

UNIVERSIDADE FEDERAL DE SANTA MARIA
CENTRO DE CIÊNCIAS DA SAÚDE
PROGRAMA DE PÓS GRADUAÇÃO EM CIÊNCIAS
ODONTOLÓGICAS

Maria Laura Braccini Fagundes

**AUTOPERCEPÇÃO DA CONDIÇÃO BUCAL EM DIFERENTES
GRUPOS ETÁRIOS E SEUS FATORES ASSOCIADOS**

Santa Maria, RS

2020

Maria Laura Braccini Fagundes

**AUTOPERCEPÇÃO DA CONDIÇÃO BUCAL EM DIFERENTES GRUPOS
ETÁRIOS E SEUS FATORES ASSOCIADOS**

Dissertação de mestrado apresentada ao Programa de Pós-Graduação em Ciências Odontológicas da Universidade Federal de Santa Maria (UFSM), como requisito para a obtenção do título de **Mestre em Ciências Odontológicas com ênfase em Saúde Coletiva.**

Orientadora: Prof^a. Dr^a. Luísa Helena do Nascimento Tôrres

Santa Maria, RS
2020

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001

Fagundes, Maria Laura Braccini
Autopercepção da Condição Bucal em Diferentes Grupos
Etários e seus Fatores Associados / Maria Laura Braccini
Fagundes.- 2020.
56 p.: 30 cm

Dissertação (mestrado) - Universidade Federal de Santa
Maria, Centro de Ciências da Saúde, Programa de Pós
Graduação em Ciências Odontológicas, RS, 2020

1. Autopercepção 2. Determinantes Sociais da Saúde 3.
Grupos Etários 4. Saúde Bucal 5. Qualidade de vida I.
Titulo.

Sistema de geração automática de ficha catalográfica da UFSM. Dados fornecidos pelo autor(a). Sob supervisão da Direção da Divisão de Processos Técnicos da Biblioteca Central. Bibliotecária responsável Paula Schoenfeldt Patta CRB 10/1728.

Declaro, MARIA LAURA BRACCINI FAGUNDES, para os devidos fins e sob as penas da lei, que a pesquisa constante neste trabalho de conclusão de curso (Dissertação) foi por mim elaborada e que as informações necessárias objeto de consulta em literatura e outras fontes estão devidamente referenciadas. Declaro, ainda, que este trabalho ou parte dele não foi apresentado anteriormente para obtenção de qualquer outro grau acadêmico, estando ciente de que a inveracidade da presente declaração poderá resultar na anulação da titulação pela Universidade, entre outras consequências legais.

Maria Laura Braccini Fagundes

**AUTOPERCEPÇÃO DA CONDIÇÃO BUCAL EM DIFERENTES GRUPOS
ETÁRIOS E SEUS FATORES ASSOCIADOS**

Dissertação de mestrado apresentada ao Programa de Pós-Graduação em Ciências Odontológicas da Universidade Federal de Santa Maria (UFSM), como requisito para a obtenção do título de **Mestre em Ciências Odontológicas com ênfase em Saúde Coletiva**.

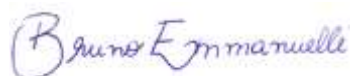
Aprovado em 31 de agosto de 2020:



Luísa Helena do Nascimento Tôrres, Prof^a. Dr^a. (UFSM)
(Orientadora/Presidente)



Beatriz Unfer, Prof^a. Dr^a. (UFSM)



Bruno Emmanuelli, Prof. Dr. (URI)

Santa Maria, RS
2020

Dedico este trabalho aos meus primeiros mestres,
Neuza e Quino.

AGRADECIMENTOS

A caminhada que se encerra simbolicamente com essa dissertação foi bonita, transformadora e marcada por diversas pessoas que de alguma forma me acompanharam. Minha profunda gratidão por fazerem parte deste processo, por de alguma maneira doarem um pouco de si e contribuírem com meu crescimento.

"Nós nos tornamos nós mesmos através dos outros"

Vygotsky

Agradeço primeiramente a **Deus**, pela saúde e oportunidade de desfrutar dessa vida maravilhosa. Obrigada por todas as sincronicidades que me trouxeram até aqui.

À minha família “de casa”: **Mãe, Maninho e Goga**, por todo amor e apoio, que me permitem voar alto. E ao **Meu Pai**, por ser meu anjo de proteção e luz, que segue me ensinando através das lições que deixou.

Ao **Lucas**, pela cumplicidade, compreensão e por ser meu grande incentivador. Obrigada por sonhar junto comigo os sonhos mais bonitos do mundo.

À minha **Família de Amigos**, que é grande, diversa, e está espalhada por esse mundo. Por serem tão importantes, seria difícil descrever cada um. Obrigada por serem um pedacinho de mim e me lembrarem sempre de quem eu sou.

“Você não precisa que ninguém te ensine a voar, está no seu espírito. Mas é bom ter quem nos lembre de que temos asas.”

Ryane Leão

À **Universidade Federal de Santa Maria**, por em 2011 ter me acolhido, e, desde então, me proporcionar a bênção de uma educação pública, de qualidade e libertadora.

À minha Orientadora, Prof^ª. Dr^ª. **Luísa Helena do Nascimento Tôrres**, pela riquíssima oportunidade de ingressar nessa caminhada. Sou imensamente grata por todo aprendizado e construção proporcionados durante esses dois anos.

À Prof^ª. Dr^ª. **Beatriz Unfer**, pelo exemplo de força e dedicação à frente da disciplina de Saúde Coletiva, e pelos ensinamentos gratuitos e diários. Se hoje estamos nos fortalecendo enquanto grupo, é porque temos raízes fortes. Obrigada também pela atenção em participar da minha banca de defesa e dedicar seu tempo para avaliar e contribuir com este trabalho.

Ao Prof. Dr. **Jessye Melgarejo do Amaral Giordani**, pelos ensinamentos e pelo aprendizado, desde a minha graduação, que despertaram em mim o encanto pelo estudo da epidemiologia. Obrigada, sobretudo, pela amizade, apoio e imenso incentivo, sempre fundamentais.

Aos professores da banca de qualificação, **Dr. Antônio Carlos Frias e Dr. Thiago Machado Ardenghi**, pelas valiosas contribuições a este trabalho e pela disposição em ajudar mesmo depois, sempre acessíveis, solucionando minhas dúvidas com gentileza e sem vaidade.

Aos professores da banca de defesa, **Dr. Bruno Emmanuelli e Dr. Bernardo Antonio Agostini** por dedicarem seu tempo para avaliar e enriquecer este trabalho com as suas contribuições. Os nomes de vocês foram pensados com muito carinho e admiração.

A todos os **Colegas da Saúde Coletiva (e do Coletivo Saúde) Ariane, Carol, Fernanda, Gabriele, Natália, Orlando e Patricia**, pela convivência, pela troca de ideias e por compartilharem esse caminho comigo. É enriquecedor trabalhar e aprender junto com vocês. À **Gabi e ao Orlando** agradeço também pela parceria e amizade compartilhadas, não só nas inúmeras discussões científicas, mas também pelo apoio nos momentos em que seria difícil caminhar sozinha. Obrigada pela disposição em ajudar e contribuir na construção desse trabalho.

Às **minhas preceptoras e aos colegas de trabalho durante a Residência Multiprofissional em Saúde**, por terem compartilhado comigo essa vivência fundamental na minha formação como profissional da saúde e defensora do SUS.

Aos **Colegas da turma de Mestrado** pela convivência e conhecimentos compartilhados.

Aos **responsáveis pelo planejamento e execução do “SB SP 2015 – Pesquisa Estadual das Condições Bucais no Estado de São Paulo”**, base desta dissertação.

Ao **Programa de Pós-Graduação em Ciências Odontológicas (PPGCO) da UFSM** e aos **seus docentes** pelas oportunidades e aprendizado. Em especial à **Jéssica Dalcin**, secretária do PPGCO, pela dedicação e disposição em ajudar sempre que necessário.

À **Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)** pela concessão de bolsa durante o mestrado.

E aos **Professores** que de alguma maneira me marcaram, com os quais eu tive o prazer de aprender, seja na infância ou na vida adulta, e que despertaram em mim o desejo de querer *ser como eles*.

“As palavras só tem sentido se nos ajudam a ver o mundo melhor. Aprendemos palavras para melhorar os olhos. Há muitas pessoas de visão perfeita que nada veem... O ato de ver não é coisa natural. Precisa ser aprendido. Quando a gente abre os olhos, abrem-se as janelas do corpo e o mundo aparece refletido dentro da gente”.

Rubem Alves

“We can judge our progress by the courage of
our questions and the depth of our answers,
our willingness to embrace what is true rather
than what feels good.”
Carl Sagan

RESUMO

AUTOPERCEÇÃO DA CONDIÇÃO BUCAL EM DIFERENTES GRUPOS ETÁRIOS E SEUS FATORES ASSOCIADOS

AUTOR: Maria Laura Braccini Fagundes

ORIENTADOR: Luísa Helena do Nascimento Tôrres

A autopercepção de saúde bucal é uma medida multidimensional que resulta de um somatório complexo de fatores, os quais envolvem características individuais, o ambiente e os contextos aos quais os indivíduos estão expostos. Também é capaz de refletir as experiências subjetivas relacionadas ao bem-estar psicológico, social e funcional dos indivíduos, inclusive impactando na qualidade de vida destes. Logo, analisar os aspectos específicos que afetam a saúde subjetiva em cada estágio da vida pode corroborar a melhoria das políticas de saúde, levando em consideração o que é pertinente para cada faixa etária. O objetivo deste estudo foi verificar os fatores associados à autopercepção da saúde bucal em adolescentes, adultos e idosos. Trata-se de um estudo observacional transversal com dados provenientes da Pesquisa Estadual das Condições Bucais no Estado de São Paulo (SBSP-2015), realizada em 163 municípios, de forma a representar a população do estado de São Paulo. A amostragem foi por conglomerado em duplo estágio de sorteio. Dados de 5.314 adolescentes (15-19 anos), 5.815 adultos (35-44) e 5.556 idosos (65+) foram analisados. O desfecho foi avaliado através de um item global de autopercepção de saúde bucal. Variáveis demográficas e socioeconômicas, de capital social e uso de serviço odontológico foram coletadas, além de variáveis clínicas incluindo número de dentes cariados e perdidos, uso e necessidade de prótese. Os dados foram analisados através da regressão de Poisson hierárquica, utilizando o comando *svy*, para estimar as razões de prevalência (RP) e seus respectivos intervalos de confiança (IC) a 95%. As análises para cada grupo etário foram realizadas separadamente e então comparadas. Adolescentes e adultos do sexo feminino, bem como adultos não brancos e idosos com maior nível de escolaridade apresentaram pior autopercepção de saúde bucal. Ter menor capital social aumentou em 56%, 28% e 21% a prevalência de autopercepção negativa de saúde bucal em adolescentes, adultos e idosos, respectivamente. Indivíduos que utilizaram o serviço odontológico para tratamento apresentaram pior autopercepção de saúde bucal, para os três grupos etários. No modelo final, adolescentes, adultos e idosos que possuíam maior número de dentes cariados apresentaram, respectivamente, prevalências 56%, 30% e 29% maiores de autopercepção negativa de saúde bucal. Adolescentes e adultos com maior número de dentes perdidos apresentaram, respectivamente, 23% e 9% maior prevalência de autopercepção negativa de saúde bucal. Já os idosos com necessidade de prótese dentária apresentaram duas vezes maior prevalência de autopercepção negativa de saúde bucal. Portanto, existem diferenças entre os fatores associados à autopercepção de saúde bucal nas diferentes faixas etárias. Aspectos intergeracionais parecem ter influência na maneira como os indivíduos percebem sua saúde bucal. Além disso, os achados deste estudo reforçam a importância do planejamento e avaliação das ações e políticas de saúde que considerem os ciclos de vida.

Palavras-chave: Autopercepção. Determinantes Sociais da Saúde. Grupos etários. Qualidade de Vida. Saúde Bucal.

ABSTRACT

ORAL HEALTH SELF-PERCEPTION IN DIFFERENT AGE GROUPS AND ASSOCIATED FACTORS

AUTHOR: Maria Laura Braccini Fagundes
ADVISOR: Luísa Helena do Nascimento Tôrres

Oral health self-perception (OHSP) is a multidimensional measure which results from a complex web of factors including, in addition to individual characteristics, also the environment and context to which individuals are exposed. As it reflects the individuals' experience regarding psychological, social and functional well-being, OHSP impacts quality of life. Therefore, to analyze the specific aspects that affect health at each stage of life can corroborate with health policies improvement, taking into account what is relevant for each age group. This study aimed to verify the factors associated with OHSP in adolescents, adults and older adults. This is a cross-sectional observational study with data from the São Paulo Oral Health Survey – 2015 (SBSP-2015), conducted in 163 municipalities, representative for the state of São Paulo. The sampling design comprised a cluster sampling in two-stages. Data from 5,314 adolescents (15-19 years), 5,815 adults (35-44) and 5,556 older adults (65+) were analyzed. The outcome was assessed by a global self-rating item. Variables regarding demographic and socioeconomic factors, social capital and dental attendance were collected, in addition to clinical variables, including number of decayed and missing teeth, dental prosthesis use and dental prosthesis need. Hierarchical Poisson regression models were performed, using the *svy* command, to estimate prevalence ratios (PR) and its confidence intervals (95%CI). Analyses for each age group were performed separately and then compared. Female adolescents and adults, as well as non-white adults and older adults with a higher educational level had worse OHSP. Having lower social capital increased the prevalence of negative OHSP in adolescents, adults and older adults by 56%, 28% and 21%, respectively. Individuals whose reason for last dental attendance was treatment had a higher prevalence of the outcome for the three age groups. In the final model, adolescents, adults and older adults with greater amount of decayed teeth showed 56%, 30% and 29% higher prevalence of negative OHSP, respectively. Adolescents and adults with higher number of missing teeth showed, respectively, 23% and 9% higher prevalence negative OHSP. The older adults with dental prosthesis need showed two times higher prevalence of negative OHSP. Therefore, there are differences among the factors associated with negative OHSP in different age groups. Intergenerational aspects seem to play a role on the way individuals perceive their oral health. In addition, this study findings reinforce the relevance of planning and evaluating health actions and policies considering the life cycles.

Key words: Self-Concept. Social Determinants of Health. Age Groups. Quality of Life. Oral Health.

