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Desenvolvimento e validação de um instrumento para avaliação da adesão de cirurgiões-dentistas aos protocolos de controle de infecção e aspectos psicológicos na prática odontológica frente a doenças infectocontagiosas

Governador Valadares

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Dissertação apresentada ao Programa de Pós-Graduação em Ciências Aplicadas à Saúde, da Universidade Federal de Juiz de Fora, Campus Governador Valadares, como requisito parcial para obtenção do título de Mestre em Ciências Aplicadas a Saúde. Área de concentração em Biociências.

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Never lose hope, my heart, miracles dwell in the invisible.

Rumi

RESUMO

As práticas de controle de infecção na odontologia são importantes para proteger tanto os pacientes quanto os profissionais e garantir um ambiente de trabalho seguro. Portanto, elas devem ser implementadas e seguidas para todos os pacientes atendidos, independentemente do seu status de infecção. Outro ponto importante a ser destacado é o bem-estar psicológico dos dentistas e da equipe de saúde bucal, já que as doenças infecciosas parecem interferir na prática de cuidados, potencialmente gerando medo e ansiedade. No Brasil, a maioria das pesquisas avalia a adesão dos profissionais de odontologia aos protocolos de controle de infecção usando instrumentos que não tiveram suas propriedades psicométricas avaliadas. Além disso, não existe nenhum instrumento que busque associar aspectos psicológicos na prática odontológica com doenças infecciosas. Este estudo teve como objetivo desenvolver e validar um instrumento em língua portuguesa chamado "Escala multidimensional relacionada às doenças infectocontagiosas em Odontologia (EMRDIO)" para avaliar a adesão dos dentistas aos protocolos de controle de infecção e explorar aspectos psicológicos na prática odontológica relacionados a doenças infecciosas. A versão inicial do instrumento consistia em 49 itens e 81 subitens. A primeira fase envolveu um índice de validade de conteúdo e análise de face por dez juízes com experiência nesse campo, revisando o conteúdo, escopo e relevância de cada item. A segunda fase incluiu uma análise de compreensão verbal com uma subamostra representativa de dentistas. Após essas fases, algumas perguntas foram removidas e modificadas para aumentar a clareza para os dentistas. A estrutura de fatores do EMRDIO foi avaliada usando análise fatorial exploratória (AFE) e análise fatorial confirmatória (AFC). A confiabilidade foi avaliada usando consistência interna pelo coeficiente ômega de McDonald (ω) e alfa de Cronbach (α). Um total de 405 indivíduos teve acesso ao instrumento. Os resultados da AFE (n = 135) revelaram uma estrutura de quatro fatores (Proteção Ambiental no Trabalho, Desinfecção, Treinamento da Equipe e Medo e Ansiedade) com 23 itens com carga fatorial acima de 0,60. O valor do KMO foi de 0,803 e o teste de esfericidade de Bartlett produziu χ^2: 2501,136, df: 253,000, com um valor significativo de $P < 0,001$. A AFC (n = 270) mostrou um bom ajuste do modelo: $\chi^2/df = 1,75$; CFI: 0,997; TLI: 0,996; SRMR: 0,079;

RMSEA: 0,053 (90% IC:0.044 a 0.061), apoiando a estrutura de quatro fatores derivada da AFE. A análise de confiabilidade mostrou consistência interna adequada para todos os fatores (ω e α ≥ 0,70). O desenvolvimento do instrumento EMRDIO seguiu todos os passos apropriados para validação, demonstrando validade e consistência interna adequadas. Assim, este instrumento pode ser considerado adequado para avaliar aspectos de controle de infecção e identificar fatores psicológicos na prática odontológica de dentistas diante de doenças infecciosas.

Palavras-chave: Ansiedade. Doenças Transmissíveis. Medo. Controle de Infecções. Inquéritos e Questionários.

ABSTRACT

Infection control practices in dentistry are important for protecting both patients and professionals and ensuring a safe working environment. Therefore, they should be implemented and followed for all patients treated, regardless of their infection status. Another important point to highlight is the psychological well-being of dentists and oral health care team, as infectious diseases appear to interfere with the practice of care, potentially generating fear and anxiety. In Brazil, most research evaluates the adherence of dental professionals to infection control protocols using instruments that have not had their psychometric properties evaluated. Furthermore, there is no instrument that seeks to associate psychological aspects in dental practice with infectious diseases. This study aimed to develop and validate an instrument in the Portuguese language called “Escala multidimensional relacionada às doenças infectocontagiosas em Odontologia (EMRDIO)” to assess the dentists’ adherence to infection control protocols and explore psychological aspects in dental practice concerning infectious diseases. The initial version of the instrument comprised 49 items and 81 subitems. The first phase involved a content validity index and face validity analyses by ten judges with expertise in this field, reviewing each item`s content, scope, and relevance. The second phase included a verbal comprehension analysis with a representative subsample of dentists. After these phases, some questions were removed and modified to enhance the clarity for the dentists. The factor structure of EMRDIO was assessed using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Reliability was evaluated using internal consistency by McDonald's Omega coefficient (ω) and Cronbach's Alpha (α). A total of 405 individuals had access to the instrument. Findings from EFA (n = 135) revealed a four-factor structure (Proteção Ambiental no Trabalho, Desinfecção, Treinamento da Equipe e Medo e Ansiedade) with 23 items with a factor loading above 0.60. The KMO value of 0.803 and Bartlett's test of sphericity yielded χ^2: 2501.136, df: 253.000, with a significant value of $P < 0.001$ was observed. CFA (n = 270) showed an good fit of the model: $\chi^2/df = 1.75$; CFI: 0.997; TLI: 0.996; SRMR: 0.079; RMSEA: 0.053 (90% CI:0.044 to 0.061), supporting the 4-factor structure derived from the EFA. Reliability analysis showed adequate internal consistency for all factors (ω and $\alpha \geq 0.70$). The development of the EMRDIO

instrument followed all the appropriate steps for validation, demonstrating adequate validity and internal consistency. Thus, this instrument can be considered suitable for assessing infection control aspects and identifying psychological factors in the dental practice of dentists facing infectious diseases.

Keywords: Anxiety. Communicable Diseases. Fear. Infection Control. Surveys and Questionnaires.

SUMÁRIO

1 INTRODUÇÃO

Os profissionais de Odontologia, na prática de suas atividades, constantemente estão expostos aos mais variados riscos ocupacionais e a microrganismos encontrados na saliva, sangue e outros fluidos orgânicos (ANVISA, 2006). Uma ampla gama de microrganismos representa uma ameaça aos pacientes e profissionais, como por exemplo, HIV (vírus da imunodeficiência humana), *Mycobacterium tuberculosis*, vírus da hepatite, vírus do herpes, caxumba, gripe, rubéola (YADAV et al., 2017) e mais recentemente, COVID-19 (coronavírus) (SANTOME-PARIONA et al. 2023). No contexto da clínica odontológica, patógenos podem ser transmitidos por meio do contato direto com sangue infectado, saliva ou outros fluidos corporais, através da inalação pelo ar ou aerossóis de saliva ou do fluido respiratório ou indiretamente por meio de instrumentos, materiais e superfícies contaminadas (TAIWO; ADERINOKUN, 2002).

Práticas de controle de infecção em Odontologia são importantes para proteger os pacientes e os profissionais e garantir um ambiente de trabalho seguro, por isso devem ser implementadas e seguidas para todos os pacientes atendidos, independentemente de seus status de infecção (KOHN et al., 2003). A biossegurança é definida como um conjunto de ações com o objetivo de prevenir, controlar ou eliminar riscos inerentes às atividades que possam interferir ou comprometer a qualidade de vida, a saúde humana e o meio ambiente (MINISTÉRIO DA SAÚDE, 2010). É possível observar na literatura que o grau de obediência dos profissionais e estudantes de Odontologia aos protocolos de biossegurança é variável. A adesão às práticas eficazes de controle de infecção pelos profissionais pode ser afetada por vários fatores, como por exemplo, conhecimento e formação educacional, variáveis sociodemográficas e profissionais, disponibilidade e acesso aos materiais e equipamentos necessários (DAGHER et al., 2017).

Após a pandemia da COVID-19, um número significativo de novas recomendações foi implementado para garantir a segurança dos profissionais, equipe e pacientes (WORLD HEALTH ORGANIZATION (WHO), 2020). Outro fato importante de ser destacado é o bem estar psicológico dos dentistas e da equipe de saúde bucal, já que doenças infecciosas parecem interferir com a

prática de atendimento, podendo gerar medo e ansiedade nesses profissionais (ASKARIAN et al., 2007). Um exemplo recente foi a pandemia da COVID-19, muitos profissionais apresentaram medo de serem infectados por colegas de trabalho ou pacientes, e isso fez com que elevasse os níveis de ansiedade durante o tratamento (SURYAKUMARI et al., 2020). A implementação de medidas adequadas de controle de infecção é fundamental para proporcionar um ambiente de trabalho seguro, e reduzir o impacto psicológico nos profissionais. Diante desse contexto, torna-se fundamental a construção de um instrumento que identifique não apenas parâmetros importantes relacionados a biossegurança, mas também os aspectos psicológicos dos profissionais relacionados a doenças infectocontagiosas em Odontologia.

