 7941 | 33 |
|                            | Separated or Divorced | 4727 | 8 | 3186 | 67 | 1541 | 33 |
|                            | Widowed | 4708 | 8 | 2899 | 62 | 1809 | 38 |
|                            | Single | 27026 | 45 | 17687 | 65 | 9339 | 35 |
| Literacy                   | Yes | 54335 | 90 | 36638 | 67 | 17697 | 33 |
|                            | No | 5867 | 10 | 2934 | 50 | 2933 | 50 |
| Level of education         | Literate | 7630 | 13 | 4337 | 57 | 3293 | 43 |
|                            | Elementary school | 15288 | 25 | 8979 | 59 | 6309 | 41 |
|                            | High School | 18589 | 31 | 12849 | 69 | 5740 | 31 |
|                            | University | 8109 | 13 | 6499 | 80 | 1610 | 20 |
|                            | Postgraduate | 487 | 1 | 417 | 86 | 70 | 14 |
|                            | Did not answer | 10099 | 17 | 6491 | 64 | 3608 | 36 |
| Region of residence        | North | 12536 | 21 | 7830 | 62 | 4706 | 38 |
|                            | Northeast | 18305 | 30 | 10861 | 59 | 7444 | 41 |
|                            | Southeast | 14294 | 24 | 10167 | 71 | 4127 | 29 |
|                            | South | 7548 | 13 | 5476 | 73 | 2072 | 27 |
|                            | Midwest | 7519 | 12 | 5238 | 70 | 2281 | 30 |
| Oral Health Condition      | Lower dental loss | None | 21133 | 35 | 16571 | 78 | 4562 | 22 |
|                            | Some | 32121 | 53 | 18625 | 58 | 13496 | 42 |
|                            | All teeth missing | 6948 | 12 | 4376 | 63 | 2572 | 37 |
| Number of natural teeth present | None | 10019 | 17 | 5907 | 59 | 4112 | 41 |
|                            | > 10 | 50183 | 83 | 33665 | 67 | 16518 | 33 |
| Use of dental prosthesis   | ≤ 10 | 24431 | 41 | 14269 | 58 | 10162 | 42 |
|                            | No | 14932 | 25 | 8970 | 60 | 5962 | 40 |
|                            | Yes, but needs to replace some teeth | 5558 | 9 | 3668 | 66 | 1890 | 34 |
|                            | Yes, but needs to replace all teeth | 15281 | 25 | 12665 | 83 | 2616 | 17 |
Table 1. Descriptive analysis of the independent variables that do not presented a relation with the self-perception of oral health. Brazil, 2013 (n = 60202).

| Variables                                      | Class          | Total         | Positive Perception | Negative Perception |
|------------------------------------------------|----------------|---------------|---------------------|---------------------|
| Self-perception of oral health                | n %            | n %           | n %                 |                     |
| General Health Condition                      |                |               |                     |                     |
| Difficulty getting around                     | Yes            | 1567 3       | 811 52              | 756 48              |
|                                               | No             | 58635 97     | 38761 66            | 19874 34            |
| Difficulty seeing                             | Yes            | 23859 40     | 15951 67            | 7908 33             |
|                                               | No             | 36343 60     | 23621 65            | 12722 35            |
| Consume alcoholic drinks                      | Yes            | 23002 38     | 15332 67            | 7670 33             |
|                                               | No             | 37200 62     | 24240 65            | 12960 35            |
| Perform physical activity                     | Yes            | 17896 30     | 13189 74            | 4707 26             |
|                                               | No             | 42306 70     | 26383 62            | 15923 38            |
| Use tobacco                                   | Yes            | 8729 14      | 4853 56             | 3876 44             |
|                                               | No             | 51473 86     | 34719 67            | 16754 33            |
| Presence of any chronic, physical or mental illness | Yes 27250 45  | 22983 84     | 4267 16             |                     |
|                                               | No             | 32952 55     | 16589 50            | 16363 50            |
| Use of dental services                        |                |               |                     |                     |
| Time since the last dental appointment        | In the last 12 months | 25656 43  | 18688 73            | 6968 27             |
|                                               | Over 1 and under 2 years | 11518 19 | 7622 66            | 3896 34             |
|                                               | Over 2 years | 20942 35     | 12162 58            | 8780 42             |
|                                               | Never went to the dentist | 2086 3 | 1100 53            | 986 47             |
| Duration of dental appointment                | ≤ 30 minutes 17088 28 | 12274 72 | 4814 28          |                     |
|                                               | 30 < 61 minutes 7439 12 | 5648 76  | 1791 24            |                     |
|                                               | > 60 minutes 1129 2 | 766 68        | 363 32             |                     |
|                                               | Not applicable 34546 57 | 20884 60 | 13662 40          |                     |
| The dental appointment by Health Insurance    | Private 14042 23 | 10647 76 | 3395 24          |                     |
|                                               | SUS 6451 11 | 3947 61       | 2504 39            |                     |
|                                               | Did not know/Not answered 34965 58 | 20884 60 | 14081 40          |                     |
| Individual health insurance                   | Yes 4744 8 | 3835 81       | 909 19             |                     |
|                                               | No 20912 35 | 14853 38      | 6059 29            |                     |
|                                               | Not answered 34546 57 | 20844 53 | 13662 66          |                     |
| Oral Self-care                                |                |               |                     |                     |
| Brushing frequency                            | Never brushed 132 0 | 58 44       | 74 56             |                     |
|                                               | Does not brush every day 520 1 | 191 37 | 329 63          |                     |
|                                               | Once a day 4791 8 | 2229 47      | 2562 53            |                     |
|                                               | Twice a day or more 53594 89 | 36575 68 | 17019 32          |                     |
|                                               | Not answered 1165 2 | 519 45      | 646 55            |                     |
| Toothbrush                                    | Yes 58719 98 | 38902 66     | 19817 34           |                     |
|                                               | No 186 0 | 93 50        | 93 50             |                     |
|                                               | Not answered 1297 2 | 577 44      | 720 56            |                     |
| Toothpaste                                    | Yes 58669 97 | 38874 66     | 19795 34           |                     |
|                                               | No 236 0 | 121 51       | 115 49            |                     |
|                                               | Not answered 1297 2 | 577 44      | 720 56            |                     |
| Toothbrush replacement frequency              | Less than 3 months 27958 46 | 19590 70 | 8368 30          |                     |
|                                               | More than 3 months 30947 51 | 19405 63 | 11542 37          |                     |
|                                               | Not answered 1297 2 | 577 44      | 720 56            |                     |
received oral health condition, with those who did not use it, 1.88 more likely to present negative oral health perception.