SUMÁRIO

1	INTRODUÇÃO GERAL	8
2	ARTIGO: FACTORS ASSOCIATED WITH ORAL HEALTH SELF- PERCEPTION IN DIFFERENT AGE GROUPS	12
	ABSTRACT.....	15
	INTRODUCTION.....	16
	METHODS.....	17
	RESULTS.....	20
	DISCUSSION.....	21
	REFERENCES.....	26
	TABLES AND FIGURES.....	29
3	CONSIDERAÇÕES FINAIS	39
	REFERÊNCIAS	40
	ANEXO A – NORMAS PARA PUBLICAÇÃO NO PERIÓDICO COMMUNITY DENTISTRY AND ORAL EPIDEMIOLOGY	44
	ANEXO B – FICHA DE EXAME E FORMULÁRIO	54
	ANEXO C – TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO	56

INTRODUÇÃO GERAL

A produção e a distribuição de saúde são determinadas pelas condições de vida nas quais as pessoas nascem, vivem, trabalham e envelhecem (SOLAR; IRWIN, 2010). Logo, o conceito de saúde também traduz uma construção social, estando nossas crenças e concepções dependentes dos contextos bioculturais, influenciados pelas ideologias social e médica prevalentes (KAPLAN; BARON-EPEL, 2003). Em 2016, a Federação Mundial de Odontologia publicou um novo conceito de saúde bucal destacando, além da capacidade física, os recursos pessoais e sociais dos indivíduos. Esse conceito busca romper com o paradigma biomédico, trazendo uma visão mais holística da saúde bucal e enfatiza que ela é influenciada pelas experiências, expectativas, percepções e habilidade de adaptação dos indivíduos às circunstâncias (GLICK et al., 2016). Nesse sentido, o conhecimento da influência das condições bucais na vida das pessoas pode colaborar na redução das sequelas dos agravos, refletindo na melhora da saúde e da qualidade de vida da população (LUCHI et al., 2013).

A medida em que se fortalecem as evidências quanto a influência dos aspectos sociais, emocionais e funcionais na saúde bucal dos indivíduos, vem sendo reconhecida a importância do uso de indicadores subjetivos de avaliação da condição de saúde bucal (LOCKER; GIBSON, 2005). Essas medidas tem demonstrado ser preditoras de declínio funcional, de autopercepção de saúde geral, bem como, de qualidade de vida (BENYAMINI et al., 2000; BENYAMINI; LEVENTHAL; LEVENTHAL, 2004). O conceito de saúde que emerge das autoavaliações é baseado em diferentes fontes de informação, e deve ser compreendido como uma construção complexa, dependente do contexto, influenciada por comparações e podendo, inclusive, ser contraditório (JYLHA, 1994; MANDERBACKA, 1998). Além disso, as respostas à questão da saúde bucal auto-avaliada resultam de um processo que envolve julgamento e consideração de inúmeras experiências tanto do presente quanto do passado (ATCHISON; GIFT, 1997; LOCKER; MAGGIARIAS; WEXLER, 2009).

Dentre os indicadores subjetivos utilizados está a autopercepção de saúde bucal (GIFT; ATCHISON; DRURY, 1998). O processo de autoavaliação difere-se da avaliação normativa, isto é, do exame clínico realizado por um profissional da saúde, pois reflete a experiência subjetiva das pessoas com a sua saúde e bem-estar, baseando-se nos conhecimentos disponíveis de saúde e doença (KOJIMA et al., 2013). É, portanto, uma avaliação subjetiva, autorrelatada pelo indivíduo, de acordo com os seus próprios julgamentos, observações e compreensão da

sua saúde. Além disso, este processo é dinâmico, podendo se alterar diversas vezes no decorrer da vida (MARTINS; BARRETO; PORDEUS, 2009).

A autoavaliação é uma medida multidimensional que resulta de um somatório complexo de fatores, os quais envolvem, além das características individuais, também o ambiente e o contexto aos quais os indivíduos estão expostos (SILVA; OLIVEIRA, 2018). A relação entre características socioeconômicas e demográficas, suporte social, indicadores normativos e saúde bucal subjetiva ainda não foi completamente elucidada (VETTORE; AHMAD; MACHUCA; FONTANINI, 2019). Determinantes sociais proximais e distais demonstram estar associados à percepção de saúde bucal das populações, com uma maior prevalência de saúde bucal ruim estando associada a menor expectativa de escolaridade, menor renda per capita, iniquidades na concentração de renda, e piores índices de desenvolvimento humano (LUCHI et al., 2013; SILVA; OLIVEIRA, 2018; TASSINARI et al., 2007). Em estudo que observou a associação entre as relações sociais, meio ambiente e saúde em 45 países, evidenciou-se a influência dos fatores socioeconômicos, desigualdade e capital social sobre a autopercepção de saúde, reforçando a importância dos determinantes sociais nessa relação (MANSYUR et al., 2008).

Pode-se mensurar a autopercepção de saúde bucal através de questionários compostos por diversas perguntas que podem englobar a avaliação das consequências funcionais, psicológicas e sociais dos agravos bucais (GABARDO et al., 2015; GABARDO; MOYSÉS, 2013) ou através de uma única pergunta, como um indicador global da percepção de saúde bucal (ATCHISON; GIFT, 1997; LOCKER; GIBSON, 2005). As avaliações feitas através de uma única questão são válidas, fortemente correlacionadas aos questionários, e trazem vantagens ao serem utilizadas quando o tempo e recursos para aferição são limitados (CUNNY; PERRI, 1991; LOCKER; GIBSON, 2005; PATTUSSI et al., 2007; THOMSON et al., 2012). Em grandes levantamentos epidemiológicos a autopercepção de saúde bucal, por ser uma medida de simples aferição, pode substituir a avaliação das condições clínicas odontológicas (THOMSON; HE; ELANI, 2019). Além de poder ser utilizada para rastreamento e predição de problemas bucais, representa uma medida especialmente importante por refletir as prioridades individuais e, considerando o papel que o paciente desempenha nas suas decisões terapêuticas, a autopercepção pode influenciar na adesão ao tratamento e no uso dos serviços de saúde (LOCKER; MILLER, 1994).

As observações diagnósticas realizadas pelos profissionais da saúde muitas vezes são discrepantes daquelas relatadas pelos sujeitos ao se auto-avaliarem. No entanto, estas não são necessariamente excludentes, visto que é possível que ambas as perspectivas sejam complementares, visando assim, o encontro tanto das expectativas do paciente quanto das

necessidades de tratamento identificadas pelo exame diagnóstico feito pelo profissional (UNDEN; ELOFSSON, 2001). Os reflexos sociais e psicológicos das condições clínicas são mediados por outras variáveis, como características funcionais e estéticas ou condições socioeconômicas. Explorar esses fatores que conectam os indicadores clínicos aos subjetivos pode ajudar a compreender quais condições interferem na qualidade de vida dos indivíduos e indicar as prioridades na alocação de recursos em saúde pública (LOCKER; MILLER, 1994). Do ponto de vista clínico, a avaliação rotineira da autopercepção é importante para aumentar a adesão a comportamentos saudáveis (BENYAMINI; LEVENTHAL; LEVENTHAL, 2004) pois possibilita que o paciente tenha consciência da sua condição de saúde, podendo induzir mudanças e aquisição de hábitos benéficos à saúde, e assim melhorando sua qualidade de vida (SALIBA et al., 2007; MARTINS; BARRETO; PORDEUS, 2009; ROCHA et al., 2015).

Algumas diferenças na autopercepção de saúde bucal demonstram ser influenciadas pela idade. Indivíduos mais jovens tendem a basear sua autoavaliação em comportamentos de saúde, necessidade e histórico de tratamento odontológico, enquanto os mais velhos geralmente têm como referência a perda dentária e o uso de prótese (LOCKER; MAGGIARIAS; WEXLER, 2009). A compreensão do corpo e da saúde podem se modificar de acordo com as diferentes experiências e expectativas de cada fase do curso de vida, levando a percepções de saúde distintas a medida que se amadurece (CARR, 2001).

A adolescência é uma fase de transição entre a infância e a juventude, a qual traz mudanças físicas, emocionais e sociais, e o comportamento dos indivíduos durante essa fase tende a ser mais instável, dependente de fatores contextuais (FURUTA et al., 2012). Sabe-se que há uma grande relevância dos aspectos ligados à estética para este grupo etário, devido à importância atrelada ao impacto social, podendo interferir também na autopercepção de saúde bucal (KAIEDA et al., 2019). Os comportamentos iniciados nesta fase podem perdurar pela vida adulta, induzindo a criação de hábitos que, por sua vez, poderão influenciar no desenvolvimento da saúde dessas pessoas de maneira positiva ou negativa (SENNA; DESSEN, 2012).

Já na idade adulta, as implicações da condição de saúde bucal podem prejudicar o desempenho no trabalho e as interações sociais, o que pode influenciar negativamente também a percepção da condição bucal. Além disso, o aspecto subjetivo da condição bucal tem significados distintos para os adultos de diferentes gerações (LAHTI; SUOMINEN-TAIPALE; HAUSEN, 2008). Isto pode resultar em autoavaliação positiva da sua condição bucal apesar da condição clínica, bem como influenciar na redução da busca e do uso dos serviços de saúde (VALE; MENDES; MOREIRA, 2013).

Na faixa etária acima de 60 anos percebe-se a influência de fatores como dor e desconforto ao se alimentar como determinantes importantes na maneira como o idoso percebe sua condição bucal (COSTA; SAINTRAIN; VIEIRA, 2010; VASCONCELOS, 2012). Os aspectos sociocomportamentais também demonstram ter grande influência na autopercepção deste grupo etário (BALTES; STAUDINGER; LINDENBERGER, 1999; NUNES; BARRETO; GONÇALVES, 2012). O envelhecimento é acompanhado de uma série de transformações devido às mudanças de papéis, tanto na família como na sociedade, perdas e ganhos diversos e mudanças nos contatos sociais, podendo também acarretar consequências à saúde afetada pelo declínio funcional, e desencadear um maior grau de dependência e vulnerabilidade (NUNES; BARRETO; GONÇALVES, 2012). Apesar disso, pesquisadores apontam que com o avançar da idade, algumas estratégias de adaptação vão sendo criadas para adequar seus recursos e competências às mudanças, ajustando-se às circunstâncias da vida e aumentando, assim, sua resiliência (BALTES; STAUDINGER; LINDENBERGER, 1999).

A autopercepção de saúde bucal abrange diferentes graus de subjetividade por parte dos indivíduos, como a percepção das iniquidades sociais e seus efeitos na saúde, por isso é necessário transpor os indicadores clínicos e incorporar os aspectos multidimensionais da saúde para compreender as suas implicações (ALLEN, 2003; BRENNAN; SPENCER, 2004). Os índices comumente utilizados na elaboração de ações e estratégias em saúde bucal consideram essencialmente os fatores biológicos, apesar de já estabelecida na literatura a importância dos fatores psicossociais sobre as doenças bucais (ANDRADE; NARVAI, 2013). Assim, avaliar a percepção do indivíduo em relação à sua condição bucal oferece dados que vão além dos aspectos clínicos, devendo ser considerados no planejamento e organização da atenção em saúde bucal (BULGARELI et al., 2018). Logo, a autopercepção da condição bucal é um parâmetro de suma importância, pois pode ser influenciada e influenciar o comportamento dos indivíduos, como na percepção da necessidade de tratamento odontológico, no uso dos serviços de saúde, e até mesmo na adoção de medidas de autocuidado (LUCHI et al., 2013).

Por refletir a experiência subjetiva quanto ao bem-estar psicológico, social e funcional dos indivíduos, a autopercepção impacta diretamente a qualidade de vida destes (MILAGRES et al., 2018). Considerando o contexto exposto, torna-se pertinente identificar quais fatores influenciam a autopercepção de saúde bucal nos diferentes momentos da vida dos indivíduos. Os achados desta investigação poderão fornecer evidências que auxiliem no desenvolvimento de estratégias de intervenção que objetivem reduzir as iniquidades em saúde.

2. ARTIGO: FACTORS ASSOCIATED WITH ORAL HEALTH SELF-PERCEPTION IN DIFFERENT AGE GROUPS

Este artigo será submetido ao periódico *Community Dentistry and Oral Epidemiology*, *Wiley Online Library*, ISSN: 1600-0528 (online). Fator de impacto: 2.278, Qualis CAPES A1. As normas para publicação estão descritas no Anexo A.

2. ARTIGO

***Title:* Factors associated with oral health self-perception in different age groups**

Authors:

Maria Laura Braccini Fagundes¹, Orlando Luiz do Amaral Junior¹, Gabriele Rissotto Menegazzo¹, Luísa Helena do Nascimento Tôrres¹

Author affiliations:

¹Postgraduate Program in Dental Sciences, Federal University of Santa Maria, Santa Maria, Brazil.

Running head:

Oral health self-perception and age groups

ORCID:

Maria Laura Braccini Fagundes: 0000-0001-5548-7408

Orlando Luiz do Amaral Junior: 0000-0002-6611-3871

Gabriele Rissotto Menegazzo: 0000-0002-4181-0267

Luísa Helena do Nascimento Tôrres: 0000-0003-0740-2785

Corresponding Author:

Luísa Helena do Nascimento Tôrres

Av. Roraima, 1000, UFSM, University City Building 26F.

ZIP Code: 97105-900. Santa Maria – RS - Brazil

Telephone +55 55 3220-9291

E-mail: luisa.torres@ufsm.br

Funding information:

MLBF, OLA Jr, GRM were supported by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001. LHNT receives a Tutorial Education Program (PET) scholarship.

Contributors' Statement:

DDS Fagundes conceptualized and designed the study, carried out the analyses, drafted the initial manuscript, reviewed and revised the manuscript. DDS Do Amaral Júnior and MSc Menegazzo critically reviewed and revised the manuscript. Dr^a Tôrres conceptualized and designed the study, coordinated and supervised the initial manuscript, carried out the analyses and critically reviewed the manuscript. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work. The authors have no conflict of interest.

ABSTRACT

Objectives: This study aimed to verify the factors associated with oral health self-perception (OHSP) in adolescents, adults and older adults. **Methods:** This cross-sectional study analyzed data from probabilistic samples of adolescents, adults and older adults. OHSP was assessed by a global self-rating item. Hierarchical Poisson regression models were performed to estimate the prevalence ratio and 95% confidence intervals of negative OHSP with variables regarding demographic and socioeconomic characteristics, social capital, dental attendance and clinical measures. Analyzes for each age group were performed separately and then compared. **Results:** A total of 5,314 adolescents, 5,815 adults and 5,556 older adults have answered the outcome question. Female adolescents and adults, as well as non-white adults and aged subjects with a higher educational level had worse OHSP. Having lower social capital increased negative OHSP' prevalence in adolescents, adults and older adults by 56%, 28% and 21%, respectively. Individuals whose reason for last dental attendance was treatment had worse OHSP for all age groups. Adolescents, adults and older adults with greater amount of decayed teeth showed 56%, 30% and 29% higher prevalence of negative OHSP, respectively. Adolescents and adults with more missing teeth presented, respectively, 23% and 9% higher prevalence of negative OHSP. The older participants with dental prosthesis need showed 2 times higher prevalence of negative OHSP. **Conclusion:** Our findings suggest that there are differences among the factors associated with negative OHSP in distinct age groups. The socioeconomic influences in all age groups enhance the assumption that OHSP reflects social inequalities in health.

Key words: Age Groups, Self-Concept, Self-Assessment, Oral health

INTRODUCTION

Studies on populations' oral health conditions and their social determinants have been considered essential for the identification of strategies focused on health promotion, as it refers to actions aimed at favorably influence individuals' quality of life¹. Thus, the continuous assessment of population's health profile is essential for planning appropriate interventions, as well as for evaluating implemented health actions². Together with normative assessments, the consideration of patient's perspective, can better meet the needs of the population, pointing out which areas should be prioritized in relation to investments in public health.