Na literatura é possível encontrar instrumentos disponíveis relacionados aos temas de biossegurança e controle de infecção, como por exemplo, o “Standard Precautions Questionnaire” (MICHINOV et al., 2016), que já foi traduzido e adaptado para o Brasil em 2019 (PEREIRA-AVILA et al., 2019). Esse instrumento tem como objetivo avaliar os determinantes sociocognitivos na adesão aos protocolos de precauções-padrão (medidas de proteção que devem ser adotadas pelos profissionais em contato com os pacientes) entre profissionais de saúde, ou seja, busca compreender os motivos e obstáculos envolvidos no não cumprimento das medidas de controle de infecção. Em uma pesquisa publicada em 2009, Brevidelli e Cianciarullo utilizaram o "Models of Adherence to Universal Precautions" (GERSHON et al., 1995) e o "Model of Work System" (DEJOY et al., 1995) como base teórica e criaram o “Modelo Explicativo de Adesão às Precauções-padrão", que busca demonstrar a influência de fatores psicossociais na adesão às precauções-padrão, analisando uma intersecção entre fatores individuais, do trabalho e organizacionais. Como esse instrumento foi validado para médicos e enfermeiros, ele foi adaptado e validado por Ribeiro et al. (2014) para verificar os fatores associados à adesão às precauções-padrão entre dentistas (RIBEIRO et al., 2014).

Não há na literatura, até o momento, nenhum instrumento criado especificamente para avaliação da adesão de profissionais de odontologia aos protocolos de controle de infecção e que busque identificar os aspectos psicológicos na prática odontológica frente às doenças infectocontagiosas. No Brasil, a maioria das pesquisas avalia a adesão dos profissionais e/ou

estudantes de odontologia aos protocolos de controle de infecção através de questões criadas para atender o objetivo de seus estudos normalmente através de instrumentos de autorrelato ou roteiros utilizados nas entrevistas (PIMENTEL et al., 2012; ARMOND et al., 2016; OLIVEIRA et al., 2017), instrumentos esses que não tiveram validação e suas propriedades psicométricas avaliadas.

Portanto, o objetivo deste estudo foi desenvolver e construir e validar um instrumento que visa avaliar a adesão de Cirurgiões-Dentistas aos protocolos de controle de infecção e identificar os aspectos psicológicos na prática Odontológica frente a doenças infectocontagiosas. Espera-se ampliar a discussão acerca dos fatores psicológicos, como medo e ansiedade, que podem interferir no atendimento dos pacientes, além de contribuir para a formação de profissionais mais sensibilizados sobre os cuidados em saúde e a importância do papel do Cirurgião-Dentista na cadeia de controle a disseminação de infecções.

2 ARTIGO CIENTÍFICO

Artigo científico submetido para publicação no periódico Oral Diseases, qualis CAPES Interdisciplinar A1. A estruturação do artigo baseou-se nas instruções aos autores preconizadas pelo periódico (ANEXO 1).

Development and validation of an instrument for assessing dentists' adherence to infection control and psychological factors in dental practice facing infectious diseases

Running Title: Development of an instrument facing infectious diseases

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ABSTRACT

Objective: This study aimed to develop and validate an instrument in the Portuguese language called "Escala multidimensional relacionada às doenças infectocontagiosas em Odontologia (EMRDIO)" to assess the dentists' adherence to infection control protocols and explore psychological aspects in dental practice concerning infectious diseases.

Materials and Methods: The initial version of the instrument comprised 49 items and 81 subitems. The first phase involved a content validity index and face validity analysis by ten judges with expertise in this field, reviewing each item`s content, scope, and relevance. The second phase included a verbal comprehension analysis with a representative subsample of dentists. After these phases, some questions were removed and modified to enhance the clarity for the dentists. The factor structure of EMRDIO was assessed using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Reliability was evaluated using internal consistency by McDonald's Omega coefficient (ω) and Cronbach's Alpha (α).

Results: A total of 405 individuals had access to the instrument. Findings from EFA (n = 135) revealed a four-factor structure (Work Environmental Protection, Disinfection, Team Training, and Fear and Anxiety) with 23 items with a factor loading above 0.60. CFA (n = 270) showed a good fit of the model: $\chi^2/df = 1.75$; CFI: 0.997; TLI: 0.996; SRMR: 0.079; RMSEA: 0.053 (90% CI:0.044 to 0.061), supporting the 4-factor structure derived from the EFA. Reliability analysis showed adequate internal consistency for all factors (ω and $\alpha \geq 0.70$).

Conclusion: The development of the EMRDIO instrument followed all the appropriate steps for validation, demonstrating adequate validity and internal consistency. Thus, this instrument can be considered suitable for assessing infection control aspects and identifying psychological factors in the dental practice of dentists facing infectious diseases.

Introduction

Ensuring patients' and dental professionals' safety and well-being is one of the most critical factors during dental practice, whether in private, public, or institutional settings (Akbari Tosi et al., 2022). Effective infection control is crucial, given the potential transmission risks of various pathogenic agents found in the oral cavity, including influenza, hepatitis B and C, herpes, HIV, Mycobacterium tuberculosis, Staphylococci, and Streptococci (da Costa et al., 2017). Furthermore, recent attention has been directed towards the transmitting of the coronavirus (Santos et al., 2023).

In a practical context, these pathogens can be transmitted through contact with infected blood, saliva, or other body fluids. Additionally, transmission may occur through the inhaling airborne saliva or respiratory fluid aerosols, or indirectly through contaminated instruments, materials, and surfaces (Taiwo & Aderinokun, 2002). Consequently, implementing practices focused on stringent control of these contaminating agents is crucial to protect the professionals and safeguard the patients.

The literature indicates variability in the adherence to biosafety protocols among dental professionals and students (Saccucci et al., 2017, Fernandez et al., 2022). Unfortunately, occupational health education, specifically concerning infection control practices, is not commonly integrated into the regular curriculum of dental schools, which is even more concerning in developing countries (Vazquez-Alcaraz et al., 2021). Professionals adherence to effect infection control practices can be influenced by various factors, including knowledge and educational background, sociodemographic and professional variables, and the availability and access to materials and personal protective equipment (Dagher et al., 2017).

Following the COVID-19 pandemic, numerous new recommendations have been implemented to guarantee the safety of professionals, staff, and patients ((WHO), 2020). This underscores the urgency of interventions to ensure good biosafety practices among professionals (Santome-Pariona et al., 2023). Consequently, a valuable approach to assess whether infection control in dental practice is being appropriately executed is through cross-sectional research using validated and standardized instruments that evaluate adherence to infection control practices (Vazquez-Alcaraz et al., 2021).

Despite the availability of various instruments addressing this context (Akbari Tosi et al., 2022, Vazquez-Alcaraz et al., 2021, da Costa et al., 2017), none directly correlates infection control domains with psychological parameters, such as fear and anxiety. The risk of being contaminated by an infectious disease often impacts the

psychological well-being of professionals (Lefkowitz et al., 2023, Ratnayake et al., 2018, Aly & Elchaghaby, 2020). Therefore, it is essential an instrument that evaluates parameters related to infection control and the interaction of psychological aspects associated. This study aimed to develop and validate an instrument that assesses the adherence of dentists to infection control protocols and explores psychological aspects in dental practice concerning infectious diseases.

Material and Methods

Study Design

This is a cross-sectional study designed to develop and validate an instrument assess dentist's adherence to infection control protocols and psychological aspects of dental practice concerning infectious diseases.

Ethical Aspects

This study received approval from the Ethics Committee on Research with Human Beings at the Federal University of Juiz de Fora, with registration number 47495321.4.0000.5157, and approval under the number 5.277.643, dated March 08, 2022. All participants were informed about the research's objective and the voluntary nature of their participation. They responded to the instrument's questions only after reading and agreeing to the terms of the informed consent form.

Sample

The research aimed to conduct the developed instruments after face validity and content validity index, exploratory and confirmatory factor analyses. Participants were recruited through announcements on social media platforms (Instagram®, WhatsApp®, Facebook®) and by sending emails to professionals or professional boards for wide dissemination of the research.

Eligibility Criteria

The participants invited were Brazilian dentists actively engaged in clinical practice, regardless of age, gender, years of professional experience, specialization, qualifications, or geographical region. Conversely, the following participants were excluded: dental students, healthcare professionals working alongside dentists (e.g., Oral

Health Assistants, Dental Hygienists, etc.), and dentists engaged in non-clinical areas without direct contact with clinical practice in their daily routines.