**Discussion**

The variables most strongly related to the self-perception of oral health found in the study were: difficulty feeding, upper dental loss, self-perception of the general health condition, evaluation of the last dental appointment, reason for last dental appointment and flossing. Thus, it can be inferred that subjective conditions, which evaluate human experiences and health, are much more capable of explaining the variability of self-perception of oral health than objective measures, which mostly measure the context of the presence of diseases.

According to studies, individuals who report more dysfunctions, symptoms, and oral incapacities evaluate their oral health in a more negative way, in line with the findings of the present study, which demonstrate that difficulty feeding increases by 5.8 times the chance of the individual exhibiting a negative self-perception of oral health. These results may reflect the relation between masticatory limitation and the worsening of the psychosocial conditions by the embarrassment to feed in front of other people, or on physical or functional conditions, especially as the nuisance when swallowing food.

The literature shows that the number of teeth present in the mouth is an important determin-
Table 2. Descriptive analysis of the independent variables that presented a relation with the self-perception of oral health. Brazil, 2013 (n = 60202).

| Variables                       | Class               | Total     | Positive Perception | Negative Perception |
|---------------------------------|---------------------|-----------|---------------------|---------------------|
|                                 | n   | %      | n   | %      | n   | %      |
| **Oral Health Condition**       |      |        |      |        |      |        |
| Difficulty eating               | None | 53336  | 89  | 38886  | 73  | 14450  | 27  |
|                                 | Some | 6866   | 11  | 686    | 10  | 6180   | 90  |
| Upper dental loss               | No teeth lost       | 22387    | 37  | 17568  | 78  | 4819   | 22  |
|                                 | Some teeth lost     | 26806    | 45  | 15390  | 57  | 11416  | 43  |
|                                 | All teeth lost      | 11009    | 18  | 6614   | 60  | 4395   | 40  |
| **General Health Condition**    |      |        |      |        |      |        |
| Self-perception of general health | Positive | 39141  | 65  | 29346  | 75  | 9795   | 25  |
|                                 | Negative | 21061  | 35  | 10226  | 49  | 10835  | 51  |
| **Use of dental services**      |      |        |      |        |      |        |
| Reason for the last dental appointment | Prevention or check up | 14048   | 23  | 11551  | 82  | 2497   | 18  |
|                                 | Treatment          | 11144    | 19  | 6859   | 62  | 4285   | 38  |
|                                 | Other              | 464      | 1   | 278    | 60  | 186    | 40  |
|                                 | Not answered       | 34546    | 57  | 20884  | 60  | 13662  | 40  |
| Evaluation of the dental service received | Positive | 23248  | 39  | 17520  | 75  | 5728   | 25  |
|                                 | Negative | 2408    | 4   | 1168   | 49  | 1240   | 51  |
|                                 | Not answered       | 34546    | 57  | 20884  | 60  | 13662  | 40  |
| **Oral Self-care**              |      |        |      |        |      |        |
| Use of dental floss             | Yes               | 30699    | 51  | 23154  | 75  | 7545   | 25  |
|                                 | No                | 28206    | 47  | 15841  | 56  | 12365  | 44  |
|                                 | Not answered      | 1297     | 2   | 577    | 44  | 720    | 56  |

nant of a positive perception of oral health rather than edentulism. However, in the present study, the loss of some upper teeth seems to impact more negatively on self-perception of oral health than the total loss of the lower teeth. In addition, upper edentulism was shown to be a protective factor for positive perception of oral health (OR = 0.89). In spite of the apparent incoherence of these results, the individuals seem to evaluate their oral health more positively when they do not present any tooth, than with the maintenance of few teeth in precarious conditions, in an insufficient number, and without access to prosthesis to ensure an effective and comfortable chewing. Total edentulous patients were found also to be more prone to receive a low-complexity rehabilitative treatment with the use of total dentures, which can be collected by public health services compared to partial edentulous patients, whose dental treatment options are, for the most part, more complex and of difficult access. These factors may induce partial edentulous patients to present greater functional and aesthetic impairments and consequently, greater dissatisfaction with oral health.