Thereby, the investigation of subjective oral health measures not only gives a comprehensive assessment of how people perceive their oral health, but can also estimate the functional, psychological and social impacts of oral diseases and disorders³ on people's lives. Among these measures, oral health self-perception is a multidimensional construct which reflects individuals' subjective experience based on health beliefs, physical and mental well-being, comprising since biomedical-based references until holistic concepts⁴. In addition, it has been shown to be associated with clinical, psychosocial and sociodemographic variables^{5,6}.

Oral health self-perception can be captured with a single-item global question which is a valid measure widely used in oral health research, due to its simplicity, cost-effectiveness and applicability both in daily clinic and population-based epidemiological surveys⁴. The subjectivity beyond the self-assessment of health relies on a complex web factors which includes, besides individual factors and personal experiences, the environment to which people are exposed⁷. Poor perception of oral health has been associated with low income and schooling, unequal income distribution, poor housing conditions, poor social capital, among other social factors, highlighting the relevance of social determinants of health^{7,8}.

Each stage of the life cycle comprises its own underlying resources and opportunities, which, in turn, influence health⁹. Thus, it is reasonable to assume that people in different life periods have health influenced by different factors. Besides that, increased age is a consistent predictor of oral diseases, being the age-related effects likely attributed to the accumulation of oral diseases and its consequences over a longer period of years, an increased susceptibility to oral disease with age or a combination of both¹⁰. However, there is still no consensus on the influence of age on the way that people self-perceive their oral health. While some studies claim that older people perceive it negatively^{3,11}, others show that older people report their oral health as good even in the presence of a poor oral condition^{10,12}. So, knowing the specific aspects

affecting subjective health in each stage of life could corroborate to improve health policies taking into account which is pertinent for each age group.

Therefore, this study aimed to verify the factors associated with oral health self-perception in adolescents, adults and older adults. It was hypothesized that these factors are modified during life course, being distinct for each age group, due to the influence of different determinants and aspects that affect each stage of life.

METHODS

Study Design

This is a cross-sectional study with data from the 2015 São Paulo State Survey on Oral Health (SBSP-2015). The State of São Paulo is located in the southeast of Brazil, with a Human Development Index of 0.783, considered high. Its population comprises more than 40 million people, which corresponds to approximately 21% of the country's total population. Data used were extracted from the public dataset of the SBSP-2015 survey, available at <https://w2.fop.unicamp.br/sbsp2015/>. A complete description of research procedures has been published elsewhere¹³.

Ethics

The SBSP-2015 was approved by the Ethics Committee on Research with Human Beings of the Piracicaba School of Dentistry (FOP-UNICAMP) (no. 1.211.025; CAAE no. 46788215.9.0000.5418). This study was also submitted and approved by the Project Office (GAP) of the Federal University of Santa Maria (UFSM) (no. 23081.030832/2019-11). A written term of free and informed consent was obtained from every person that participated in the survey. A separate informed consent form was used to obtain permission from parents or legally authorized representatives for minors who were part of the study.

Sample

SBSP-2015 was a population-based study carried out in the urban area of 163 municipalities, representative for the State of São Paulo (including the Capital, São Paulo metropolitan area and 15 Regional Health Departments). The sampling design comprised a cluster sampling in two-stages with probability of selection being proportional to the population size (PPS). The State of São Paulo was stratified into six macro-regions termed "domains," and in each domain, 33 municipalities were selected, termed Primary Sampling Units (PSUs), with the exception of Macro 1 (Metropolitan Region of the Capital) where 12 municipalities, in

addition to the capital, were drawn. The draws were performed with PPS in each municipality. In the second stage, 390 census tracks were selected as secondary sampling units (SSU) (2 areas for each municipality selected and 36 areas for the city of São Paulo). All households in the census tracks were visited following the planned route, being examined the individuals of the study age groups.

In total, 5,558, 6,051 and 5,951 individuals were examined and interviewed, respectively, for the age groups of adolescents aged 15–19 years, adults aged 35–44 years and the older adults aged 65 years and over, comprising 17,560 participants. The age groups analyzed were those recommended by World Health Organization (WHO)².

Interview and data collection

A total of 253 work teams contributed to data collection, being each team composed of a dentist and an oral health assistant. The teams were trained in a 16 hours' workshop, comprising theoretical and practical aspects of the exams, ensuring an acceptable degree of uniformity. The examiner calibration process lasted at least 24 hours. A gold-standard examiner conducted the training and calibration processes to achieve overall standardization and agreement. The minimum Kappa value acceptable for each examiner, age group and condition studied was 0.65.

The oral conditions assessed were those recommended by WHO² with adjustments guided by the SB Brazil 2010 Project. The non-clinical variables were obtained during the application of a structured questionnaire, by trained interviewers, in the participant's home.

Study Outcome

Oral health self-perception (OHSP) was assessed through a global self-rated item: "Regarding your teeth/mouth, how satisfied are you?" Grouped into positive (very satisfied, satisfied) and negative (not satisfied or unsatisfied, unsatisfied, very unsatisfied), being negative as the reference category for the outcome. This categorization has been used in previous research⁷.

Exposure variables

The demographic and socioeconomic characteristics analyzed were sex, self-declared skin color, years of formal education and family income. Sex was collected in male or female and self-declared skin color was dichotomized in white and non-white (black, yellow, brown, indigenous) due to the low prevalence of the non-white categories³. Years of formal education

was collected as the total of years studied with no reprobation, later divided in ≤ 8 years and > 8 years for adolescents and adults⁷, that corresponds to elementary school in Brazil. For the older adults, due to the low educational level of the older adults in Brazil, this variable was divided in ≤ 4 and > 4 years, as used in previous research¹⁴.

The original categories for family income collected were: up to R\$ 250, from R\$ 251 to R\$ 500, from R\$ 501 to R\$ 1.500, from R\$ 1501 to R\$ 2.500, from R\$ 2.501 to R\$ 4.500, from R\$ 4.501 to R\$ 9.500 and over R\$9.500. It was categorized in \leq R\$1.500,00 and $>$ R\$1.500,00. One US dollar was 3,80 Reais during the period of data gathering, and R\$1.500,00 would correspond to around two Brazilian minimum wages in 2015.

The questions assessing social capital in the SBSP 2015 were extracted from the Integrated Questionnaire for the Measurement of Social Capital (SC-IQ)¹⁵. Questions assessed the levels of cooperation, safety and happiness, as follows: “If there were a problem with the water supply in this community, what was the probability that people would cooperate trying to solve the problem?” (Grouped into: 1-very and relatively likely, 2-very and relatively unlikely, 3-neither likely nor unlikely); “In general, how do you feel regarding criminality and violence when you are at home by yourself?” (Grouped into: 1-very and moderately safe, 2-very and moderately unsafe, 3-neither safe nor unsafe); “In general, do you consider yourself... (grouped into: 1- very and moderately happy, 2- very and moderately unhappy, 3-neither happy nor unhappy)”. Afterwards, the code for each answer was summed up to obtain the degree of social capital for every participant (high: 3–4; moderate: 5–6; and low: 7–9)¹⁶.

Dental attendance was measured as the time of the last dental visit (less than 1 year, 1 to 2 years, 3 years or more, divided in < 1 year or ≥ 1 year), the type of healthcare service (collected as public, private, private plan, or other) was divided in public or private and reason for last dental attendance (review/prevention, pain, extraction, and treatment) was dichotomized in routine if the reason had been for review/prevention, and treatment if the visited had been for the other reasons. All categorizations were chosen based on previous research¹⁷.

Dental clinical measures were assessed during the clinical examination. Caries experience was evaluated by the decayed, missed, or filled teeth index—DMFT. In this study we analyzed the number of decayed teeth, which corresponds to the D component of the index, and the number of missing teeth, which corresponds to the M component. Both decayed and missing teeth were dichotomized in \leq mean and $>$ mean. Dental prosthesis use was dichotomized into yes (when using dental prosthesis of any type [fixed, removable partial dental

prosthesis, or full denture]) and no (do not wear). Dental prosthesis need was also dichotomized into yes (when needing dental prosthesis of any type) and no (do not need).

Statistical Analyses

The study theoretical model was built taking as reference the conceptual model proposed by Watt and Sheiham¹⁸ and on Luchi et al'.⁷ theoretical model for oral health self-perception (figure 1). Data analysis was performed with the software STATA 14.0 (Stata Corporation, College Station, TX, USA). All analyses incorporated sampling weights considering the cluster structure using survey commands (svy). Initially a descriptive analyses was performed using chi-squared test for categorical variables. On the bivariate analysis, all the independent variables with a p-value <0.20 and the relevant ones were included in the multiple regression. Associations with the outcome were performed using hierarchical Poisson regression models, with robust variance, adjusting for confounding variables, with estimation of the crude and adjusted prevalence ratios and respective 95% confidence interval (PR; 95% confidence interval [CI]). Remained in the model those variables associated with the outcome with p<0.05 after adjusting for the variables in the same block and for the hierarchically higher ones. Analyses for each age group were performed separately. Afterwards, their final results were compared.

RESULTS

From a total of 5,314 adolescents, 5,815 adults and 5,556 older adults who have answered the outcome question, the prevalence of negative OHSP was 39.3%, 59.7% and 45.3%, respectively. Table 1 shows the sample distribution and prevalence of the outcome according to the exposure variables. For all age groups, the majority of the sample was female and self-declared white. The reason for last dental attendance was treatment rather than prevention for most of the adolescents (60.8%), adults (77.6%) and older adults (83.3%). The prevalence of decayed teeth was higher for adolescents when comparing with the other age groups, while the prevalence of missing teeth was higher for aged participants. For all age groups, significant association was observed in the crude analysis between negative oral health self-perception and higher number of decayed teeth and missing teeth, dental prosthesis use and dental prosthesis need (data not shown).

Tables 2, 3 and 4 show the hierarchical Poisson models for adolescents, adults and older adults respectively. Female adolescents and adults had respectively 48% and 11% higher prevalence of negative OHSP than men, while for older adults sex seems to not associate with

the outcome. Regarding the skin color, non-white adults showed a 15% higher prevalence of negative OHSP than those who self-declared as white, and it was not associated with the outcome in the other age groups. The older adults with lower educational level showed 23% lower prevalence of negative OHSP when compared to those with higher educational level, and it did not influence OHSP of adolescents and adults. It was observed that to have lower social capital rises in 56%, 28% and 21% the prevalence of negative OHSP of adolescents, adults and older adults, respectively. Concerning dental attendance variables, the adults whose last dental attendance happened longer than a year, showed 22% higher prevalence of negative OHSP than their counterparts. The older adults who attended public dental services showed worse OHSP than those who attended the private ones. Adolescents, adults and older adults whose reason for the last dental attendance was treatment showed a 68%, 61% and 55% higher prevalence of the outcome, respectively, than those who looked for preventive dental attendance.

In the final model, it was observed that adolescents, adults and older adults who presented higher than the mean of decayed teeth showed, respectively, 56%, 30% and 29% higher prevalence of negative OHSP than their counterparts. Also, adolescents and adults who had less teeth showed, respectively, 23% and 9% higher prevalence of negative OHSP than their counterparts, while it seems to not influence the OHSP of the older adults.

DISCUSSION

This study findings support our hypothesis that the factors which influence oral-health self-perception are different for each stage of life. The Brazilian National Oral Health Policy in Brazil (PNSB) provides for the understanding of each age's specificities as a way of overcoming the biomedical model¹⁹. Hence, to identify the distinctions alongside the life course that influence health subjectivity may contribute to individual's empowerment through self-awareness, demystifying beliefs that the accumulation of oral diseases is normal over the years. Furthermore, patients' consciousness of their health condition are of essential importance to identify risk factors, as well as to give clues for presumable outcomes in addition to clinical diagnosis²⁰.

Concerning the sociodemographic variables analyzed, being female negatively influenced OHSP in the adolescent and adult age groups. Women face pressure from aesthetic standards more aggressively than men²¹, making them more sensitive to oral health diseases' impact¹⁷. Likewise, women attend dental services more frequently than men, and depending on the type of professional practice, it might result in overtreatment²², affecting their OHSP. As regards to skin color, self-classifying as non-white was associated with the outcome in adults.

Considering that an individual's ethnic-racial identification is inserted in a broader context, involving historical, socio-cultural and political aspects, skin color can be considered as a proxy of socioeconomic status²³, which has been linked to worse OHSP⁷. Moreover, this finding may reflect the stressful experiences faced by black and non-white skin color people. A study conducted with a large population of adults in the United States, showed that the emotional impact of racial discrimination was associated with lower uptake of dental services²⁴, which can result in unmet need of care, and consequently worse OHSP. Different from other studies^{1,14}, the older adults with less years of formal education had a lower prevalence of negative OHSP. Although this was unexpected, it can be interpreted that, in Brazil, the schooling for this age group is very low, so those more educated, with more access to information, might be more demanding with their oral health. Notwithstanding, these socioeconomic influences in all age groups enhance the assumption that OHSP also reflects social inequalities in health.

Whilst low social capital influenced negatively the OHSP of all age groups, we observed that the youngest age group had the higher outcome prevalence, followed by the older adults, and then by adults. Adolescence is a critical period during which many behavioral risk factors become established, such as dietary practices or smoking habits⁸. Previous research found that high levels of social capital may indirectly provide self-confidence, higher self-esteem and a sense of protection, which could prevent them from engaging in deleterious health behaviors²⁵. Their perceptions of the level of interpersonal trust, sharing, and reciprocity might play an important role in health subjectivity. Moreover, as regards to older age, psychological well-being is associated with OHSP⁴, and so can act as a mediator in the association with social capital. Individuals with better social support have more access to information, emotional and financial resources, which can buffer the negative consequences of stressful events that might influence health²⁶. So, this might reinforces that OHSP comprises a broader multidimensional subjective assessment, rather than just an oral morbidity evaluation⁴.

Concerning dental caries, we observed a dose response effect, as the younger the age group, the higher the influence of decayed teeth in negative OHSP. Adolescents are more sensitive to impacts related to the perception of appearance and pain²⁷, which is related to the fact that some symptoms that negatively impact oral health, such as painful or throbbing teeth, are proportional to the greater amount of natural teeth in mouth²⁸. In Brazil, a change in the epidemiological profile of dental caries in adolescents has been observed, with a significant reduction in the carious component when comparing the epidemiological assessments in the

years 1986, 2003 and 2010²⁹. Nevertheless, this improvement has been accompanied by a change in the distribution of the disease, being concentrated in the socio-economically vulnerable groups³⁰. This must be considered in order to avoid the onset of health inequities, which can be perpetuated throughout the life course.

The number of missing teeth was not associated with OHSP for the older adults although they presented the greatest prevalence of missing teeth when comparing to the other age groups, which is in accordance with previous research⁵. A possible explanation for this paradox is that older people show greater resilience in relation to their oral health, and consequently understand tooth loss as a normal event of aging, which might be enhanced by peers who accept oral impairments as normal as well³¹. Also, simultaneous general health issues, like chronic conditions that are common at old age, may soften oral health impairments³¹. Even so, tooth loss is one of the main oral health problems and reflects the accumulation of oral diseases burden throughout life, in addition to cultural aspects, to dental services access and to the dental care philosophy³². The older generations have not benefited from the socioeconomic changes and prevention policies of the past decades that have induced a positive effect on the health of younger age groups³³. The cohort effect in improving oral health conditions has been highlighted in the literature³⁴. We will need to verify, over time, whether the next older adult's cohorts will continue to adapt to tooth loss when this should be the exception rather than the rule.