Instrument Construction

The instrument in the Portuguese language was called “Escala multidimensional relacionada às doenças infectocontagiosas em odontologia (EMRDIO)”. The translation of the name of instrument is “Multidimensional scale related to infectious diseases in dentistry (MSRIDD)”. The research instrument was created based on a robust theoretical framework, informed by an extensive literature review, consultations with experts in the field, and interviews with individuals from the instrument's target population (Hutz et al., 2015). This theoretical foundation facilitated the articulation of properties characterizing the construct and definition of observable behaviors representing them, forming the basis for potential items in the measurement instrument (Braga & Cruz, 2006). To establish this theoretical foundation, literature searches were conducted using national and international databases, including MEDLINE/PubMed, Scientific Electronic Library Online (Scielo), Latin American and Caribbean Health Sciences Literature (LILACS), and Google Scholar. The keywords employed in these searches were: “odontologia”, “dentistry”, “biossegurança”, “biosafety”, “medo”, “fear”, “ansiedade”, “anxiety”, “preconceito”, “prejudgement”, “estigma”, “stigma”, “doenças infectocontagiosas”, “infectious diseases”, “validação”, “validation”. The descriptors were combined using Boolean operators, tailored to the specific database where the literature search was conducted. Futhermore, input from experts in the field was sought.

The questionnaire items were developed based on a thorough examination of previously researched articles, considering factors related dentist’s adherence to infection control protocols and psychological aspects in dental practice concerning infectious diseases. Subsequently, an initial version of the instrument, comprising 49 items with 81 subitems, was formulated. A well-represented construct should ideally have around 20 items (Pasquali, 2010), or at least three times the intended final number. Responses to the items were defined using the Likert scale, featuring five alternatives: never, rarely, sometimes, often, and always. Each response was assigned a score from 1 to 5 (Vieira, 2009).

After formulating the items, their domains were clearly defined. For this instrument, the following domains were established: personal protective equipment (9 items), workplace protection (7 items), team training (8 items), fear and anxiety (14

items), stigma and prejudice (11 items). The initially defined items were carefully assessed for semantic aspects, intelligibility, and relevance to the construct (Pasquali, 1998). Following the structuring and organization of the instrument, it is essential to verify the hypothesis that the items adequately represent the construct. To achieve this, testing with respect to evaluation by other individuals is imperative (Pasquali, 2010).

Face Validity and Content Validity Index

The evaluation of the Content Validity Index (CVI) was conducted by inviting a committee of expert judges in the field of the instrument (Coluci et al., 2015). Ten expert judges were invited by e-mail, with a dentistry background and at least a master's degree. These judges were provided with a document via email containing the instrument's description, along with instructions on how to evaluate the instrument and the instrument itself, which comprised the 49 items. The judges' instrument evaluation encompassed two steps: content validity assessment and instrument analysis (face validity).

In the assessment of content validity, judges provided responses regarding representativeness, wording, and specification of factors. Regarding representativeness, judges assessed whether the items reflected the involved concepts, their relevance, and suitability for achieving the proposed objectives. Concerning wording, judges evaluated each item for clarity, ensuring that the idea was understandable and adequately expressed what it intended to measure.

A quantitative assessment of the committee members' agreement was carried out through the CVI, measuring the percentage of judges in agreement on specific aspects of the instrument and items (Coluci et al., 2015). According to the literature, the acceptable agreement rate among judges for individual item evaluation should be above 0.78 (Lynn., 1986).

Regarding factor specification, judges classified the items according to the five factors previously defined by the researchers during the construction of the construct. In a file provided in the document, judges were asked to assess to which factors the instrument item's belonged, with each item categorized into only one factor. A calculation of the percentage agreement among the judges was performed. The document also allowed suggestions to improve existing items or propose the inclusion of new ones. Space was provided for suggestions to enhance current items or include new items, along with a section for general comments and suggestions to improve the instrument.

The total score of the instrument was defined by summing all the items, with a higher total score indicating greater adherence of the dentist to infection control and better psychological aspects related to the profession. The same 3-point scale evaluated the representativeness, understanding, format, instructions, and total score.

Verbal comprehension analysis

A verbal comprehension model was emailed to 30 dental professionals with different levels of qualification, including recent graduates, individuals graduated over ten years ago, individuals with a master's degree, and those with a doctoral degree. The verbal comprehension model employed a 5-point scale where professionals assessed their understanding of each item’s inquiry. This approach aimed to gather insights into the clarity and comprehensibility of the instrument across different levels of professional experience and expertise.

Data Collection

After the adjustment to the instrument following the face and content validity phases, and the semantic analysis, participants were remotely invited through the Google Forms platform (Alphabet Co., Mountain View, California, USA) to respond to the final version of the EMRDIO (38 items with 74 subitems). The created form was linked to a specific Google user account and was not made public to ensure data security.

In addition to the specific instrument, a sociodemographic questionnaire was employed to characterize the selected sample. This questionnaire included items related to gender, age, current state of residence, educational level, professional practice, location of practice, highest qualification, primary area of dentistry practice, and years of professional experience.

Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was used to explore the factorial structure of the instrument. The principal axis factoring method and oblique Promax rotation were employed (Swami and Barron, 2019). Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity tests were used to assess the suitability of the data matrix during EFA (Hair Jr et al., 2009). The KMO test ranges from 0 to 1, and values ≥ 0.80 are considered satisfactory for data factorization (Kaiser & Rice, 1974). Additionally, the significance of Bartlett's sphericity test ($P < 0.05$) was checked.

For factor retention, parallel analysis and scree plot analysis were employed (Kline, 1994, Swami & Barron, 2019). If necessary, a manual factorization analysis was conducted to define the factors that theoretically met the correlation of the involved items. To retain items in the EFA, was considered factor loadings ≥ 0.6 and explained variance percentage ≥ 40% (Kline, 1994). When cross-loadings of an item on more than one factor with values above 0.32 were observed, these items were removed for confirmatory analysis (Hair Jr et al., 2009).

Confirmatory Factor Analysis

After exploring the factor structure in the EFA of the instrument, the Confirmatory Factor Analysis (CFA) was employed. Given that the variables are ordinal, the diagonal weighted least square (DWLS) estimator was used, considering a calculation error with a 95% confidence interval and robust standard errors. Model fit was evaluated using the chi-square test corrected for degrees of freedom ($\chi 2$/df) and multiple fit indices, including Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMS), and Root Mean Square Error Approximation (RMSEA). Acceptable fit values for CFI and TLI range between 0.90 and 1.00, where 0.90 to 0.95 indicates an acceptable fit, and 0.95 to 1.00 indicates a proper fit. SRMR and RMSEA should both fall between 0.05 and 1.00, indicating an acceptable fit, while values less than 0.05 indicate a proper fit (Hu & Bentler, 1999).

Internal Consistency

The reliability of the instrument was assessed for internal consistency through the analysis of the area. The population used in the CFA was considered, and the McDonald's Omega coefficient (ω) and Cronbach's Alpha (α) were used. Values exceeding 0.70 indicate adequate internal consistency (McNeish, 2018, Viladrich et al., 2017, Reise et al., 2013).

Data Analysis

All analyses were conducted using JASP v. 0.16.0.0 (JASP Team, University of Amsterdam, Netherlands), and a significance level of $P < 0.05$ was adopted.

Results

Content Validity Index

After the evaluation of the instrument by the judges, the responses were meticulously examined. Two judges were excluded due to disparities in their assessments compared to the rest of the panel. Two judges assessed three questions as non-representative, resulting in a Content Validity Index (CVI) of 0.75 concerning the representativeness of these items. Regarding clarity and comprehension, the CVI exceeded 0.875 for every question on the scale (Table 1). Additionally, the judges demonstrated agreement exceeding 0.80 evaluating the title, acronym of the scale, assessment of the instrument format, appraisal of the provided instructions, and evaluation of the total score.

Regarding the specification of factors, the judges categorized the items according to the five predetermined factors to indicate the factor to which each item belongs. Table 2 shows the level of percentage agreement among the judges regarding the allocation of each item according to the factors stipulated by the initial instrument. Thus, the judges chose for each item were compared to those identified through the theoretical-methodological references proposed in the initial instrument. Following the judges' considerations, the researchers excluded three questions from the instrument and rephrased 13 items to improve the clarity and representativeness of the item wording. The factors determined by the judges mostly aligned with those defined by the researchers, showing an agreement among judges greater than 87.5% for 30 items. Only two items exhibited the lowest level of agreement among judges (50%).

Verbal Comprehension Analysis

The revised version of the instrument was submitted to a verbal comprehension analysis to ensure comprehensibility among professionals with varying levels of expertise. The verbal comprehension analysis involved a group of 30 dentists, including 6 recently graduated professionals (1 to 5 years after graduation), 6 professionals with medium-term experience (5 to 15 years after graduation), 6 professionals with over 15 years of experience, 6 professionals with a master’s degree, and 6 professionals with a Ph.D. After the verbal comprehension analysis, 8 items were removed, while 16 items were modified to enhance the clarity for the target audience. Consequently, the final version of EMRDIO comprises 38 items, encompassing 74 subitems categorized into 5 factors: Personal Protective Equipment (9 items with 21 subitems); Workplace Protection (6 items with 22 subitems); Team Training (8 items with 16 subitems); Fear/Anxiety (9 items with 9 subitems); Stigma/Prejudice (6 items with 6 subitems).