On the other hand, the relationship between self-perception of general and oral health is in agreement with the findings of the current research. In the present study, the prevalence of negative perceptions among individuals suffering from general health problems and biological frailty was higher. Silva et al. consider this to be a complex and multifaceted relationship, since some unfavorable general health conditions may act as predisposing factors for oral health impairment, as well as deficient oral conditions may generate general health problems. This result confirms the importance of studying co-morbidities and common risk factors. In this sense, it is important to focus in the relationship between self-perception of oral health and general health condition in order to draw up effective preventive strategies.

However, it should be noted that the presence of some chronic disease or a group of them, as a variable of interest, was not able to explain the
Table 3. Reasons for self-perceived negative oral health according to the independent variables.

| Variable                                  | Oddis Ratio (OR) |
|-------------------------------------------|------------------|
| Difficulty eating                          |                  |
| None                                      | 1.00             |
| Some                                      | 5.81             |
| Upper dental loss                         |                  |
| None tooth lost                           | 1.00             |
| Some teeth lost                           | 1.49             |
| All teeth lost                            | 0.86             |
| Self-perception of general health         |                  |
| Positive                                  | 1.00             |
| Negative                                  | 1.91             |
| Evaluation of the dental service received  |                  |
| Positive                                  | 1.00             |
| Negative                                  | 2.50             |
| Reason for the last dental appointment    |                  |
| Prevention, check-up                      | 1.00             |
| Treatment                                 | 1.07             |
| Other                                     | 1.21             |
| Use of Dental Floss                       |                  |
| Yes                                       | 1.00             |
| No                                        | 1.88             |

self-perception of oral health, but only the general context of health. This finding indicates that general health situations transcend chronic conditions and reinforces that the complexity in the framework of health perceptions is much more involved with subjective issues than with objective clinical demands.

The reason and the evaluation of the last dental appointment were the only variables of the group of “use of dental services” that were related to the dependent variable. Visiting the dentist for check-up or prevention and positively evaluate appointment were self-referred factors of oral health protection. It is suggested that the explanation for this finding lies in the fact that routine visits to the dentist and good dental service can minimize dental loss and improve oral condition, as well as empower patients with healthy living habits and the health-disease process, making them more confident about their status of oral health.

A similar condition can be observed regarding flossing. Individuals who floss regularly have a better self-perception of oral health. The study emphasizes that the lack of knowledge and motivation to adopt preventive and care practices aggravates the oral health condition and compromises the self-perception of oral health.

Moreover, it should be noted that the literature is rather vast and inconclusive in relation to factors that truly affect self-perception of oral health. The only pattern that emerges from these studies is that most of the factors associated to sociodemographic, work characterize, lifestyle, health, and use of dental services by the individuals are related to the self-perception of oral health, however they do not contribute to the understanding of its variability. Given the diversity and the low power of association of the methods used to cross the factors of interest, the information obtained becomes little advantageous for the assertive decision making.

Through the feature selection test applied in the present study, it became possible to consider the pluralism of the social and health segments involved in the large database of the National Health Survey and to eliminate possible confounding or redundant factors, unraveling the variables that are truly important for the conformation of the self-perception of oral health. This condition becomes crucial for contributions that aim to increase the knowledge about self-perception of oral health in the Brazilian adult population, which can help supporting decision-making processes and redirection of oral health practices and resources.

**Limitations of the study**

As a limitation of the study, we highlight the subjectivity imbricated in the evaluation of self-perception of oral health, since it is susceptible to changes throughout life, day, week as a result of contextual conditions, psychological state experienced by the individual, as well as involving values and feelings not always expressed. However, the subjectivity does not disqualify the relevance to guide policy and to plan decisions in health.

In addition, because this is a cross-sectional study, it was not possible to establish a temporal relationship between the associations found.

**Conclusion**

The use of a multidimensional methodological basis was able to (re)design explanatory models for the self-perception of oral health of Brazilian adults and its results should be considered in the
implementation, evaluation, and qualification of the national oral health network.

It is noteworthy that the determinants of the self-perception of oral health of Brazilians were difficulty feeding, use of dental floss, upper dental loss, self-perception of the general health condition, and reason and evaluation last dental appointment; and that factors related to sociodemographic and work characteristics, lifestyle, and presence of chronic diseases contributed little to the understanding of the variability of the self-perception of oral health of the adult population.

**Collaborations**

D Bordin delineated the study, interpreted the data and wrote the article. CB Fadel delineated the study and carried out the writing of the article. CB Santos conducted the statistical analysis, created the index for analysis and performed the interpretation of the data. CAS Garbin, SAS Moimaz and NA Saliba contributed writing and critical content review.
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