Regarding the time of last dental attendance, having visit the dentist since longer had negative impact in OHSP for adults. Even with accumulated demand, the use of dental services among adults in Brazil is considered low which might leads to the emergence of pain and dental urgency³⁵, negatively affecting the perception of health. As for the use of public service, it was related to worse OHSP for the older adults. Previous research verified that the type of dental service assessed is associated with the use of dental prosthesis among older adults, with greater use among those attending private services³⁶. In the same direction, the need of dental prosthesis negatively influenced the OHSP of adults and even greatly of older adults. It can be observed that these age groups still face the consequences of many years with a healthcare model focused on children's oral health. Beyond that, the access to rehabilitation usually demands high waiting time and a greater number of dental visits, which implies loss of working hours besides higher transportation cost and frequent lack of accessibility for the older adults who already have mobility difficulties³⁵. The loss of teeth associated with the lack of rehabilitation can lead to problems in speech, chewing and appearance with serious side effects on self-esteem and

socialization³⁶. Also, it can lead to food avoidance due to chewing difficulties, which may be detrimental in terms of nutritional status, systemic health and life expectancy^{37,38}. There have been advances in the provision of dental services in Brazil, but there is still a need to improve access and quality of services to positively impact the subjective and normative conditions of oral health for adults and older ones.

The reason for last dental attendance as treatment rather than prevention remained associated to worse OHSP for all age groups. It highlights the importance of taking preventive and primary dental care services as priorities, addressing the individuals' oral health needs in all stages of life. The Brazilian PNSB states that the reorganization and qualification of the primary healthcare, focusing on health prevention and promotion¹⁹, should facilitate the regular use of dental services, minimizing the repressed demand and avoiding the accumulation of oral diseases. Unfortunately, even more than a decade after its implementation, the scenario is still not the ideal. This actually might suggest that, despite numerous advances, probably there was no significant change in the oral health assistance model¹⁹.

This study has some limitations. The cross-sectional design does not allow the inference of causal relationships, longitudinal investigations would be important to further understand the associations studied. Also, the SBSP-2015 questionnaire did not assess more issues related to oral health behaviors or general health, which could influence OHSP as well. Therefore, further analysis would benefit from including other variables related to OHSP. This study also has strengths. Although it only allows inferences for the studied population, the findings give us clues as to what can be found in the Brazilian population, which is relevant in the face of a period of political instability and uncertainty about when the next national oral health survey will take place. Further, the use of a subjective measure as our outcome, complementary to the clinical indices, allow a more holistic interpretation of the meanings of health for individuals.

We can conclude that there are differences between the factors associated with OHSP in different age groups. Intergenerational aspects seem to play a role in how individuals perceive their oral health. Younger generations probably have more access to information, greater educational level and are more likely to maintain healthy behaviors, which can raise their expectations regarding their oral health³⁹. Also, the positive role of resilience and adaptation regarding the older adult's self-perception must be consider. The focus on health, not seen as the absence of disease, maybe entail a more optimistic significance to oral health subjectivity. In addition, our findings enhance the importance of oral healthcare promotion,

planning and evaluation throughout the life course in order to avoid both unfavorable objective and subjective oral health conditions of all generations.

REFERENCES

1. Sousa JL de, Henriques A, Silva ZP da, Severo M, Silva S. Posição socioeconômica e autoavaliação da saúde bucal no Brasil: resultados da Pesquisa Nacional de Saúde. *Cad Saúde Pública*. 2019;35(6):e00099518.
2. World Health Organization. World Health Organization. Oral health surveys: basic methods. 4 ed. Geneva: WHO;1997.
3. Gabardo MCL, Moysés SJ, Moysés ST, Olandoski M, Olinto MTA, Pattussi MP. Multilevel analysis of self-perception in oral health and associated factors in Southern Brazilian adults: a cross-sectional study. *Cad Saúde Pública*. 2015;31(1):49–59.
4. Locker D, Clarke M, Payne B. Self-perceived Oral Health Status, Psychological Well-being, and Life Satisfaction in an Older Adult Population. *J Dent Res*. 2000;79(4):970–5.
5. Guarnizo-Herreño CC, Watt RG, Fuller E, Steele JG, Shen J, Morris S, et al. Socioeconomic position and subjective oral health: findings for the adult population in England, Wales and Northern Ireland. *BMC Public Health*. 2014;14(1):827.
6. Rosing K, Christensen LB, Øzhayat EB. Associations between tooth loss, prostheses and self-reported oral health, general health, socioeconomic position and satisfaction with life. *J Oral Rehabil*. 2019;46(11):1047–54.
7. Luchi CA, Peres KG, Bastos JL, Peres MA. Desigualdades na autoavaliação da saúde bucal em adultos. *Rev Saúde Pública*. 2013;47(4):740–51.
8. Furuta M, Ekuni D, Takao S, Suzuki E, Morita M, Kawachi I. Social capital and self-rated oral health among young people: Social capital and oral health. *Community Dent and Oral Epidemiol*. 2012;40(2):97–104.
9. Braveman P, Barclay C. Health Disparities Beginning in Childhood: A Life-Course Perspective. *Pediatrics*. 2009;124(3):S163–75.
10. McNally ME, Matthews DC, Clovis JB, Brilliant M, Filiaggi MJ. The oral health of ageing baby boomers: a comparison of adults aged 45-64 and those 65 years and older. *Gerodontology*. 2014;31(2):123–35.
11. Silva JV da, Oliveira AGR da C. Individual and contextual factors associated to the self-perception of oral health in Brazilian adults. *Rev saúde pública*. 2018;52:29.
12. Andrade FB de, Teixeira DS da C, Frazão P, Duarte YAO, Lebrão ML, Antunes JLF. Perfil de saúde bucal de idosos não institucionalizados e sua associação com autoavaliação da saúde bucal. *Rev bras epidemiol*. 2018;21(2):e180012.
13. Antônio Carlos Pereira, Vladen Vieira, Antônio Carlos Frias. Pesquisa Estadual de Saúde Bucal–SB São Paulo 2015 [Internet]. Livronovo; 2016. Available from: http://www.saude.sp.gov.br/resources/ses/perfil/profissional-da-saude/areas-tecnicas-das-ses/e_book_relatorio_sb_sp_2015.pdf 16
14. Martins AME de BL, Barreto SM, Pordeus IA. Auto-avaliação de saúde bucal em idosos: análise com base em modelo multidimensional. *Cad Saúde Pública*. 2009;25(2):421–35.

15. Grootaert C, Narayan D, Jones VN, Woolcock M. Measuring Social Capital: An Integrated Questionnaire [Internet]. The World Bank; 2004 [cited 2020 Apr 15]. (World Bank Working Papers). Available from: <http://elibrary.worldbank.org/doi/book/10.1596/0-8213-5661-5>
16. Nogueira JS, Pereira AC, Frias AC, Ambrosano GMB, Cortellazzi KL, Guerra LM, et al. Social capital and factors associated with the caries experience in adults – a population-based study in Brazil. *Braz oral res.* 2019;33:e118.
17. Bulgareli JV, Faria ET de, Cortellazzi KL, Guerra LM, Meneghim MDC, Ambrosano GMB, et al. Fatores que influenciam o impacto da saúde bucal nas atividades diárias de adolescentes, adultos e idosos. *Rev saúde pública.* 2018;52:44.
18. Watt RG, Sheiham A. Integrating the common risk factor approach into a social determinants framework. *Community Dent Oral Epidemiol.* 2012;40(4):289–96.
19. Aquilante AG, Aciole GG. Building a “Smiling Brazil”? Implementation of the Brazilian National Oral Health Policy in a health region in the State of São Paulo. *Cad Saúde Pública.* 2015;31(1):82–96.
20. Meisel P, Holtfreter B, Völzke H, Kocher T. Self-reported oral health predicts tooth loss after five and ten years in a population-based study. *J Clin Periodontol.* 2018;45(10):1164–72.
21. Patrick H, Neighbors C, Knee CR. Appearance-Related Social Comparisons: The Role of Contingent Self-Esteem and Self-Perceptions of Attractiveness. *Pers Soc Psychol Bull.* 2004;30(4):501–14.
22. Peres MA, Barbato PR, Reis SCGB, Freitas CHS de M, Antunes JLF. Perdas dentárias no Brasil: análise da Pesquisa Nacional de Saúde Bucal 2010. *Rev Saúde Pública.* 2013;47(3):78–89.
23. Kabad JF, Bastos JL, Santos RV. Raça, cor e etnia em estudos epidemiológicos sobre populações brasileiras: revisão sistemática na base PubMed. *Physis.* 2012;22(3):895–918.
24. Sabbah W, Gireesh A, Chari M, Delgado-Angulo EK, Bernabé E. Racial Discrimination and Uptake of Dental Services among American Adults. *IJERPH.* 2019;16(9):1558.
25. Drukker M, Buka SL, Kaplan C, McKenzie K, Van Os J. Social capital and young adolescents’ perceived health in different sociocultural settings. *Soc Sci Med.* 2005;61(1):185–98.
26. Tsakos G, Sabbah W, Chandola T, Newton T, Kawachi I, Aida J, et al. Social Relationships and Oral Health Among Adults Aged 60 Years or Older: *Psychosom Med.* 2013;75(2):178–86.
27. Peres KG, Cascaes AM, Leão ATT, Côrtes MI de S, Vettore MV. Aspectos sociodemográficos e clínicos da qualidade de vida relacionada à saúde bucal em adolescentes. *Rev Saúde Pública.* 2013;47(3):19–28.
28. Chen M-S, Hunter P. Oral health and quality of life in New Zealand: A social perspective. *Soc Sci Med.* 1996;43(8):1213–22.

29. Saintrain MV de L, Correa CRS, Saintrain SV, Nuto S de AS, Vieira-Meyer APGF. Brazilian adolescents' oral health trends since 1986: an epidemiological observational study. *BMC Res Notes*. 2015;8(1):554.
30. Vazquez F de L, Cortellazzi KL, Kaieda AK, Bulgareli JV, Mialhe FL, Ambrosano GMB, et al. Individual and contextual factors related to dental caries in underprivileged Brazilian adolescents. *BMC Oral Health*. 2015;15(1):6.
31. Macentee MI, Hole R, Stolar E. The significance of the mouth in old age. *Soc Sci Med*. 1997;45(9):1449–58.
32. Thomson WM. Social inequality in oral health. *Community Dent Oral Epidemiol*. 2012;40:28–32.
33. Nascimento S do, Frazão P, Bousquat A, Antunes JLF. Condições dentárias entre adultos brasileiros de 1986 a 2010. *Rev Saúde Pública*. 2013;47(3):69–77.
34. Slade GD, Akinkugbe AA, Sanders AE. Projections of U.S. Edentulism Prevalence Following 5 Decades of Decline. *J Dent Res*. 2014;93(10):959–65.
35. Oliveira RFR de, Haikal DS, Ferreira RC, Santos ASF, Nascimento JE, Soares JRD, et al. Abordagem multinível quanto ao uso de serviços odontológicos no Sistema Único de Saúde entre adultos brasileiros. *Cad saúde colet*. 2019;27(4):455–67.
36. Nascimento JE, Magalhães TA de, Souza JGS, Sales MSM, Nascimento CO, Lopes Júnior CWX, et al. Associação entre o uso de prótese dentária total e o tipo de serviço odontológico utilizado entre idosos edêntulos totais. *Ciênc saúde colet*. 2019;24(9):3345–56.
37. Tôrres LH do N, Fagundes MLB, Silva DD da, Neri AL, Hilgert JB, Hugo FN, et al. Self-rated general and oral health and associated factors in independently-living older individuals. *Braz oral res*. 2020;34:e079.
38. Milagres CS, Tôrres LH do N, Neri AL, Sousa M da LR. Condição de saúde bucal autopercebida, capacidade mastigatória e longevidade em idosos. *Ciênc saúde colet*. 2018;23(5):1495–506.
39. Slade GD, Sanders AE. The Paradox of Better Subjective Oral Health in Older Age. *J Dent Res*. 2011;90(11):1279–85.

Table 1. Sample distribution and prevalence of negative oral health self-perception according to demographic and socioeconomic characteristics, social capital, dental attendance and dental clinical measures in adolescents, adults and older adults from state of São Paulo in 2015.

Variables	Adolescents (15-19) n = 5,314		Adults (35-44) n = 5,815		Older adults (65+) n = 5,556	
	n (%*)	Prevalence of negative OHSP (95%CI)	n (%*)	Prevalence of negative OHSP (95%CI)	n (%*)	Prevalence of negative OHSP (95%CI)
<i>Demographic and socioeconomic</i>						
<i>Sex</i>						
Male	2,430 (43.3)	32.4 (25.4-40.2)	1,943 (30.4)	53.0 (48.7- 57.3)	2,235 (38.1)	46.0 (40.5- 51.5)
Female	3,128 (56.7)	44.5 (40.0-49.1)	4,108 (69.6)	62.6 (59.8- 65.4)	3,716 (61.9)	44.8 (40.4- 49.3)
<i>Skin Color</i>						
White	3,316 (60.4)	37.6 (33.3-42.1)	3,763 (60.5)	55.3 (51.8- 58.8)	4,095 (67.1)	44.3 (40.5- 48.2)
Non-White	2,242 (39.6)	41.8 (34.2-49.8)	2,288 (39.5)	66.3 (62.8- 69.7)	1,856 (32.9)	47.2 (41.7- 52.7)
<i>Formal Education[†]</i>						
> 8 years	4,186 (79.2)	38.1 (32.3-44.3)	3,183 (55.0)	53.9 (50.3- 57.5)	1,368 (28.6)	52.8 (45.7- 59.8)
≤ 8 years	1,142 (20.8)	40.5 (35.1-46.2)	2,470 (45.0)	67.4 (62.9- 71.5)	3,926 (71.4)	42.7 (39.1- 46.3)
<i>Family income</i>						
> R\$1.500,00	2,486 (53.9)	36.6 (33.2-40.1)	3,085 (53.5)	53.4 (50.1- 56.7)	2,417 (46.5)	42.0 (38.8-45.3)
≤ R\$1.500,00	1,918 (46.1)	41.0 (35.2-47.0)	2,224 (46.4)	64.7 (61.0- 68.3)	2,888 (53.5)	47.9 (41.4-54.5)
<i>Social Capital</i>						
High	3,673 (62.2)	35.9 (31.3-40.7)	3,872 (63.9)	54.4 (51.1- 57.7)	3,649 (65.4)	43.3 (39.6-47.0)
Moderate	1,495 (31.1)	42.6 (36.4-49.0)	1,680 (29.6)	67.9 (63.1- 72.3)	1,451 (28.6)	49.6 (44.9-54.3)
Low	272 (6.7)	55.6 (37.7-72.2)	313 (6.5)	73.6 (65.0- 80.6)	286 (6.0)	57.9 (42.4-72.0)
<i>Dental attendance</i>						
<i>Time of last dental attendance</i>						
<1 year	3,183 (59.3)	37.1 (31.7-42.9)	3,185 (52.2)	52.4 (49.3- 55.5)	1,692 (31.0)	39.1 (33.0-45.5)
≥1 year	2,023 (40.7)	41.5 (34.7-48.6)	2,509 (47.8)	67.5 (64.0- 70.8)	3,256 (69.0)	48.1 (44.2-52.0)
<i>Type of healthcare service</i>						
Private	2,838 (55.4)	37.3 (32.8-42.1)	3,421 (59.9)	55.9 (52.7- 59.0)	3,205 (61.8)	42.3 (38.5-46.3)
Public	2,286 (44.6)	40.2 (33.8-46.8)	2,288 (40.1)	64.2 (59.8- 68.3)	1,981 (38.2)	50.6 (43.3-57.9)
<i>Reason for last dental attendance</i>						
Preventive	2,019 (39.2)	27.1 (21.4-33.8)	1,393 (22.4)	38.7 (34.9- 42.5)	896 (16.7)	28.7 (24.0-34.0)