Descriptive Analysis and Sample Characterization

A total of 410 individuals had access to the instrument, and 5 of them expressed a lack of interest in participating. Consequently, 405 individuals were considered eligible. The sample of 405 participants exhibited significant variability in the characteristics outlined in the sociodemographic questionnaire, indicating good representation and heterogeneity within the sample.

A higher proportion of female participants was noted, with the age group of 20 to 29 being the most prevalent. The Brazilian state of Minas Gerais accounted for more than half of the interviewed subjects, predominantly those who received education in public institutions. Most respondents were employed in private and urban settings, and specialization was the most common qualification level, with significant variability in expertise area and years of experience (Table 3).

Exploratory Factor Analysis

The EFA was performed with one-third of the sample, consisting of 135 individuals who completed the questionnaire after the semantic analysis. The factorability assumptions of the sample were examined. Initially, the number of factors were explored using a parallel and scree plot analysis. This revealed an eight-factor structure, considering a factor loading of 0.6. However, in the parallel analysis, one factor did not have eligible items with this factor loading, while another factor had only 2 items, indicating that this factor could not be sustained.

After excluding items that did not exhibit factorability for analysis, the instrument revealed 5 factors with items exhibiting loadings above 0.6 and a KMO value of 0.768. A very close similarity between factors 4 and 5 was observed upon theoretical analysis of the instrument. Therefore, a new analysis was conducted, considering 4 factors (Work Environmental Protection, Disinfection, Team Training, and Fear and Anxiety) manually. As a result, the KMO value increased to 0.803, and the Bartlett's test of sphericity yielded χ^2: 2501.136, df: 253.000, with a significant value of $P < 0.001$ (Table 4).

Confirmatory Factor Analysis

Given the results obtained from the EFA, the CFA was conducted to identify additional evidence of the instrument's validity. A total of 270 participants (2/3 of the sample) were considered for the CFA. Normality was observed for all indices performed

with the structure obtained from the EFA. The sample data revealed an good fit of the model: $\chi^2/df = 1.75$; CFI: 0.997; TLI: 0.996; SRMR: 0.079; RMSEA: 0.053 (90% CI:0.044 to 0.061). The standardized factor loading estimates were all adequate, considering the defined limit of 0.60, supporting the 4-factor structure derived from the EFA (Table 4). The model and factor convergence can be observed in Figure 1.

Internal Consistency

Reliability analysis was performed using internal consistency tests, specifically McDonald's omega (ω) and Cronbach's alpha (α), considering the samples and factors defined in the CFA. It can be observed that all four factors presented McDonald's omega and Cronbach's alpha values, along with 95% confidence intervals, higher than 0.70. This indicates a good reliability of the instrument (Table 5).

Discussion

This study aimed to develop and validate an instrument for assessing the knowledge of dentists regarding infection control and identifying psychological aspects of dental practice in the context of infectious diseases. Regarding infection control, it refers to the measures implemented by dentists to reduce the transmission risks of pathogens through saliva, blood, and respiratory fluids among patients and healthcare professionals (Vazquez-Alcaraz et al., 2021). These practices are critical for maintaining a safe working environment and minimizing risks in professional dental practice (Kohn et al., 2003). Consequently, dentists' knowledge of infectious diseases and the requisite infection control procedures is crucial (Gordon et al., 2001).

In the literature, numerous studies have aimed to assess infection control in dentistry (Javed et al., 2023, Mahasneh et al., 2020, Stankiewicz & Wilson, 2021), with this body of research expanding significantly during the Covid-19 pandemic (Wahdan et al., 2023, Wan et al., 2023, Rafeeq et al., 2023, Sakai et al., 2023). However, many of the instruments used in these assessments were questionnaires lacking proper content validation or were incomplete and inadequate, potentially compromising the results' reliability. Conversely, there are published works that evaluated infection control using previously validated instruments (Santos et al., 2023) or developed and validated instruments specifically for this purpose (Vazquez-Alcaraz et al., 2021, Akbari Tosi et al., 2022, Vundavalli et al., 2023).

Despite the available studies, many of these instruments have primarily concentrated on infection control and have not considered psychological parameters, such as those related to fear and anxiety, which may directly impact the dentists' practices dealing with infectious diseases. Lefkowitz and colleagues (Lefkowitz et al., 2023), conducted a systematic review, evaluating 53 cross-sectional studies from over 70 countries. The authors revealed a negative impact of the pandemic on the mental health of dentists globally. The main risk factors identified included fear of infection, transmission to families, and potential direct contact with infected patients. This underscores the need for incorporating a factor related to these psychological parameters (fear/anxiety) into instruments designed to assess the risks of infectious diseases, aligning with the fourth factor identified in the instrument developed by this study. This review also identified that the Generalised Anxiety Disorder Assessment (GAD-7) was one of the most frequently employed instruments for analyzing psychological parameters, featured in 7 out of the 53 included studies (13.2%) (Lefkowitz et al., 2023). The GAD-7 is a solid and widely recognized tool in the literature with translations available in various languages. Comprising seven items, it is designed to measure the severity of generalized anxiety disorder. Each item prompts individuals to assess the severity of their symptoms over the past two weeks (Spitzer et al., 2006, Lowe et al., 2008). In contrast to the GAD-7, the items proposed in our instrument concerning fear and anxiety offer a more comprehensive approach directly tied to the necessity for infection control in dental practice when facing infectious diseases. Based on a preliminary search, no other instrument that has considered this associated approach was identified, highlighting the importance of the current instrument.

It is important to note that fear or anxiety related to infectious diseases is often not exclusive to professionals (dentists and assistants) who work daily with different patients but also extends to the patients themselves receiving treatment from these professionals. This observation is supported by (Daltaban & Aytekin, 2022), who conducted a cross-sectional study to assess the levels and factors associated with fear and anxiety among dental patients during the COVID-19 pandemic in Turkey. The authors found that the pandemic had significant psychological effects on patients undergoing dental care, with almost 75% expressing fear of visiting the dentist due to the risk of contamination. Furthermore, the authors emphasized that, due to the fear of COVID-19, many patients might develop avoidance behaviors toward dental care, underscoring the importance of

providing comprehensive educational information to the public about the rigorous infection control measures implemented by dental clinics (Daltaban & Aytekin, 2022).

Although many studies addressing psychological factors are directly related to COVID-19 due to the pandemic, it is essential to emphasize that COVID-19 remains an infectious disease, which is the central focus of the current instrument. Consequently, these concerns should extend to other infectious diseases, such as HIV, hepatitis B and C, and tuberculosis. Whether consciously or not, dentists should consider that all patients treated may or may not have some infectious disease (Gordon et al., 2001). This perspective is consistent with the infection control guideline, ensuring all necessary precautions regarding biosafety issues (Gordon et al., 2001). Conducting cross-sectional research using validated and standardized instruments that assess adherence to infection control practices and psychological parameters is one way to verify whether infection control in dental practice is being appropriately implemented. Therefore, applying a validated instrument is crucial for tracking these practices and based on the responses, evaluating and proposing changes or consolidations in decision-making.

In constructing the instrument, the proposed items were developed following an extensive literature review (Hutz et al., 2015), emphasizing aspects of infection control and psychological factors related to infectious diseases. The responses to the questions were structured using multiple-choice questions on the Likert scale, aiming for ease of completion by respondents (Vieira, 2009). CVI served as the initial stage of instrument validation, given its essential role in developing new instruments (Hyrkas et al., 2003, Coluci et al., 2015). In the current construct, CVI was conducted by expert judges in the field. They judged whether the items refer to the trait in question or not (Pasquali, 2010). Dental professionals with a minimum academic qualification of a master's degree were considered. Regarding clarity and understanding, all items demonstrated validity evidence, with a CVI above 0.8, and only three items received a score of 0.75. Thus, it was evident that most judges agreed on the representativeness and clarity of the items, aligning with literature recommendations for considering them valid (Polit & Beck, 2006).

Subsequently, verbal comprehension analysis was conducted with a subset of professionals, encompassing different levels of education. Verbal comprehension analysis is crucial to ensure that the instrument’s items are comprehensible for their intended purpose and intelligible within small groups of the target population with varying degrees of skill (Pasquali, 1998). Necessary adjustments were made to enhance

the instrument's comprehension. After these initial steps, some items were removed, and others were adjusted for better instrument clarity.

After EFA analyses of the instrument, numerous items did not exhibit a factor loading above 0.60 and were consequently excluded from the instrument. This necessitated the reorganization of the involved factors, leading to the exclusion of other factors such as personal protective equipment and stigma/prejudice. Additionally, the workplace protection factor was split into two factors: work environmental protection and disinfection. EFA is recommended for generating hypotheses about latent structures, which will later be subjected to CFA, considering different samples (de Oliveira Junior et al., 2023, Swami & Barron, 2019). The high number of items removed after EFA analyses could be attributed to difficulties in understanding the items by the interviewees, the misalignment of items with the available factors, or even the fact that, in some items, the majority of responses yielded the same result, as in the example: "Do you use [gloves, gowns, protective eyewear, cap] as personal protective equipment," to which nearly all respondents answered "always".