Treatment	3,132 (60.8)	46.4 (41.4-51.6)	4,363 (77.6)	65.6 (62.5- 68.6)	4,239 (83.3)	49.0 (45.3-52.8)
<i>Dental clinical measures</i>						
Decayed teeth						
≤ mean	3,982 (70.1)	32.6 (28.8-36.6)	4,447 (71.6)	51.9 (49.0- 54.8)	4,948 (81.9)	41.4 (37.7-45.3)
> mean	1,576 (29.9)	54.9 (47.0-62.4)	1,604 (28.4)	79.1 (74.6- 82.9)	1,003 (18.1)	61.9 (55.3-68.0)
Missing teeth						
≤ mean	5,021 (90.7)	37.6 (32.6-42.9)	3,872 (62.2)	53.2 (49.6- 56.7)	2,036 (34.0)	50.9 (44.3-57.3)
> mean	537 (9.3)	55.5 (47.6-63.1)	2,179 (37.8)	70.6 (66.3- 74.7)	3,915 (66.0)	42.2 (38.6-45.9)
Dental prosthesis use						
No	5,538 (99.7)	39.2 (34.2-44.3)	4,845 (78.3)	57.7 (54.3- 60.9)	1,253 (22.7)	56.3 (48.7-63.6)
Yes	20 (.3)	69.1 (37.6-89.2)	1,191 (21.7)	67.6 (62.9- 72.1)	4,693 (77.3)	42.2 (38.6-45.9)
Dental prosthesis need						
No	5,256 (95.2)	38.4 (33.4-43.8)	2,889 (44.9)	46.0 (41.9- 50.1)	2,215 (33.7)	24.7 (21.8-27.8)
Yes	302 (4.8)	55.7 (48.3-62.8)	3,146 (55.1)	71.0 (67.7- 74.2)	3,732 (66.3)	56.0 (51.1-60.7)

*Taking into account de sample weigh

†Considering for older adults ≤ 4 and > 4 years of formal education

CI= confidence interval

OHSP = Oral Health Self-Perception

Table 2. Adjusted associations between negative oral health self-perception and exposure variables among Adolescents (15-19), determined using hierarchical Poisson regression models. São Paulo, Brazil, 2015.

Variables	Model 1	Model 2	Model 3	Model 4	Final Model
	PR (95% CI)	PR (95% CI)	PR (95% CI)	PR (95% CI)	PR (95% CI)
<i>Demographic and Socioeconomic</i>					
Sex					
Male	1	1	1	1	1
Female	1.48 (1.29-1.69)	1.37 (1.14-1.63)	1.29 (1.04-1.60)	1.29 (1.07- 1.55)	1.29 (1.07-1.55)
Skin Color					
White	1	-	-	-	-
Non-White	1.07 (0.92-1.26)				
Formal Education					
> 8 years	1	-	-	-	-
≤ 8 years	1.10 (0.94-1.27)				
Family income					
> R\$1.500,00	1	-	-	-	-
≤ R\$1.500,00	1.11 (0.92-1.35)				
<i>Social Capital</i>					
High		1	1	1	1
Moderate		1.16 (1.02-1.32)	1.16 (1.01-1.33)	1.13 (1.00-1.28)	1.13 (1.00-1.28)
Low		1.56 (1.17-2.08)	1.58 (1.26-1.98)	1.58 (1.27- 1.97)	1.58 (1.27-1.97)
<i>Dental attendance</i>					
Time of last dental attendance					
<1 year			1	-	-
≥1 year			1.01 (1.00- 1.02)		
Type of healthcare service					
Private			1	-	-
Public			1.06 (0.93-1.20)		
Reason for last dental attendance					
Preventive			1	1	1
Treatment			1.68 (1.39- 2.03)	1.53 (1.26- 1.86)	1.53 (1.26-1.86)
<i>Dental clinical measures</i>					
Decayed teeth					
≤ mean				1	1

> mean	1.56 (1.37- 1.78)	1.56 (1.37-1.77)
Missing teeth		
≤ mean	1	1
> mean	1.23 (0.98- 1.54)	1.23 (1.04-1.44)
Dental prosthesis use		
No	1	-
Yes	1.24 (0.93- 1.67)	
Dental prosthesis need		
No	1	-
Yes	0.97 (0.73- 1.30)	

PR=prevalence ratio / CI= confidence interval

Table 3. Adjusted associations between negative oral health self-perception and exposure variables among Adults (35-44), determined using hierarchical Poisson regression models. São Paulo, Brazil, 2015.

Variables	Model 1	Model 2	Model 3	Model 4	Final Model
	PR (95% CI)	PR (95% CI)	PR (95% CI)	PR (95% CI)	PR (95% CI)
<i>Demographic and socioeconomic</i>					
Sex					
Male	1	1	1	1	1
Female	1.11 (1.04-1.20)	1.10 (1.02-1.18)	1.10 (1.03-1.19)	1.11 (1.04-1.19)	1.16 (1.07-1.25)
Skin Color					
White	1	1	1	1	1
Non-White	1.15 (1.08-1.22)	1.15 (1.08-1.23)	1.12 (1.06-1.19)	1.08 (1.02-1.13)	1.06 (1.01-1.11)
Formal Education					
> 8 years	1	1	1	1	-
≤ 8 years	1.17 (1.08-1.27)	1.17 (1.07-1.27)	1.10 (1.02-1.20)	1.02 (0.94-1.10)	
Family income					
> R\$1.500,00	1	1	1	1	-
≤ R\$1.500,00	1.15 (1.06-1.23)	1.14 (1.06-1.23)	1.08 (1.01-1.16)	1.02 (0.94-1.10)	
<i>Social Capital</i>					
High		1	1	1	1
Moderate		1.23 (1.12-1.34)	1.21 (1.10-1.32)	1.19 (1.09-1.30)	1.18 (1.08-1.29)
Low		1.28 (1.14-1.43)	1.26 (1.13-1.42)	1.18 (1.06-1.31)	1.20 (1.10-1.31)
<i>Dental attendance</i>					
Time of last dental attendance					
<1 year			1	1	1
≥1 year			1.22 (1.14-1.30)	1.18 (1.10-1.26)	1.17 (1.11-1.25)
Type of healthcare service					
Private			1	-	-
Public			1.04 (0.97-1.12)		
Reason for last dental attendance					
Preventive			1	1	1
Treatment			1.61 (1.45-1.78)	1.45 (1.52-1.59)	1.45 (1.35-1.56)
<i>Dental clinical measures</i>					
Decayed teeth					
≤ mean				1	1

> mean	1.29 (1.19-1.40)	1.30 (1.22-1.38)
Missing teeth		
≤ mean	1	1
> mean	1.15 (1.08-1.22)	1.09 (1.02-1.16)
Dental prosthesis use		
No	1	-
Yes	0.98 (0.91-1.05)	
Dental prosthesis need		
No	1	1
Yes	1.26 (1.15-1.39)	1.29 (1.18-1.40)

PR=prevalence ratio / CI= confidence interval

Table 4. Adjusted associations between negative oral health self-perception and exposure variables among Older Adults (65+), determined using hierarchical Poisson regression models. São Paulo, Brazil, 2015.

Variables	Model 1	Model 2	Model 3	Model 4	Final Model
	PR (95% CI)	PR (95% CI)	PR (95% CI)	PR (95% CI)	PR (95% CI)
<i>Demographic and socioeconomic</i>					
Sex					
Male	1	-	-	-	-
Female	0.95 (0.85-1.07)				
Skin Color					
White	1	-	-	-	-
Non-White	1.05 (0.97-1.14)				
Formal Education [†]					
> 4 years	1	1	1	1	1
≤ 4 years	0.77 (0.68-0.86)	0.79 (0.70-0.88)	0.77 (0.70-0.84)	0.82 (0.77-0.87)	0.81 (0.75-0.87)
Family income					
> R\$1.500,00	1	1	1	-	-
≤ R\$1.500,00	1.16 (1.01-1.33)	1.18 (1.05-1.33)	1.09 (0.97-1.23)		
<i>Social Capital</i>					
High		1	1	1	1
Moderate		1.15 (1.04-1.27)	1.10 (0.99-1.22)	1.11 (1.02-1.22)	1.14 (1.05-1.24)
Low		1.21 (0.94-1.56)	1.19 (0.90-1.56)	1.26 (1.06-1.49)	1.26 (1.06-1.49)
<i>Dental attendance</i>					
Time of last dental attendance					
<1 year			1	1	-
≥1 year			1.20 (1.01-1.44)	1.12 (1.01-1.24)	
Type of healthcare service					
Private			1	1	1
Public			1.25 (1.07-1.46)	1.16 (1.01- 1.33)	1.16 (1.01- 1.34)
Reason for last dental attendance					
Preventive			1	1	1
Treatment			1.55 (1.34-1.80)	1.50 (1.28-1.76)	1.55 (1.32-1.82)
<i>Dental clinical measures</i>					
Decayed teeth					
≤ mean				1	1

> mean	1.26 (1.12-1.43)	1.29 (1.17-1.42)
Missing teeth		
≤ mean	1	-
> mean	0.96 (0.86-1.07)	
Dental prosthesis use		
No	1	-
Yes	0.93 (0.86- 1.02)	
Dental prosthesis need		
No	1	1
Yes	2.07 (1.83-2.35)	2.13 (1.88-2.41)

PR=prevalence ratio / CI= confidence interval

† Considering for older adults ≤ 4 and > 4 and years of formal education

Supplementary file**Table 5.** Final models of hierarchical Poisson regression adjusted between exposure variables and negative oral health self-perception in adolescents, adults and older adults from state of São Paulo in 2015.

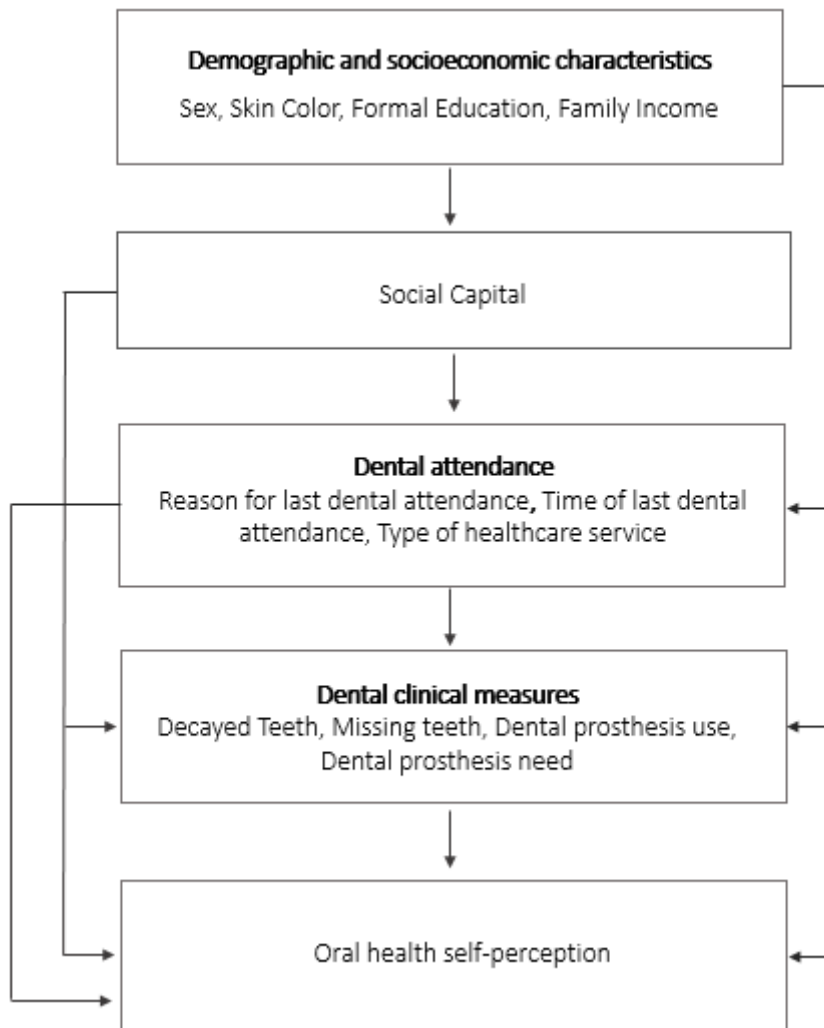
Variables	Adolescents (15-19)	Adults (35-44)	Older adults (65+)
	n = 5,314	n = 5,815	n = 5,556
	Final Model	Final Model	Final Model
	PR (95% CI)	PR (95% CI)	PR (95% CI)
<i>Demographic and socioeconomic</i>			
Sex			
Male	1	1	-
Female	1.29 (1.07-1.55)	1.16 (1.07-1.25)	-
Skin Color			
White	-	1	-
Non-White	-	1.06 (1.01-1.11)	-
Formal Education [†]			
> 8 years	-	-	1
≤ 8 years	-	-	0.81 (0.75-0.87)
Family income			
> R\$1.500,00	-	-	-
≤ R\$1.500,00	-	-	-
<i>Social Capital</i>			
High	1	1	1
Moderate	1.13 (1.00-1.28)	1.18 (1.08-1.29)	1.14 (1.05-1.24)
Low	1.58 (1.27-1.97)	1.20 (1.10-1.31)	1.26 (1.06-1.49)
<i>Dental attendance</i>			
Time of last dental attendance			
<1 year	-	1	-
≥1 year	-	1.17 (1.11-1.25)	-
Type of healthcare service			
Private	-	-	1
Public	-	-	1.16 (1.01- 1.34)
Reason for last dental attendance			
Routine	1	1	1
Treatment	1.53 (1.26-1.86)	1.45 (1.35-1.56)	1.55 (1.32-1.82)
<i>Dental clinical measures</i>			
Decayed teeth			
≤ mean	1	1	1
> mean	1.56 (1.37-1.77)	1.30 (1.22-1.38)	1.29 (1.17-1.42)
Missing teeth			
≤ mean	1	1	-
> mean	1.23 (1.04-1.44)	1.09 (1.02-1.16)	-
Dental prosthesis use			
No	-	-	-
Yes	-	-	-
Dental prosthesis need			
No	-	1	1
Yes	-	1.23 (1.13-1.33)	2.13 (1.88-2.41)

PR=prevalence ratio / CI= confidence interval

[†] Considering for older adults ≤ 4 and > 4 years of formal education

Final Model: fully adjusted for demographic, socioeconomic variables, social capital, dental attendance and dental clinical measures.

Figure 1. Theoretical model of factors associated with Oral Health Self-Perception adapted from Watt and Sheiham (2012) and Luchi et al. (2013).



3. CONSIDERAÇÕES FINAIS

Este estudo avaliou os fatores associados à autopercepção negativa de saúde bucal em adolescentes, adultos e idosos do estado de São Paulo, Brasil. Os resultados demonstraram que existem diferenças entre os fatores que influenciam o desfecho estudado nos distintos grupos etários. Isso pode ser explicado pelas mudanças nas expectativas com relação à saúde, que são moldadas, para além dos aspectos físicos e normativos, pelas vivências e contextos aos quais os indivíduos são expostos durante a vida. Evidencia-se que, como pesquisadores e profissionais da saúde, nossas investigações e intervenções vão muito além de avaliar a doença, ao passo que acessamos, antes de tudo, experiências humanas com a saúde. Assim, a saúde bucal e seus significados são formados por conceitos mais amplos do que meramente o que avalia-se “em boca”.

Ao mesmo tempo em que a resignação frente à acumulação de problemas bucais seja propulsora de dispositivos para enfrentá-la, como a resiliência e a adaptação, quando a disparidade entre as condições objetivas e subjetivas de saúde é desconsiderada, as ações que buscam reorganizar a assistência e os serviços de saúde acabam tendo pouco impacto. A consciência quanto o entendimento das condições objetivas é essencial para que mudanças nos padrões de comportamento, como a busca por atendimentos de forma preventiva e a aquisição de hábitos mais saudáveis, aconteçam. Diante disso, é imperativo que desenvolvamos maneiras eficientes de promover protagonismo, corresponsabilidade, auto-eficácia e empoderamento frente à saúde bucal antes que os desfechos negativos aconteçam.

No entanto, é imprescindível ponderar que estratégias de prevenção e promoção de saúde bucal com foco individual e comportamental são, na maioria das vezes, culpabilizadoras e, portanto, ineficazes e simplistas, considerando que a saúde é determinada sobretudo por determinantes sociais. Como demonstrado neste estudo, a autopercepção de saúde bucal também reflete iniquidades em saúde. As condições de vida e de trabalho estabelecem de que maneira os hábitos e estilos de vida serão mantidos, os quais são, por sua vez, indicadores de como a estrutura social influencia na saúde. O controle das condições bucais desfavoráveis, e do conseqüente impacto subjetivo que acarretam para os indivíduos, fundam-se principalmente em políticas sociais e em políticas de saúde que considerem fatores de risco comum, exigindo esforço colaborativo entre os diversos setores da sociedade e que potencializem processos participativos e decisórios.

REFERÊNCIAS

- ALLEN, P. F. Assessment of oral health related quality of life. **Health and Quality of Life Outcomes**, p. 8, 2003.
- ANDRADE, F. R. DE; NARVAI, P. C. Inquéritos populacionais como instrumentos de gestão e os modelos de atenção à saúde. **Revista de Saúde Pública**, v. 47, n. suppl 3, p. 154–160, dez. 2013.
- ATCHISON, K. A.; GIFT, H. C. Perceived Oral Health in a Diverse Sample. **Advances in Dental Research**, v. 11, n. 2, p. 272–280, maio 1997.
- BALTES, P. B.; STAUDINGER, U. M.; LINDENBERGER, U. LIFESPAN PSYCHOLOGY: Theory and Application to Intellectual Functioning. **Annual Review of Psychology**, v. 50, n. 1, p. 471–507, fev. 1999.
- BENYAMINI, Y. et al. Positive Affect and Function as Influences on Self-Assessments of Health: Expanding Our View Beyond Illness and Disability. **The Journals of Gerontology Series B: Psychological Sciences and Social Sciences**, v. 55, n. 2, p. P107–P116, 1 mar. 2000.
- BENYAMINI, Y.; LEVENTHAL, H.; LEVENTHAL, E. A. Self-rated oral health as an independent predictor of self-rated general health, self-esteem and life satisfaction. **Social Science & Medicine**, v. 59, n. 5, p. 1109–1116, set. 2004.
- BRENNAN, D. S.; SPENCER, A. Dimensions of oral health related quality of life measured by EQ-5D+ and OHIP-14. **Health and Quality of Life Outcomes**, v. 2, n. 1, p. 35, 2004.
- BULGARELI, J. V. et al. Fatores que influenciam o impacto da saúde bucal nas atividades diárias de adolescentes, adultos e idosos. **Revista de Saúde Pública**, v. 52, p. 44, 5 abr. 2018.
- CARR, A. J. Measuring quality of life: Is quality of life determined by expectations or experience? **BMJ**, v. 322, n. 7296, p. 1240–1243, 19 maio 2001.
- COSTA, E. H. M. DA; SAINTRAIN, M. V. DE L.; VIEIRA, A. P. G. F. Autopercepção da condição de saúde bucal em idosos institucionalizados e não institucionalizados. **Ciência & Saúde Coletiva**, v. 15, n. 6, p. 2925–2930, set. 2010.
- CUNNY, K. A.; PERRI, M. Single-Item Vs Multiple-Item Measures Of Health-Related Quality Of Life. **Psychological Reports**, v. 69, p. 127-130, 1991.
- FURUTA, M. et al. Social capital and self-rated oral health among young people: Social capital and oral health. **Community Dentistry and Oral Epidemiology**, v. 40, n. 2, p. 97–104, abr. 2012.
- GABARDO, M. C. L. et al. Multilevel analysis of self-perception in oral health and associated factors in Southern Brazilian adults: a cross-sectional study. **Cadernos de Saúde Pública**, v. 31, n. 1, p. 49–59, jan. 2015.

GABARDO, M. C. L.; MOYSÉS, S. T. Autopercepção de saúde bucal conforme o Perfil de Impacto da Saúde Bucal (OHIP) e fatores associados: revisão sistemática. **Revista Panamericana de Salud Publica**, p. 7, 2013.

GIFT, H. C.; ATCHISON, K. A.; DRURY, T. F. Perceptions of the Natural Dentition in the Context of Multiple Variables. **Journal of Dental Research**, v. 77, n. 7, p. 1529–1538, jul. 1998.

GLICK, M. et al. A new definition for oral health developed by the FDI World Dental Federation opens the door to a universal definition of oral health. **The Journal of the American Dental Association**, v. 147, n. 12, p. 915-917, Dec. 2016.

JYLHA, M. Health Revisited: Exploring Survey Episodes with Elderly Respondents. **Social Science & Medicine**, v. 39, n. 7, p. 983-990, 1994.

KAIEDA, A. K. et al. Malocclusion and dental appearance in underprivileged Brazilian adolescents. **Brazilian Oral Research**, v. 33, n. 0, 2019.

KAPLAN, G.; BARON-EPEL, O. What lies behind the subjective evaluation of health status? **Social Science & Medicine**, v. 56, n. 8, p. 1669–1676, abr. 2003.

KOJIMA, A. et al. Relationships between self-rated oral health, subjective symptoms, oral health behavior and clinical conditions in Japanese university students: a cross-sectional survey at Okayama University. **BMC Oral Health**, v. 13, n. 1, p. 62, dez. 2013.

LAHTI, S.; SUOMINEN-TAIPALE, L.; HAUSEN, H. Oral health impacts among adults in Finland: competing effects of age, number of teeth, and removable dentures. **European Journal of Oral Sciences**, v. 116, n. 3, p. 260–266, jun. 2008.

LOCKER, D.; GIBSON, B. Discrepancies between self-ratings of and satisfaction with oral health in two older adult populations. **Community Dentistry and Oral Epidemiology**, v. 33, n. 4, p. 280–288, ago. 2005.

LOCKER, D.; MAGGIARIAS, J.; WEXLER, E. What Frames of Reference Underlie Self-Ratings of Oral Health? **Journal of Public Health Dentistry**, v. 69, n. 2, p. 78–89, mar. 2009.

LOCKER, D.; MILLER, Y. Evaluation of Subjective Oral Health Status Indicators. **Journal of Public Health Dentistry**, v. 54, n. 3, p. 167–176, jun. 1994.

LUCHI, C. A. et al. Desigualdades na autoavaliação da saúde bucal em adultos. **Revista de Saúde Pública**, v. 47, n. 4, p. 740–751, ago. 2013.

MANDERBACKA, K. Examining what self-rated health question is understood to mean by respondents. **Scandinavian Journal of Social Medicine**, p. 9, 1998.

MANSYUR, C. et al. Social capital, income inequality, and self-rated health in 45 countries. **Social Science & Medicine**, v. 66, n. 1, p. 43–56, jan. 2008.

MARTINS, A. M. E. DE B. L.; BARRETO, S. M.; PORDEUS, I. A. Auto-avaliação de saúde bucal em idosos: análise com base em modelo multidimensional. **Cadernos de Saúde Pública**, v. 25, n. 2, p. 421–435, fev. 2009.

MILAGRES, C. S. et al. Condição de saúde bucal autopercebida, capacidade mastigatória e longevidade em idosos. **Ciência & Saúde Coletiva**, v. 23, n. 5, p. 1495–1506, maio 2018.

NUNES, A. P. N.; BARRETO, S. M.; GONÇALVES, L. G. Relações sociais e autopercepção da saúde: projeto envelhecimento e saúde. **Revista Brasileira de Epidemiologia**, v. 15, n. 2, p. 415–428, jun. 2012.

PATTUSSI, M. P. et al. Clinical, social and psychosocial factors associated with self-rated oral health in Brazilian adolescents. **Community Dentistry and Oral Epidemiology**, v. 35, n. 5, p. 377–386, out. 2007.

ROCHA, N. B. et al. Relationship between Perception of Oral Health, Clinical Conditions and Socio-Behavioral Factors of Mother-Child. **Pesquisa Brasileira em Odontopediatria e Clínica Integrada**, v. 15, p. 113–121, 30 mar. 2015.

SALIBA, N. A. et al. Perfil de cuidadores de idosos e percepção sobre saúde bucal. **Interface - Comunicação, Saúde, Educação**, v. 11, n. 21, p. 39–50, abr. 2007.

SENNA, S. R. C. M.; DESSEN, M. A. Contribuições das teorias do desenvolvimento humano para a concepção contemporânea da adolescência. **Psicologia: Teoria e Pesquisa**, v. 28, n. 1, p. 101–108, mar. 2012.

SILVA, J. V. DA; OLIVEIRA, A. G. R. DA C. Individual and contextual factors associated to the self-perception of oral health in Brazilian adults. **Revista de Saúde Pública**, v. 52, p. 29, 2 abr. 2018.

TASSINARI, W. DE S. et al. Contexto sócio-econômico e percepção da saúde bucal em uma população de adultos no Rio de Janeiro, Brasil: uma análise multinível. **Cadernos de Saúde Pública**, v. 23, n. 1, p. 127–136, jan. 2007.

THOMSON, W.M., et al. Construct Validity of Locker's Global Oral Health Item. **Journal of Dental Research**, v. 91, n. 11, p. 1038-1042, 2012.

THOMSON, W. M.; HE, S. L.; ELANI, H. W. Self-report oral health and disease experience among adults in China and NZ. **Clinical Oral Investigations**, v. 23, n. 5, p. 2123–2128, maio 2019.

UNDEN, A.-L.; ELOFSSON, S. Health from the patient's point of view. How does it relate to the physician's judgement? **Family Practice**, v. 18, n. 2, p. 174–180, 1 abr. 2001.

VALE, E. B. DO; MENDES, A. DA C. G.; MOREIRA, R. DA S. Autopercepção da saúde bucal entre adultos na região Nordeste do Brasil. **Revista de Saúde Pública**, v. 47, n. 3, p. 98–108, dez. 2013.

VASCONCELOS, L. C. A. DE et al. Autopercepção da saúde bucal de idosos de um município de médio porte do Nordeste brasileiro. **Cadernos de Saúde Pública**, v. 28, n. 6, p. 1101–1110, jun. 2012.

VETTORE, M.V.; AHMAD, S.F.H.; MACHUCA, C.; FONTANINI, H. Socio-economic status, social support, social network, dental status, and oral health reported outcomes in adolescents. **European Journal of Oral Sciences**, v. 127: p. 139–146, 2019.

SOLAR, O.; IRWIN, A. A conceptual framework for action on the social determinants of health. Social determinants of health discussion paper 2 (Policy and Practice). Geneva: **World Health Organization**; 2010.

ANEXO A – NORMAS PARA PUBLICAÇÃO NO PERIÓDICO *COMMUNITY DENTISTRY AND ORAL EPIDEMIOLOGY*

1. GENERAL

The aim of *Community Dentistry and Oral Epidemiology* is to serve as a forum for scientifically based information in community dentistry, with the intention of continually expanding the knowledge base in the field. The scope is therefore broad, ranging from original studies in epidemiology, behavioural sciences related to dentistry, and health services research, through to methodological reports in program planning, implementation and evaluation. Reports dealing with people of any age group are welcome.

The journal encourages manuscripts which present methodologically detailed scientific research findings from original data collection or analysis of existing databases. Preference is given to new findings. Confirmation of previous findings can be of value, but the journal seeks to avoid needless repetition. It also encourages thoughtful, provocative commentaries on subjects ranging from research methods to public policies. Purely descriptive reports are not encouraged, and neither are behavioural science reports with only marginal application to dentistry.

Knowledge in any field advances only when research findings and policies are held up to critical scrutiny. To be consistent with that view, the journal encourages scientific debate on a wide range of topics. Responses to research findings and views expressed in the journal are always welcome, whether in the form of a manuscript or a commentary. Prompt publication will be sought for these submissions. Book reviews and short reports from international conferences are also welcome, and publication of conference proceedings can be arranged with the publisher.

Please read the instructions below carefully for details on the submission of manuscripts, and the journal's requirements and standards, as well as information on the procedure after acceptance of a manuscript for publication in *Community Dentistry and Oral Epidemiology*. Authors are encouraged to visit Wiley Blackwell Author Services for further information on the preparation and submission of articles and figures.

2. GUIDELINES FOR RESEARCH REPORTING

Community Dentistry and Oral Epidemiology adheres to the ethical guidelines below for publication and research.

2.1. Authorship and Acknowledgements

Authorship: Authors submitting a manuscript do so on the understanding that the manuscript has been read and approved by all authors, and that all authors agree to the submission of the manuscript to the Journal.

Community Dentistry and Oral Epidemiology adheres to the definition of authorship set up by the International Committee of Medical Journal Editors (ICMJE). According to the ICMJE criteria, authorship should be based on (1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, (2) drafting the article or revising

it critically for important intellectual content and (3) final approval of the version to be published. Authors should meet conditions 1, 2 and 3.

It is a requirement that all authors have been credited as appropriate upon submission of the manuscript. Contributors who do not qualify as authors should instead be mentioned under Acknowledgments.

Acknowledgements: Under acknowledgements, please specify contributors to the article other than the authors accredited, along with all sources of financial support for the research.

2.2. Ethical Approvals

In all reports of original studies with humans, authors should specifically state the nature of the ethical review and clearance for the study protocol. Informed consent must be obtained from human participants in research studies. Some reports, such as those dealing with institutionalized children or mentally disabled persons, may need additional details of ethical clearance.