Regarding stigma/prejudice, it is noteworthy that these aspects involve a complex approach. According to (Link & Phelan, 2001), stigma occurs when labeling, stereotypes, loss of status, separation, and discrimination happen simultaneously in a power situation that allows them, frequently related to fear and anxiety. Studies show that high levels of HIV-related stigma are associated with elevated anxiety levels in people living with HIV (Kamen et al., 2015, Brandt et al., 2017). This might have been one of the factors that brought items related to both factors (fear/anxiety and stigma/prejudice) closer together. However, even with the retention of the fear/anxiety factor, none of the items related to stigma/prejudice were maintained in its structure due to inadequate factor loading.

The literature suggests that Factor Analysis can be performed at a ratio of 10 subjects for each item on the scale (Sapnas & Zeller, 2002), however this study presented a smaller sample number for EFA e CFA. Furthermore, it is important to highlight that a significant number of items were excluded after analyzes. The final EMRDIO instrument comprised a total of 23 items, and after CFA, it exhibited favorable values concerning parameters and values conventionally accepted as adequate in the literature (Hu & Bentler, 1999). It also demonstrated good reliability assessed through internal consistency (McNeish, 2018), indicating that the construct is suitable for the proposed purpose. Therefore, further studies are recommended to test the instrument after validation.

Conclusion

It can be concluded that the development of the EMRDIO instrument followed all the appropriate steps for validation, demonstrating adequate validity, stability, and internal consistency. Thus, this instrument can be considered suitable, valid, and reliable for assessing infection control aspects and identifying psychological factors in the dental practice of dentists facing infectious diseases.

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Figure 1. Graph of confirmatory factor analysis of 4-factors of developed instrument.

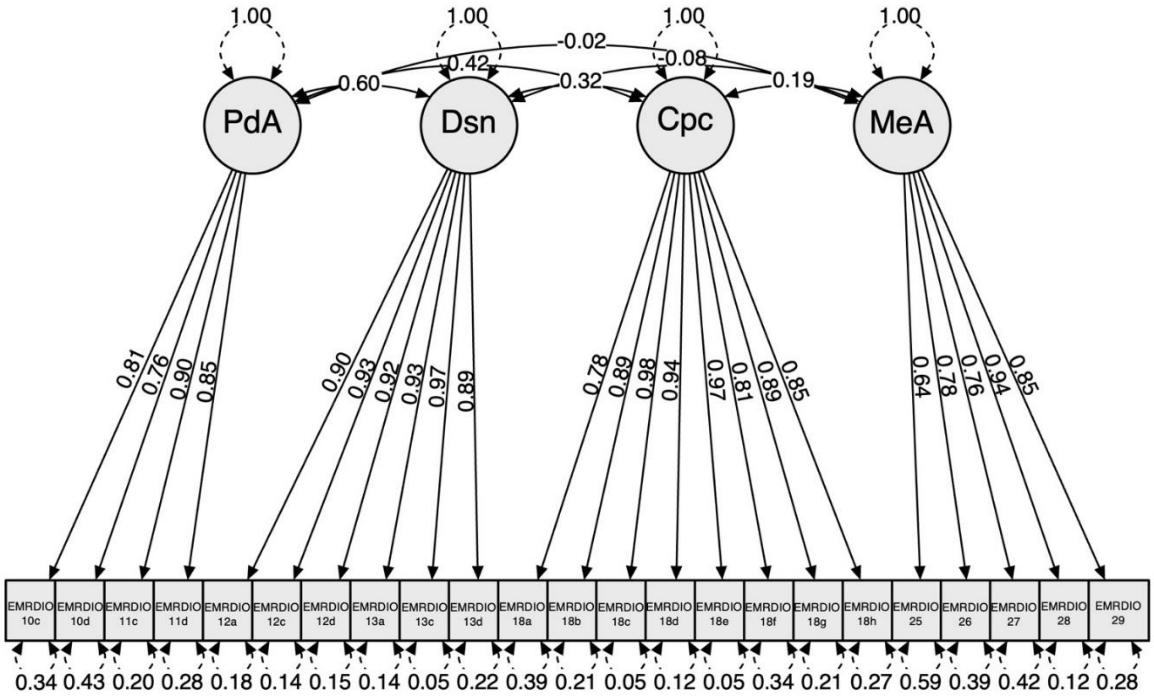

Table 1. Items of EMRDIO with CVI calculation for dimensions evaluated.

ITEM	CVI		ITEM	CVI		ITEM	CVI	
	RI	CUI		RI	CUI		RI	CUI
1	1	0.875	**18**	1	1	**35**	1	1
2	0.875	1	**19**	1	1	**36**	1	1
3	1	0.875	**20**	1	1	**37**	1	1
4	1	1	**21**	0.875	1	**38**	1	1
5	1	0.875	**22**	1	1	**39**	1	1
6	1	0.875	**23**	1	0.875	**40**	0.875	0.875
7	1	1	**24**	1	1	**41**	1	0.875
8	1	0.875	**25**	1	1	**42**	1	0.875
9	1	0.875	**26**	1	1	**43**	1	1
10	1	1	**27**	1	1	**44**	0.875	1
11	1	1	**28**	0.875	0.875	**45**	1	1
12	1	1	**29**	0.875	1	**46**	0.75	1
13	1	1	**30**	0.875	0.875	**47**	1	1
14	1	1	**31**	0.75	0.875	**48**	1	1
15	1	0.875	**32**	1	0.875	**49**	0.75	0.875
16	1	0.875	**33**	1	1			
17	1	0.875	**34**	1	1			

Representative Item (R) and Clear and Understandable Item (CC)

Table 2. Distribution of scale items in the respective factors/domains, according to level of agreement between judges

Factors	**Percentage agreement of judges**				
	50%	**62.50%**	**75%**	**87.50%**	**100%**
Personal protective equipment	24	41	8, 35	16, 17, 25	7, 34
Work Environmental Protection	15		9, 26, 36	5, 6, 18	
Team Training			4, 19	32, 38, 45	3, 14, 27
Fear/Anxiety		11,22	10, 28, 40, 42	2, 33, 37	13, 20, 21, 29, 31, 44, 46, 47, 48, 49
Stigma/Prejudice		23	39, 43	1, 12, 30	

Table 3. Descriptive analysis of sample that answered the instrument for EFA and CFA (n = 405).

	Total	Percentage
Gender		
Female	272	67.2%
Male	132	32.6%
Transgender	1	0.2%
Age Range		
20 to 29	186	45.9%
30 to 39	139	34.3%
40 to 49	51	12.6%
50 to 59	23	5.7%
60 or more	6	1.5%
Brazilian States		
Minas Gerais	210	51.9%
São Paulo	70	17.3%
Mato Grosso do Sul	25	6.2%
Rio de Janeiro	24	5.9%
Pernambuco	20	4.9%
Goiânia	14	3.5%
Espírito Santo	8	2%
Paraná	6	1.5%
Bahia	6	1.5%
Pará	3	0.7%
Paraíba	3	0.7%
Rio Grande do Norte	2	0.5%
Alagoas	2	0.5%
Amazonas	2	0.5%
Distrito Federal	1	0.2%
Ceará	1	0.2%
Mato Grosso	1	0.2%
Maranhão	1	0.2%
Santa Catarina	1	0.2%
Formation Location		
Public Institution	241	59.5%
Private Institution	164	40.5%
Professional Activity		
Private	225	55.6%
Private and Public	66	16.3%
Public	60	14.8%
School	47	11.6%
Military	7	1.7%
Location of Activity		
Urban	375	92.6%
Rural	10	2.5%
Both	20	4.9%
High Qualification		
Specialization	166	41%

Graduation	75	18.5%
Aperfeiçoament	54	13.3%
Master's degree	50	12.3%
Doctorate degree	38	9.4%
Residence	12	3%
Post doctoral	10	2.5%
Occupation Area		
General clinic	133	32.8%
Endodontics	62	15.3%
Prosthesis	40	9.9%
Orthodontics	34	8.4%
Implantology	22	5.4%
Periodontics	22	5.4%
Surgery	21	5.2%
Pediatric Dentistry	20	4.9%
Dentistry	16	4%
Public Health	14	3.5%
Radiology	8	2%
Other	7	1.7%
Hospital	4	1%
Stomatology	2	0.5%
Operating Time		
0 to 2 years	100	24.7%
2 to 5 years	95	23.5%
5 to 10 years	65	16%
10 to 20 years	97	24%
More than 20 years	48	11.9%

Table 4. Descriptive statistics (Mean and SD) and factor loadings (λ) of the EMRDIO after EFA and CFA.