Research participants: research involving human participants will be published only if such research has been conducted in full accordance with ethical principles, including the World Medical Association Declaration of Helsinki (version 2008) and the additional requirements (if any) of the country where the research has been carried out.

Manuscripts must be accompanied by a statement that the research was undertaken with the understanding and written consent of each participant and according to the above mentioned principles.

All studies should include an explicit statement in the Methods section identifying the review and ethics committee approval for each study, if applicable. Editors reserve the right to reject papers if there is doubt as to whether appropriate procedures have been used. Take care to use the term “participant” instead of “subject” when reporting on your study.

Ethics of investigation: Manuscripts not in agreement with the guidelines of the Helsinki Declaration (as revised in 1975) will not be accepted for publication.

Animal Studies: If experimental animals are used, the methods section must clearly indicate that adequate measures were taken to minimize pain or discomfort. Experiments should be carried out in accordance with the Guidelines laid down by the National Institute of Health (NIH) in the USA in respect of the care and use of animals for experimental procedures or with the European Communities Council Directive of 24 November 1986 (86/609/EEC) and in accordance with local laws and regulations.

2.3. Clinical Trials

Clinical trials should be reported using the CONSORT guidelines available at <http://www.consort-statement.org>. A CONSORT checklist should also be included in the submission material.

Community Dentistry and Oral Epidemiology encourages authors submitting manuscripts reporting from a clinical trial to register the trials in any of the following free, public clinical trials registries: www.clinicaltrials.gov, <http://clinicaltrials.ifpma.org/clinicaltrials>,

<http://isrctn.org/>. The clinical trial registration number and name of the trial register will then be published with the manuscript.

2.4. Observational and Other Studies

Reports on observational studies such as cohort, case-control and cross-sectional studies should be consistent with guidelines such as STROBE. Meta-analysis for systematic reviews should be reported consistent with guidelines such as QUOROM or MOOSE. These guidelines can be accessed at www.equator-network.org. Authors of analytical studies are strongly encouraged to submit a Directed Acyclic Graph as a supplementary file for the reviewers and editors. This serves to outline the rationale for their modelling approach and to ensure that authors consider carefully the analyses that they conduct.

Studies with a health economics focus should be consistent with the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) statement and the CHEERS checklist; see the article at the following link: <https://www.bmj.com/content/346/bmj.f1049>.

2.5. Appeal of Decision

The decision on a manuscript is final and cannot be appealed.

2.6. Permissions

If all or parts of previously published illustrations are used, permission must be obtained from the copyright holder concerned. It is the primary author's responsibility to obtain these in writing and provide copies to the Publishers.

Photographs of People

Community Dentistry and Oral Epidemiology follows current HIPAA guidelines for the protection of patient/participant privacy. If an individual pictured in a digital image or photograph can be identified, his or her permission is required to publish the image. The corresponding author may submit a letter signed by the patient authorizing the Community Dentistry and Oral Epidemiology to publish the image/photo. Alternatively, a form provided by Community Dentistry and Oral Epidemiology (available by clicking the "Instructions and Forms" link in Manuscript central) may be downloaded for your use. You can also download the form [here](#). This approval must be received by the Editorial Office prior to final acceptance of the manuscript for publication. Otherwise, the image/photo must be altered such that the individual cannot be identified (black bars over eyes, etc.).

2.7. Copyright Assignment

If your paper is accepted, the author identified as the formal corresponding author for the paper will receive an email prompting them to log into Author Services, where, via the Wiley Author Licensing Service (WALS), they will be able to complete the licence agreement on behalf of all authors on the paper.

For authors signing the copyright transfer agreement

If the OnlineOpen option is not selected, the corresponding author will be presented with the copyright transfer agreement (CTA) to sign. The terms and conditions of the CTA can be previewed in the samples associated with the Copyright FAQs below:

CTA Terms and Conditions http://authorservices.wiley.com/bauthor/faqs_copyright.asp

For authors choosing OnlineOpen

If the OnlineOpen option is selected, the corresponding author will have a choice of the following Creative Commons License Open Access Agreements (OAA):

Creative Commons Attribution License OAA

Creative Commons Attribution Non-Commercial License OAA

Creative Commons Attribution Non- Commercial - NoDerivs License OAA

To preview the terms and conditions of these open access agreements, please visit the Copyright FAQs hosted on Wiley Author Services http://authorservices.wiley.com/bauthor/faqs_copyright.asp and visit <http://www.wileyopenaccess.com/details/content/12f25db4c87/Copyright--License.html>.

If you select the OnlineOpen option and your research is funded by The Wellcome Trust and members of the Research Councils UK (RCUK) or the Austrian Science Fund (FWF), you will be given the opportunity to publish your article under a CC-BY license supporting you in complying with your Funder requirements. For more information on this policy and the Journal's compliant self-archiving policy, please visit: <http://www.wiley.com/go/funderstatement>.

3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be submitted electronically via the online submission site <http://mc.manuscriptcentral.com/cdoe>. The use of an online submission and peer review site enables immediate distribution of manuscripts and consequentially speeds up the review process. It also allows authors to track the status of their own manuscripts. Community Dentistry and Oral Epidemiology requires the submitting/corresponding author (only) to provide an ORCID iD when submitting their manuscript. If the author does not have an ORCID iD, an easy-to-use application to obtain one is available through the journal's ScholarOne system. Complete instructions for submitting a manuscript are available online and below. Further assistance can be obtained from the Managing Editor, Michelle Martire: cdoejournal@wiley.com

Editorial Office:

Professor W. Murray Thomson

Editor

Community Dentistry and Oral Epidemiology

Sir John Walsh Research Institute

Faculty of Dentistry

The University of Otago

Dunedin, New Zealand

E-mail: murray.thomson@otago.ac.nz

Tel: +64 21 279 7116

The Managing Editor is Michelle Martire: cdoejournal@wiley.com

Article Preparation Support

Wiley Editing Services offers expert help with English Language Editing, as well as translation, manuscript formatting, figure illustration, figure formatting, and graphical abstract design – so you can submit your manuscript with confidence.

Also, check out our resources for Preparing Your Article for general guidance about writing and preparing your manuscript.

3.1. Getting Started

- Launch your web browser (supported browsers include Internet Explorer 6 or higher, Netscape 7.0, 7.1, or 7.2, Safari 1.2.4, or Firefox 1.0.4 or higher) and go to the journal's online Submission Site: <http://mc.manuscriptcentral.com/cdoe>
- Login or click the 'Create Account' option if you are a first-time user.
- If you are creating a new account:
 - After clicking on 'Create Account', enter your name and e-mail information and click 'Next'. Your e-mail information is very important.
 - Enter your institution and address information as appropriate, and then click 'Next.'
 - Enter a user ID and password of your choice (we recommend using your e-mail address as your user ID), and then select your area of expertise. Click 'Finish'.
- If you have an account but have forgotten your log-in details, go to Password Help on the journals online submission system <http://mc.manuscriptcentral.com/cdoe> and enter your e-mail address. The system will send you an automatic user ID and a new temporary password.
- Login and select 'Corresponding Author Center.'

3.2. Submitting Your Manuscript

- After you have logged in, click the 'Submit a Manuscript' link in the menu bar.
- Enter data and answer questions as appropriate. You may copy and paste directly from your manuscript and you may upload your pre-prepared covering letter.
- Click the 'Next' button on each screen to save your work and advance to the next screen.
- You are required to upload your files.
 - Click on the 'Browse' button and locate the file on your computer.
 - Select the designation of each file in the drop down next to the Browse button.
 - When you have selected all files you wish to upload, click the 'Upload Files' button.
- Review your submission (in HTML and PDF format) before sending to the Journal. Click the 'Submit' button when you are finished reviewing.

By submitting a manuscript to or reviewing for this publication, your name, email address, and affiliation, and other contact details the publication might require, will be used for the regular operations of the publication, including, when necessary, sharing with the publisher (Wiley) and partners for production and publication. The publication and the publisher recognize the importance of protecting the personal information collected from users in the operation of these services, and have practices in place to ensure that steps are taken to maintain the security, integrity, and privacy of the personal data collected and processed. You can learn more at <https://authorservices.wiley.com/statements/data-protection-policy.html>.

3.3. Manuscript Files Accepted

Manuscripts should be uploaded as Word (.doc or .docx) or Rich Text Format (.rtf) files (not write-protected), along with separate Figure files. For the latter, GIF, JPEG, PICT or Bitmap files are acceptable for submission, but only high-resolution TIF or EPS files are suitable for

printing. Tables should be done in Word rather than in Excel. The files will be automatically converted to HTML and a PDF document on upload, and those will be used for the review process. The text file must contain the entire manuscript, including the title page, abstract, text, references, tables, and figure legends, but no embedded figures. Figure tags should be included in the file. Manuscripts should be formatted as described in the Author Guidelines below.

3.4. Suggest Two Reviewers

Community Dentistry and Oral Epidemiology attempts to keep the review process as short as possible to enable rapid publication of new scientific data. In order to facilitate this process, please suggest the names and current email addresses of two potential international reviewers whom you consider capable of reviewing your manuscript. Whether these are used is up to the Editor, but it is helpful to have the suggestions.

3.5. Suspension of Submission Mid-way in the Submission Process

You may suspend a submission at any phase before clicking the 'Submit' button and save it to submit later. The manuscript can then be located under 'Unsubmitted Manuscripts' and you can click on 'Continue Submission' to continue your submission when you choose to.

3.6. E-mail Confirmation of Submission

After submission, you will receive an email to confirm receipt of your manuscript. If you do not receive the confirmation email within 10 days, please check your email address carefully in the system. If the email address is correct, please contact your IT department. The error may be caused by some sort of spam filtering on your email server. Also, the emails should get through to you if your IT department adds our email server (uranus.scholarone.com) to their whitelist.

3.7. Review Procedures

All manuscripts (except some commentaries and conference proceedings) are submitted to an initial review by the Editor or Associate Editors. Manuscripts which are not considered relevant to oral epidemiology or the practice of community dentistry or are not of interest to the readership of Community Dentistry and Oral Epidemiology will be rejected without review. Manuscripts presenting innovative, hypothesis-driven research with methodologically detailed scientific findings are favoured to move forward to peer review. All manuscripts accepted for peer review will be submitted to at least 2 reviewers for peer review, and comments from the reviewers and the editor will be returned to the corresponding author.

3.8. Manuscript Status

You can access ScholarOne Manuscripts (formerly known as Manuscript Central) any time to check your 'Author Centre' for the status of your manuscript. The Journal will inform you by e-mail once a decision has been made.

3.9. Submission of Revised Manuscripts

Revised manuscripts must be uploaded within two or three months of authors being notified of a Minor or Major revision decision respectively. Locate your manuscript under 'Manuscripts with Decisions' and click on 'Submit a Revision' to submit your revised manuscript. Please remember to delete any previously-uploaded files when you upload your revised manuscript. Revised manuscripts must show changes to the text in either a coloured font or highlighted text. Do NOT use track changes for this. Prepare and submit a separate "Response to reviewers" document, in which you address EACH of the points raised by the reviewers.

3.10. Conflict of Interest

Community Dentistry & Oral Epidemiology requires that sources of institutional, private and corporate financial support for the work within the manuscript must be fully acknowledged, and any potential grant holders should be listed. Acknowledgements should be brief and should include information concerning conflict of interest and sources of funding. It should not include thanks to anonymous referees and editors.

3.11. Editorial Board Submissions

Manuscripts authored or co-authored by the Editor-in-Chief or by members of the Editorial Board are evaluated using the same criteria determined for all other submitted manuscripts. The process is handled confidentially and measures are taken to avoid real or reasonably perceived conflicts of interest.

4. MANUSCRIPT FORMAT AND STRUCTURE

4.1. Word Limit and Page Charges

Articles should be limited to 3,700 words (including references) and 6 Tables or Figures; alternatively, 4,000 words and 5 Tables or Figures may be used. This equates to seven published pages, and authors are strongly encouraged to stay within those limits. The Methods and Results sections are usually where the word count can “blow out”, and authors are encouraged to consider submitting heavily detailed material for inclusion in a separate online Appendix to their article (at no cost). Articles exceeding seven published pages are subject to a charge of USD 300 per additional page. One published page amounts approximately to 5,500 characters (including spaces) of text but does not include Figures and Tables.

4.2. Format

Language: All submissions must be in English; both British and American spelling conventions are acceptable. Authors for whom English is a second language must have their manuscript professionally edited by an English speaking person before submission to make sure the English is of high quality. It is preferred that the manuscript is professionally edited. A list of independent suppliers of editing services can be found at <http://wileyeditingservices.com/en/>. All services must be paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

Font: All submissions must be 1.5 spaced using a standard 12-point font size, and preferably in the Times Roman font.

Abbreviations, Symbols and Nomenclature: Authors can consult the following source: CBE Style Manual Committee. Scientific style and format: the CBE manual for authors, editors, and publishers. 6th ed. Cambridge: Cambridge University Press, 1994

4.3. Structure

All manuscripts submitted to Community Dentistry and Oral Epidemiology should follow the structure guidelines below.

Title Page: the names and institutional affiliations of all authors of the manuscript should be included.

Abstract: All manuscripts submitted to Community Dentistry and Oral Epidemiology should use a structured abstract under the headings: Objectives – Methods – Results – Conclusions.

Main Text of Original Articles should include Introduction, Methods, Results and Discussion. Subheadings are not encouraged.

Introduction: this should be focused, outlining the historical or logical origins of the study and not summarise the findings; exhaustive literature reviews are not appropriate. It should close with an explicit statement of the specific aims of the investigation.

Methods must contain sufficient detail such that, in combination with the references cited, all studies reported can be fully reproduced. As a condition of publication, authors are required to make materials and methods used freely available to other academic researchers for their own use.

Results should not focus overly on P values – we concur with recent calls for less emphasis on statistical significance (see Amrhein et al, Nature 2019; 567: 305-307). In the Results section, have one paragraph of text per Table, and do not repeat Table data in that Results text; instead, draw the reader's attention to the highlights/important parts of the Table. Avoid "compared to" - use 'than' instead.

Discussion: See Docherty and Smith, BMJ 1999; 318: 1224-5 for how to structure a Discussion section. That structure is encouraged. The section should end with a brief conclusion and a comment on the potential clinical program or policy relevance of the findings. Statements and interpretation of the data should be appropriately supported by original references. In the Discussion and conclusion, use the term 'findings' rather than 'results'.

4.4. References

Authors are required to cite all necessary references for the research background, methods and issues discussed. Primary sources should be cited. Relevant references published in CDOE are expected to be among the cited literature.

The list of references begins on a fresh page in the manuscript. All references should be numbered consecutively in order of appearance and should be as complete as possible. In text citations should cite references in consecutive order using Arabic superscript numerals. Sample references follow:

Journal article:

1. King VM, Armstrong DM, Apps R, Trott JR. Numerical aspects of pontine, lateral reticular, and inferior olivary projections to two paravermal cortical zones of the cat cerebellum. *J Comp Neurol* 1998;390:537-551.

Book:

2. Voet D, Voet JG. *Biochemistry*. New York: John Wiley & Sons; 1990. 1223 p.

Please note that journal title abbreviations should conform to the practices of Chemical Abstracts.