Factors	Items	EFA (n = 135)		CFA (n = 270)	
		Mean (SD)	λ	Mean (SD)	λ
Fator 1 Proteção do Ambiente	1. Você utiliza barreiras descartáveis nos equipamentos periféricos (canetas, fotopolimerizador, ultrassom)?	4.16 (1.38)	0.813	4.17 (1.29)	0.814
	2. Você utiliza barreiras descartáveis nos materiais odontológicos (resinas, cimentos e etc)?	4.27 (1.27)	0.736	4.52 (0.92)	0.758
	3. Você ou seu/sua auxiliar trocam as barreiras descartáveis dos equipamentos periféricos (canetas, fotopolimerizador, ultrassom) entre cada paciente?	4.05 (1.39)	0.815	3.87 (1.45)	0.897
	4. Você ou seu/sua auxiliar trocam as barreiras descartáveis dos materiais odontológicos (resinas, cimentos e etc) entre cada paciente?	4.06 (1.36)	0.845	4.14 (1.25)	0.850
Fator 2 Desinfecção	5. Você ou seu/sua auxiliar realizam a desinfeção da cadeira odontológica (braços, assentos, encostos)?	4.78 (0.62)	0.838	4.74 (0.69)	0.904
	6. Você ou seu/sua auxiliar realizam a desinfeção da alça do refletor?	4.73 (0.65)	0.865	4.73 (0.69)	0.925
	7. Você ou seu/sua auxiliar realizam a desinfeção dos equipamentos periféricos (canetas, fotopolimerizador, ultrassom e etc)?	4.76 (0.69)	0.692	4.73 (0.70)	0.919
	8. Você ou seu/sua auxiliar repetem a desinfecção da cadeira odontológica (braços, assentos, encostos) entre o atendimento de cada paciente?	4.66 (0.79)	0.889	4.48 (1.03)	0.926
	9. Você ou seu/sua auxiliar repetem a desinfecção da alça do refletor entre o atendimento de cada paciente?	4.62 (0.84)	0.841	4.46 (1.04)	0.975
	10. Você ou seu/sua auxiliar repetem a desinfecção dos equipamentos periféricos (canetas, fotopolimerizador, ultrassom e etc) entre o atendimento de cada paciente?	4.64 (0.80)	0.772	4.54 (0.93)	0.886
Fator 3 Capacitação da Equipe	11. Os membros da sua equipe são treinados em relação ao uso e lavagem de jalecos de tecido?	4.03 (1.37)	0.715	3.79 (1.47)	0.780
	12. Os membros da sua equipe são treinados em relação ao uso e descarte de jalecos descartáveis?	4.30 (1.11)	0.752	4.07 (1.29)	0.889
	13. Os membros da sua equipe são treinados em relação ao uso e descarte de luvas?	4.62 (0.84)	0.738	4.46 (1.08)	0.975
	14. Os membros da sua equipe são treinados em relação ao uso e desinfeção de óculos de proteção?	4.47 (0.98)	0.865	4.23 (1.21)	0.937
	15. Os membros da sua equipe são treinados em relação ao uso e descarte de máscara comum?	4.53 (0.97)	0.873	4.40 (1.11)	0.973
	16. Os membros da sua equipe são treinados em relação ao uso e descarte de máscaras N95/FFP2/FFP3 ou equivalente?	4.22 (1.22)	0.703	3.80 (1.45)	0.814
	17. Os membros da sua equipe são treinados em relação ao uso e desinfecção de protetor facial?	4.20 (1.23)	0.844	3.86 (1.44)	0.887
	18. Os membros da sua equipe são treinados em relação ao uso e limpeza de sapatos fechados?	4.09 (1.36)	0.759	4.06 (1.33)	0.852
Fator 4	19. Você tem medo de atender um paciente com tosse, espirros ou dor de garganta?	3.77 (1.32)	0.679	3.57 (1.33)	0.643

Medo e Ansiedade	20. Você se sente com medo de ter que interromper os atendimentos se adquirir doença infectocontagiosa?	3.81 (1.42)	0.776	3.55 (1.53)	0.782
	21. Você se sente ansioso ao atender paciente portador de doenças infectocontagiosas?	3.22 (1.42)	0.644	3.14 (1.31)	0.759
	22. Você tem medo de contrair alguma doença infectocontagiosa durante o exercício da profissão?	3.76 (1.35)	0.894	3.61 (1.35)	0.937
	23. Você tem medo de transmitir uma doença infectocontagiosa para seus familiares?	3.96 (1.33)	0.869	3.75 (1.48)	0.846

Table 5. Reliability analysis by internal consistency using McDonald's (ω) and Cronbach's (α).

	Fator 1 Work Environmental Protection	**Fator 2** Disinfection	**Fator 3** Team Training	**Fator 4** Fear and Anxiety
ω McDonald (IC 95%)	0.811 (0.774-0.848)	0.923 (0.909-0.937)	0.921 (0.907-0.936)	0.852 (0.825-0.880)
α Cronbach (IC 95%)	0.785 (0.741-0.823)	0.910 (0.893-0.925)	0.926 (0.911-0.939)	0.849 (0.818-0.875)

3 CONCLUSÃO

Por meio deste estudo, foi realizada a construção e validação de conteúdo do instrumento EMRDIO. Este instrumento seguiu as etapas adequadas para validação, demonstrando validade, estabilidade e consistência interna adequadas. Assim, este instrumento pode ser considerado adequado, válido e confiável para avaliar aspectos psicométricos de controle de infecção e identificar fatores psicológicos na prática odontológica de dentistas que enfrentam doenças infecciosas. Assim, futuros estudos aplicando esse instrumento em profissionais cirurgiões dentistas devem ser considerados.

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1.
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        WHAT IS YOUR DIAGNOSIS?

        Based on the patient's history, physical examination, and laboratory findings, which one of the following is the most suspicious diagnosis?

        1.
            1. Answer A
            2. Answer B
            3. Answer C
            4. Answer D

1.
    1. 5. DIAGNOSIS: Provide the answer along with a 1-2 sentence explanation followed by the subsequent discussion. (350 words).
    2. 6. DIAGNOSIS IMAGE: One picture clarifying the diagnosis (i.e. a histological picture, images, micro, blood tests, ….). Label this Figure
    3. 7. OUTCOME: 1-2 sentences.
    4. 8. AUTHOR CONTRIBUTION section: Required.

5. 9. PATIENT CONSENT section: Use standard wording, “The patient reported in this manuscript provided written informed consent for the publication of the case details."
6. 10. CONFLICT OF INTEREST STATEMENTS (COIS): Required section. Default text when no conflicts exist reads “All authors have no conflicts of interest to disclose.”
7. 11. ACKNOWLEDGEMENTS: Optional section.
8. 12. KEYWORDS: Not required as they may give away the answer.
9. 13. FUNDING: Not required for this article type.
10. 14. REFERENCES: Maximum 10.

Letters to the Editors: Letters, if of broad interest, are encouraged. They may deal with material in papers published in *Oral Diseases* or they may raise new issues, but should have important implications. Only one letter may be submitted by any single author or group of authors on any one published paper. Letters to the Editors should not include an abstract and are limited to 500 words, with a maximum of 1 figure and 10 references.

Case Reports: *Oral Diseases* does not accept case reports and instead recommends that authors submit to *Clinical Case Reports* an open access journal published by Wiley.

Meeting Reports: Will be considered by the editors for publication only if they are of wide and significant interest.

Short Communications: These are brief papers of any topic within the scope of *Oral Diseases*about significant and novel advances that are complete in research endeavor but not suitable for full publications. Short Communications should not include an abstract and are limited to 1000 words, with a maximum of 3 figures and 20 references. Short Communications **should not** be structured into sections.

Invited Reviews: These may be submitted by invitation of the Senior Editors only, and consist of around 2500-2750 words, with a maximum of one table or image and 25 references.

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5. MANUSCRIPT FORMAT AND STRUCTURE

Oral Diseases now offers Free Format submission for a simplified and streamlined submission process.

Before you submit, you will need:

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- The title page of the manuscript, including:
    - Your co-author details, including affiliation and email address. *(Why is this important? We need to keep all co-authors informed of the outcome of the peer review process.)*
    - Statements relating to our ethics and integrity policies, which may include any of the following *(Why are these important? We need to uphold rigorous ethical standards for the research we consider for publication):*
        - data availability statement
        - funding statement
        - conflict of interest disclosure
        - ethics approval statement
        - patient consent statement
        - permission to reproduce material from other sources
        - clinical trial registration

If you are invited to revise your manuscript after peer review, the journal will also request the revised manuscript to be formatted according to journal requirements as described below.

5.1. Page Charge

IMPORTANT: Please note that articles exceeding 8 published pages, including title page, abstract, references, table/figure legends and tables and figures, are subject to a charge of GBP 70 per additional page. As a guide, one published page amounts approximately to 850 words, or two to four small tables/figures. Additional supplementary material (including text and figures), which does not fit within the page limits, can be published online only as supporting information.

Open Access Article Processing Charges (APCs) are billed separately from additional page charges. If your institution or funder is covering your APC, please refer to their guidelines on what additional costs they may be able to cover. For more information on this journal's APCs, please see the Open Access page.

For Special Issue content, **only,** the excessing page charges will be waived for invited reviews that often require greater length, but we still strongly recommend the invited authors to follow the formatting requirements detialed here.

5.2. Format

Language: Authors should write their manuscripts in British English using an easily readable style. Authors whose native language is not English should have a native English speaker read and correct their manuscript. Spelling and phraseology should conform to standard British usage and should be consistent throughout the paper. A list of independent suppliers of editing services can be found at http://authorservices.wiley.com/bauthor/english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

Presentation: Authors should pay special attention to the presentation of their findings so that they may be communicated clearly. The background and hypotheses underlying the study as well as its main conclusions should be clearly explained. Titles and abstracts especially should be written in language that will be readily intelligible to any scientist.

Technical jargon: should be avoided as much as possible and clearly explained where its use is unavoidable.

Abbreviations: Oral Diseases adheres to the conventions outlined in Units, Symbols and Abbreviations: A Guide for Medical and Scientific Editors and Authors. Non-standard abbreviations must be used three or more times and written out completely in the text when first used.

5.3. Structure: All papers submitted to *Oral Diseases* should include:

- Title Page
- Structured Abstract
- Main text
- References
- (Figures)
- (Figure Legends)
- (Tables)

Title Page: should be part of the manuscript uploaded for review and include:

- A title of no more than 100 characters including spaces
- A running title of no more than 50 characters
- 3-6 keywords
- Complete names and institutions for each author

- Corresponding author's name, address, email address and fax number
- Date of submission (and revision/resubmission)

Abstract: is limited to 200 words in length and should contain no abbreviations. The abstract should be included in the manuscript document uploaded for review as well as separately where specified in the submission process. The abstract should convey the essential purpose and message of the paper in an abbreviated form set out under:

- Objective(s),
- Subject(s) (or Materials) and Methods,
- Results,
- Conclusions(s).

The Main Text of Original Research Articles should be organised as follows

Introduction: should be focused, outlining the historical or logical origins of the study and not summarize the results; exhaustive literature reviews are inappropriate. It should close with the explicit statement of the specific aims of the investigation.

Materials and Methods must contain sufficient detail such that, in combination with the references cited, all clinical trials and experiments reported can be fully reproduced. As a condition of publication, authors are required to make materials and methods used freely available to academic researchers for their own use. This includes antibodies and the constructs used to make transgenic animals, although not the animals themselves. Other supporting data sets must be made available on the publication date from the authors directly.

(i) Clinical trials: As noted above, these should be reported using the CONSORT guidelines available at www.consort-statement.org. A CONSORT checklist should also be included in the submission material. Clinical trials can be registered in any of the following free, public clinical trials
registries: www.clinicaltrials.gov, http://clinicaltrials.ifpma.org/clinicaltrials/, http://isrctn.org/ .As stated in an editorial published in *Oral Diseases* (12:217-218), 2006), all manuscripts reporting results from a clinical trial must indicate that the trial was fully registered at a readily accessible website. The clinical trial registration number and name of the trial register will be published with the paper.

(ii)Experimental subjects: As noted above, experimentation involving human subjects will only be published if such research has been conducted in full accordance with ethical principles, including the World Medical Association Declaration of Helsinki (version 2002) 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 experiments were undertaken with the understanding and written consent of each subject and according to the above mentioned principles. A statement regarding the fact that the study has been independently reviewed and approved by an ethical board should also be included.Editors reserve the right to reject papers if there are doubts as to whether appropriate procedures have been used. When 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 regarding 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.

***(iii) Suppliers*:** Suppliers of materials should be named and their location (town, state/county, country) included.

Results: should present the observations with minimal reference to earlier literature or to possible interpretations.

Discussion: may usually start with a brief summary of the major findings, but repetition of parts of the abstract or of the results sections should be avoided. The section should end with a brief conclusion and a comment on the potential clinical relevance of the findings. Statements and interpretation of the data should be appropriately supported by original references.

Acknowledgements: Should be used to provide information on sources of funding for the research, any potential conflict of interest and to acknowledge contributors to the study that do not qualify as authors. All 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 not include thanks to anonymous referees and editors. Where people are acknowledged, a cover letter demonstrating their consent must be provided.

5.4. References

References should be prepared according to the *Publication Manual of the American Psychological Association* (6th edition). This means in-text citations should follow the author-date method whereby the author's last name and the year of publication for the source should appear in the text, for example, (Jones, 1998). For references with three to five authors, all authors should be listed only on the first occurrence of the in-text citation, and in subsequent in-text occurrences only the first author should be listed followed by '*et al.*'. The complete reference list should appear alphabetically by name at the end of the paper.

A sample of the most common entries in reference lists appears below. Please note that a DOI should be provided for all references where available. For more information about APA referencing style, please refer to the APA website. Please note that for journal articles, issue numbers are not included unless each issue in the volume begins with page one.

Journal article

Example of reference with 2 to 7 authors

Beers, S. R., & De Bellis, M. D. (2002). Neuropsychological function in children with maltreatment-related posttraumatic stress disorder. *The American Journal of Psychiatry, 159*, 483–486. doi: 10.1176/appi.ajp.159.3.483

Ramus, F., Rosen, S., Dakin, S. C., Day, B. L., Castellote, J. M., White, S., & Frith, U. (2003). Theories of developmental dyslexia: Insights from a multiple case study of dyslexic adults. *Brain, 126*(4), 841–865. doi: 10.1093/brain/awg076

Example of reference with more than 7 authors

Rutter, M., Caspi, A., Fergusson, D., Horwood, L. J., Goodman, R., Maughan, B., … Carroll, J. (2004). Sex differences in developmental reading disability: New findings from 4 epidemiological studies. *Journal of the American Medical Association, 291*(16), 2007–2012. doi: 10.1001/jama.291.16.2007

Book edition

Bradley-Johnson, S. (1994). *Psychoeducational assessment of students who are visually impaired or blind: Infancy through high school* (2nd ed.). Austin, TX: Pro-ed.

5.5. Tables, Figures and Figure Legends

Figures: All figures and artwork must be provided in electronic format. Please save vector graphics (e.g. line artwork) in Encapsulated Postscript Format (EPS) and bitmap files (e.g. half-tones) or clinical or in vitro pictures in Tagged Image Format (TIFF).

Detailed information on our digital illustration standards can be found at http://authorservices.wiley.com/bauthor/illustration.asp.

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

Unnecessary figures and parts (panels) of figures should be avoided: data presented in small tables or histograms, for instance, can generally be stated briefly in the text instead. Figures should not contain more than one panel unless the parts are logically connected.

Figures divided into parts should be labelled with a lower-case, boldface, roman letter, a, b, and so on, in the same type size as used elsewhere in the figure. Lettering in figures should be in lower-case type, with the first letter capitalized. Units should have a single space between the number and unit, and follow SI nomenclature common to a particular field. Unusual units and abbreviations should be spelled out in full or defined in the legend. Scale bars should be used rather than magnification factors, with the length of the bar defined in the legend rather than on the bar itself. In general visual cues (on the figures themselves) are preferred to verbal explanations in the legend (e.g. broken line, open red triangles etc).

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Oral Diseases 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. Early View articles are complete and final. 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.

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APÊNDICE B – Versão inicial do instrumento

Escala de Biossegurança e Aspectos Psicológicos relacionados a doenças infectocontagiosas em Odontologia (EAPDIO)

INSTRUÇÕES: Dentro das alternativas, assinale X na opção que melhor descreve afrequência dos seus comportamentos.

		Nunc	Quase nunca	Às vezes	Quase sempre	Sempre
1	Você já foi tratada(o) com desdém, indiferença ou crítica por ser Cirurgiã(o)-Dentista e estar mais exposta(o) à contaminação de doenças infectocontagiosas?					
2	Você tem dificuldades de se manter concentrado durante os atendimentos odontológicos?					
3	Os membros da sua equipe são treinados em relação à:					
	Uso e lavagem de jalecos de tecido					
	Uso e descarte de jalecos descartáveis					
	Uso e descarte de luvas					
	Uso e desinfecção de óculos de proteção					
	Uso e descarte de máscara comum					
	Uso e descarte de máscara N95/FFP2/FFP3 ou equivalentes					
	Uso e desinfecção de protetor facial					
	Uso e limpeza de sapatos fechados					
	Uso e descarte de propé					
4	O seu auxiliar é orientado a não tocar nas superfíciescom luvas contaminadas durante os atendimentos?					
5	Você realiza a desinfecção da sala de espera (chão, bancadas, móveis, interruptores de luz, maçanetas, campainha) entre cada paciente atendido?					