For more information about AMA reference style - AMA Manual of Style

4.5. Tables, Figures and Figure Legends

Tables are part of the text and should be included, one per page, after the References. Please see our Guide to Tables and Figures for guidance on how to lay these out. All graphs, drawings, and photographs are considered figures and should be sequentially numbered with Arabic numerals. Each figure must be on a separate page and each must have a caption. All captions, with necessary references, should be typed together on a separate page and numbered clearly (Fig.1, Fig. 2, etc.).

Preparation of Electronic Figures for Publication: Although low-quality images are adequate for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit EPS (lineart) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented programmes. Scans (TIFF only) should have a resolution of 300 dpi (halftone) or 600 to 1200 dpi (line drawings) in relation to the reproduction size (see below). EPS files should be saved with fonts embedded (and with a TIFF preview if possible). For scanned images, the scanning resolution (at final image size) should be as follows to ensure good reproduction: line art: >600 dpi; half-tones (including gel photographs): >300 dpi; figures containing both halftone and line images: >600 dpi.

Further information can be obtained at Wiley Blackwell's guidelines for figures: <http://authorservices.wiley.com/bauthor/illustration.asp>.

Check your electronic artwork before submitting it: <http://authorservices.wiley.com/bauthor/eachecklist.asp>

Permissions: If all or parts of previously published illustrations are used, permission must be obtained from the copyright holder concerned. It is the corresponding author's responsibility to obtain these in writing and provide copies to the Publishers.

Color figures. Figures submitted in colour may be reproduced in color online free of charge. Please note, however, that it is preferable that line figures (e.g. graphs and charts) are supplied in black and white so that they are legible if printed by a reader in black and white. If an author would prefer to have figures printed in colour in hard copies of the journal, a fee will be charged by the Publisher.

Figure Legends: All captions, with necessary references, should be typed together on a separate page and numbered clearly (Fig.1, Fig. 2, etc.).

Special issues: Larger papers, monographs, and conference proceedings may be published as special issues of the journal. The full cost of these extra issues must be paid by the authors. Further information can be obtained from the editor or publisher.

5. AFTER ACCEPTANCE

Upon acceptance of a manuscript for publication, the manuscript will be forwarded to the Production Editor, who is responsible for the production of the journal.

5.1. Proof Corrections

The corresponding author will receive an email alert containing a link to a web site. A working email address must therefore be provided for the corresponding author. The proof can be downloaded as a PDF (portable document format) file from this site.

Acrobat Reader will be required in order to read this file. This software can be downloaded (free of charge) from the following Web site: www.adobe.com/products/acrobat/readstep2.html. This will enable the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof. Hard copy proofs will be posted if no e-mail address is available; in your absence, please arrange for a colleague to access your e-mail to retrieve the proofs. Proofs must be returned within three days of receipt.

Since changes to proofs are costly, we ask that you only correct typesetting errors. Excessive changes made by the author in the proofs, excluding typesetting errors, will be charged separately. Other than in exceptional circumstances, all illustrations are retained by the publisher. Please note that the author is responsible for all statements made in the work, including changes made by the copy editor.

5.2. Early View (Publication Prior to Print)

Community Dentistry and Oral Epidemiology is covered by Wiley Blackwell's Early View service. Early View articles are complete full-text articles published online in advance of their publication in a printed issue. They have been fully reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after online publication. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the traditional way. They are therefore given a Digital Object Identifier (DOI), which allows the article to be cited and tracked before it is allocated to an issue. After print publication, the DOI remains valid and can continue to be used to cite and access the article.

5.3. Author Services

Online production tracking is available for your article through Wiley's Author Services. Please see: <http://authorservices.wiley.com/bauthor/>

Article Promotion Support

Wiley Editing Services offers professional video, design, and writing services to create shareable video abstracts, infographics, conference posters, lay summaries, and research news stories for your research – so you can help your research get the attention it deserves.

5.4. Cover Image Submissions

This journal accepts artwork submissions for Cover Images. This is an optional service you can use to help increase article exposure and showcase your research. For more information, including artwork guidelines, pricing, and submission details, please visit the Journal Cover Image page.

ANEXO B – FICHA DE EXAME E FORMULÁRIO

SBS São Paulo **SUS** 2015
PESQUISA ESTADUAL DE SAÚDE BUCAL

Ficha de Exame EXAMINADOR ORIG/DUP

Nº IDENTIFICAÇÃO MUNICÍPIO SETOR CENSITÁRIO DOMICÍLIO

INFORMAÇÕES GERAIS

Idade em anos Sexo Cor/Raça

1- Masculino 2- Feminino 1- Branca 4- Parda 2- Preta 5- Indígena 3- Amarela

Realização do Exame

1- Realizado
2- Não realizado- falta de autorização
3- Não realizado- autorizado mas não permitido
4- Não realizado – ausência do morador
5- Não realizado por outras razões

EDENTULISMO (15-19, 35-44 e 65 anos e mais)

USO DE PRÓTESE Sup Inf

0- Não usa
1- Usa uma Ponte Fixa (PF)
2- Usa mais do que uma PF
3- Usa Prótese Parcial Removível (PR)
4- Usa 1 ou mais PF e 1 ou mais PR
5- Usa prótese Total
9- Sem informação

NECESSIDADE DE PRÓTESE Sup Inf

0- Não necessita
1- Necessita de 1 PF ou PR (1 elemento)
2- Nec. De 1 PF ou PR (mais de 1 elemento)
3- Nec. De uma combinação de próteses (PF e/ou PR para 1 ou mais de 1 elemento)
4- Nec. de 1 Prótese Total
9- Sem informação

CONDIÇÃO DA OCLUSÃO DENTÁRIA (15- 19 anos)

Overjet maxilar Anterior em mm Overjet mandibular Anterior em mm Mordida aberta vertical anterior em mm

Relação molar ântero-posterior Angle

0- Normal 1- Meia Cúspide 2- Cúspide Inteira 0- Classe I 1- Classe II 2- Classe III

CÁRIE DENTÁRIA E NECESSIDADE DE TRATAMENTO (15-19, 35-44 e 65 anos e mais)

COROA TRAT. 18 17 16 15 14 13 12 11 21 22 23 24 25 26 27 28

COROA TRAT. 48 47 46 45 44 43 42 41 31 32 33 34 35 36 37 38

0- Coroa Hígida 1- Coroa Cariada 2- Restaurada mascarada 3- Restaurada sem cárie 4- Dente perdido devido à cárie 5- Dente Perdido por Outra razão 6- Dente com selante 7- Apoio de Ponte ou Coroa 8- Coroa não erupcionada 9- Excluído 0- Nenhum Tratamento 1- Restauração uma superfície 2- Restauração de 2 ou mais superfícies 3- Coroa por qualquer razão 4- Faceta Estética 5- Tratamento Pulpar ou Restauração 6- Extração 7- Remineração de Mancha Branca 8- Selante 9- Sem Informação

CONDIÇÃO PERIODONTAL

0- Normal 1- Sangramento a sondagem 2- Cálculo 3- Bolsa de 4 a 5 mm 4- Bolsa 6 ou mais mm X- Ausência

17/16 11 27/26 37/36 31 47/46

SANGRAMENTO GENGIVAL Cálculo Dentário Bolsa Periodontal

11,5 mm 6,5 mm 6,5 mm 6,5 mm

CARACTERIZAÇÃO SOCIOECONÔMICA DA FAMÍLIA

- 1 Quantas pessoas, incluindo o sr(a), residem nesta casa? Marcar 99 para "não sabe/não respondeu"
- 2 Quantos cômodos estão servindo permanentemente de dormitório para os moradores deste domicílio? Marcar 99 para "não sabe/não respondeu"
- 3 Quantos bens tem em sua residência?
 Considerar como bens: televisão, geladeira, aparelho de som, micro-ondas, telefone, telefone celular, máquina de lavar roupa, máquina de lavar louça, microcomputador, e número de carros. Varia de 0 a 11 bens. Marcar 99 para "não sabe/não respondeu"
- 4 No mês passado, quanto receberam, em reais, juntas, todas as pessoas que moram na sua casa incluindo salários, bolsa família, pensão, aluguel, soldo, aposentadoria ou outros rendimentos?
 1- Até 250; 2- De 251 a 500; 3- De 501 a 1.500; 4- De 1.501 a 2.500; 5- De 2.501 a 4.500; 6- De 4.501 a 9.500; 7- Mais de 9.500; 9- Não sabe/não respondeu.

ESCOLARIDADE, MORBIDADE BUCAL REFERIDA E USO DE SERVIÇOS

- 5 Até que série o sr(a) estudou?
 Fazer a conversão e anotar o total de anos estudados com aproveitamento (sem reprovação). Marcar 99 para "não sabe/não respondeu"
- 6 O sr(a) acha que necessita de tratamento dentário atualmente? 0- Não; 1- Sim; 9- Não sabe/Não respondeu
- 7 Nos últimos 6 meses o sr(a) teve dor de dente? 0- Não; 1- Sim; 9- Não sabe/Não respondeu
- 8 Aponte na linha ao lado o quanto foi esta dor 1 (um) significa muito pouca dor e 10 (dez) uma dor muito forte? 1 2 3 4 5 6 7 8 9 10
- 9 Alguma vez na vida o sr(a) já foi ao consultório do dentista? 0- Não; 1- Sim; 9- Não sabe/Não respondeu
- 10 Quando o sr(a) consultou o dentista pela última vez?
 1- Menos de um ano; 2- Um a dois anos; 3- Três anos ou mais; 8- Não se aplica; 9- Não sabe/Não respondeu
- 11 Onde foi a sua última consulta?
 1- Serviço público; 2- Serviço particular; 3- Plano de Saúde ou Convênio; 4- Outros; 8- Não se aplica; 9- Não sabe/Não respondeu
- 12 Qual o motivo da sua última consulta?
 1- Revisão, prevenção ou check-up; 2- Dor; 3- Extração; 4- Tratamento; 5- Outros; 8- Não se aplica; 9- Não sabe/Não respondeu
- 13 O que o sr(a) achou do tratamento na última consulta?
 1- Muito bom; 2- Bom; 3- Regular; 4- Ruim; 5- Muito Ruim; 8- Não se aplica; 9- Não sabe/Não respondeu

AUTOPERCEPÇÃO E IMPACTO EM SAÚDE BUCAL

- 14 Com relação aos seus dentes/boca o sr(a) está?
 1- Muito satisfeito; 2- Satisfeito; 3- Nem satisfeito nem insatisfeito; 4- Insatisfeito; 5- Muito insatisfeito; 9- Não sabe/Não respondeu
- 15 O sr(a) considera que necessita usar prótese total (dentadura) ou trocar a que está usando atualmente?
 0- Não; 1- Sim; 9- Não sabe/Não respondeu
- 16 Algumas pessoas têm problemas que podem ter sido causados pelos dentes. Das situações abaixo, quais se aplicam a(o) sr(a), nos últimos seis meses? 0- Não; 1- Sim; 9- Não sabe/Não respondeu
- 16.1. Teve dificuldade para comer por causa dos dentes ou sentiu dor nos dentes ao tomar líquidos gelados ou quentes?
- 16.2. Os seus dentes o incomodaram ao escovar?
- 16.3. Os seus dentes o deixaram nervoso (a) ou irritado (a)?
- 16.4. Deixou de sair, se divertir, ir a festas, passeios por causa dos seus dentes?
- 16.5. Deixou de praticar esportes por causa dos seus dentes?
- 16.6. Teve dificuldades para falar por causa dos seus dentes?
- 16.7. Os seus dentes o fizeram sentir vergonha de sorrir ou falar?
- 16.8. Os seus dentes atrapalharam para estudar/trabalhar ou fazer tarefas a escola/trabalho?
- 16.9. Deixou de dormir ou dormiu mal por causa dos seus dentes?

CAPITAL SOCIAL

- 17 Se houvesse um problema de abastecimento de água nesta comunidade, qual é a probabilidade de que as pessoas cooperassem para tentar resolver o problema? 1- Muito provável; 2- Relativamente provável; 3- Nem provável, nem improvável; 4- Relativamente improvável; 5- Muito improvável
- 18 Em geral, como você sente em relação ao crime e à violência quando está sozinho(a) em casa?
 1- Muito seguro (a); 2- Moderadamente seguro (a); 3- Nem seguro (a), nem inseguro (a); 4- Moderadamente inseguro (a); 5- Muito inseguro (a)
- 19 Em geral, você se considera....
 1- Muito feliz; 2- Moderadamente feliz; 3- Nem feliz, nem infeliz; 4- Moderadamente infeliz; 5- Muito infeliz

ANEXO C – TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO



Termo de Consentimento Livre e Esclarecido

Esclarecimentos

Este é um convite para você participar da Pesquisa estadual de Saúde Bucal (Projeto SB São Paulo 2015) realizada pela Secretaria do Estado da Saúde do estado de São Paulo, Entidades Odontológicas e Universidades. Sua participação é voluntária, o que significa que você poderá desistir a qualquer momento, retirando seu consentimento, sem que isso lhe traga nenhum prejuízo ou penalidade.

Nessa investigação científica, serão examinados os dentes e as gengivas de adolescentes e adultos da população do seu município, escolhidos por sorteio. O exame é uma observação da boca, feita na própria escola ou na residência, com toda técnica, segurança e higiene, conforme normas da Organização Mundial da Saúde e do Ministério da Saúde. Não representa riscos nem desconforto para quem será examinado. Os dados individuais não serão divulgados em nenhuma hipótese, mas os resultados da pesquisa ajudarão muito a prevenir doenças bucais e melhorar a saúde de todos.

Os riscos relativos à sua participação nesta pesquisa são mínimos e os benefícios que você terá serão indiretos e relacionados a um melhor conhecimento a respeito das doenças bucais na população do estado de São Paulo de modo a organizar os serviços de maneira mais racional e efetiva.

Todas as informações obtidas serão sigilosas e seu nome não será identificado em nenhum momento. Os dados serão guardados em local seguro e a divulgação dos resultados será feita de forma a não identificar os voluntários.

Se você tiver algum gasto que seja devido à sua participação na pesquisa, você será ressarcido, caso solicite. Em qualquer momento, se você sofrer algum dano comprovadamente decorrente desta pesquisa, você terá direito a indenização.

Caso seja detectado algum problema de saúde bucal que exija atendimento odontológico, você será devidamente encaminhado a uma Unidade de Saúde, onde será atendido.

Você ficará com uma cópia deste Termo e toda a dúvida que você tiver a respeito desta pesquisa, poderá perguntar diretamente para <coordenador local da pesquisa>, no endereço <endereço da instituição> ou pelo telefone <telefone da instituição>.

Dúvidas a respeito da ética dessa pesquisa poderão ser questionadas ao Coordenação Técnica-Científica e a Coordenação executiva do Projeto SB São Paulo 2015.

Consentimento Livre e Esclarecido – Para participante individual

Declaro que compreendi os objetivos deste estudo, como ele será realizado, os riscos e benefícios envolvidos na **Pesquisa Estadual de Saúde Bucal – Projeto SB São Paulo 2015** e autorizo a realização do exame

Data ____/____/____

Nome em letra de forma

Assinatura ou impressão dactiloscópica