6	Você utiliza barreiras descartáveis nos equipamentos não relacionados diretamente aos procedimentosodontológicos? (telefone, tv, caixas de som, computador, refrigerador, etc)					
7	Você utiliza equipamentos de proteção individual (EPI) durante os atendimentos?					
	Jaleco de tecido					
	Jaleco descartável					
	Luvas					
	Óculos de proteção					
	Máscara comum					
	Máscara N95/FFP2/FFP3 ou equivalentes					
	Protetor facial (*faceshield*)					
	Propé					
8	Você realiza a higienização das mãos após a remoção de:					
	luvas e avental					
	óculos de proteção e máscara					
9	Você realiza a desinfeção da(o)?					
	Cadeira Odontológica (braços, assento e encosto)					
	Mocho					
	Alça do refletor					
	Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
	Materiais odontológicos (resinas, cimentos, etc.)					
10	Como profissional de saúde, você acredita que as doenças infectocontagiosas afetam o seu trabalho?					
11	Você se distancia de outras pessoas pelo fato da sua profissão estar entre as com maior risco de contaminação cruzada?					
12	Você já foi vítima de *fake news* relacionadas à profissão					

	e que te deixaram em uma situação constrangedora?					
13	Você se sente com medo de ter que interromper os atendimentos por algum período se ficar doente?					
14	A sua equipe participa de capacitação sobre biossegurança em Odontologia? (palestras, curso,congresso online)					
15	Você renova a desinfecção entre cada paciente atendido da(o)?					
	Cadeira Odontológica (braços, assento e encosto)					
	Mocho					
	Alça do refletor					
	Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
	Materiais odontológicos (resinas, cimentos, etc.)					
16	Ao ajustar a máscara de proteção após a instalação, você realiza higienização das mãos antes e apósmanipulá-la?					
17	A colocação e remoção dos EPI acontece fora do local de atendimento ao paciente?					
18	Você realiza desinfecção das superfícies do consultório(chão, bancadas, móveis, interruptores de luz, maçanetas) entre cada paciente atendido?					
19	Você já alertou/orientou sua equipe sobre uso de adornos (relógios, pulseiras, anéis, colares, brincos)durante os atendimentos clínicos?					
20	Você tem medo de contrair alguma doençainfectocontagiosa durante o exercício da profissão?					
21	Você tem dificuldades para se entusiasmar com					

	atividades antes prazerosas após o atendimento a pacientes com doenças infectocontagiosas?					
22	Você acredita ser um possível foco de transmissão de doenças infectocontagiosas?					
23	Você se preocupa como as pessoas irão tratar as pessoas que moram com você pelo fato da sua profissão apresentar alto risco de contaminação cruzada?					
24	Você realiza o protocolo de higienização das mãos, previamente aos atendimentos?					
	com água e sabão por 40 a 60 segundos					
	com álcool 70% por 20 a 30 segundos					
25	Você realiza a desinfecção dos EPI reutilizáveis entreos atendimentos?					
26	Você troca as barreiras descartáveis entre cada paciente da(o)?					
	Cadeira Odontológica (braços, assento e encosto)					
	Mocho					
	Alça do refletor					
	Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
	Materiais odontológicos (resinas, cimentos, etc.)					
27	Você se reúne com sua equipe para avaliar e dar "feedback" sobre desempenho relacionado à biossegurança durante atendimentos clínicos?					
28	Você tem medo de atender um paciente com tosse, espirros ou dor de garganta?					
29	Você já apresentou episódios de pânico sem causaaparente?					
30	Você já percebeu olhares, sussurros e risadas em sua direção em virtude da profissão?					

31	Você consegue descansar ou relaxar quando não está trabalhando?					
32	Os membros da sua equipe já foram treinados emrelação ao uso de EPI durante a lavagem do material após a realização dos atendimentos?					
33	Você se sente desconfortável ao conversar sobre doenças infectocontagiosas?					
34	Você realiza a remoção dos EPI respeitando a ordem:luvas, avental, óculos de proteção e máscara?					
35	Você realiza a remoção de adornos (relógios, pulseiras,anéis, colares, brincos) previamente à colocação dos EPI?					
36	Você utiliza barreiras descartáveis na(o)?					
	Cadeira Odontológica (braços, assento e encosto)					
	Mocho					
	Alça do refletor					
	Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
	Materiais odontológicos (resinas, cimentos, etc.)					
37	O medo de contrair/transmitir doenças infectocontagiosas te faz ter mais atenção para adoção das medidas de biossegurança?					
38	Você realiza atualizações da sua equipe sobre infecçõescruzadas durante atendimento odontológico?					
39	Você nota que pessoas próximas a você te tratam diferente por atender pacientes possivelmentecontaminados com doenças infectocontagiosas?					
40	Você tem medo de ter que fechar o seu consultório?					

41	Você considera os riscos envolvidos no atendimento dopaciente para escolha dos EPI a serem utilizados?					
42	Você já se sentiu culpada(o) por ser Cirurgiã(o)- Dentista e estar mais exposta(o) à contaminação dedoenças infectocontagiosas.					
43	Você se sente magoado quando as pessoas te tratam diferente por você atender pacientes possivelmentecontaminados com doenças infectocontagiosas?					
44	Você tem tido dificuldades para dormir nos últimos dias?					
45	A equipe de limpeza do consultório/clínica é orientada sobre o uso de EPI?					
46	Você tem se sentido mais irritado atualmente?					
47	Você tem medo de ser infectado ou infectar um colegade trabalho durante o atendimento clínico?					
48	Você tem medo de transmitir uma doença infectocontagiosa para seus familiares?					
49	Você sente medos ou preocupações sem motivos aparentes?					

APÊNDICE C – Documento de Avaliação de face e conteúdo

INSTRUÇÕES PARA ANÁLISE DO INSTRUMENTO

Prezado (a) Pesquisador (a),

Você está sendo convidado a participar como perito da avaliação do conteúdo da **"Escala de Biossegurança e Aspectos Psicológicos relacionados a doenças infectocontagiosas em Odontologia"** (EAPDIO). A criação da referida escala é objeto de pesquisa desenvolvida pelo Núcleo de Estudos em Diagnóstico e Reabilitação Odontológica (NEDRO/CNPq), da Universidade Federal de Juiz de Fora, Campus Governador Valadares, sob coordenação da Profa. Dra. Francielle Silvestre Verner.

O presente projeto visa esclarecer perguntas relativas ao controle de infecção entre Cirurgiões-Dentistas, bem como identificar aspectos psicológicos na prática Odontológica frente a doenças infectocontagiosas. Do ponto de vista científico, ainda não foi proposto instrumento para essa população correlacionando estes fatores, dificultando investigações com esse objetivo.

A etapa de criação dos itens foi realizada por meio do método dedutivo (revisão de literatura).

A avaliação do instrumento envolve 2 fases: 1) AVALIAÇÃO DA VALIDADE DE CONTEÚDO e 2) ANÁLISE DO INSTRUMENTO. Na fase 1, você irá responder quanto a Representatividade, Redação e Especificação dos Fatores. Na fase 2, o Título, Formato, Instruções e Escore do instrumento serão julgados.

Favor considerar além de conhecimentos científicos, sua experiência clínica e percepção sobre o assunto da presente escala para realizar os julgamentos.

Agradecemos antecipadamente pela sua atenção e empenho e nos colocamos à disposição para quaisquer esclarecimentos.

Atenciosamente,

Pesquisadores NEDRO/CNPq
Profa. Dra. Francielle Silvestre Verner
Prof. Dr. Cleidiel Aparecido Araújo Lemos
Prof. Dr. Rafael Binato Junqueira
Prof. Dr. Rodrigo Furtado de Carvalho
Prof. Dr. Sibele Nascimento de Aquino

AVALIAÇÃO DA VALIDADE DE CONTEÚDO

A avaliação da validade de conteúdo será composta por três passos, os quais estão descritos a seguir. Ressalto a necessidade de cumprir os passos na ordem que estão apresentados.

1º Passo – Avaliação da Representatividade:

Avalie cada item quanto à representatividade (notar se os itens realmente refletem os conceitos envolvidos, se são relevantes e, se são adequados para atingir os objetivos propostos).

Para isso utilize a seguinte legenda:

-1 = Não, o item não se refere ao controle de infecção ou aspectos psicológicos relacionados a doenças infectocontagiosas em Odontologia.

0 = duvidoso, não tenho certeza se o item se refere ao controle de infecção ou aspectos psicológicos relacionados a doenças infectocontagiosas em Odontologia.

1 = Sim, o item se refere ao controle de infecção ou aspectos psicológicos relacionados a doenças infectocontagiosas em Odontologia.

2º Passo – Avaliação da Redação:

Avalie cada item quanto à clareza (redação dos itens, se eles foram redigidos de forma que o conceito esteja compreensível e se expressa adequadamente o que se espera medir). Para isso utilize a seguinte legenda:

-1 = Inadequado, o item deve ser retirado.

0 = Inadequado, o item deve ser reformulado.

1= Adequado, o item deve ser mantido da forma atual.

3º Passo – Especificação dos Fatores:

A partir da revisão de literatura, hipotetizamos que a biossegurança e os aspectos psicológicos relacionados à doenças infectocontagiosas podem ser dividido em cinco fatores, a saber:

FATOR A: Equipamentos de proteção individual — Este fator engloba as características relacionadas ao uso de equipamentos de proteção individual, visando verificar a adesão dos Cirurgiões-Dentistas a esses métodos de biossegurança.

FATOR B: Proteção do ambiente de trabalho — Este fator engloba as características relacionadas a proteção do ambiente de trabalho, visando verificar a adesão dos Cirurgiões-Dentistas a esses métodos de biossegurança.

FATOR C: Capacitação da equipe — Este fator engloba as características relacionadas à capacitação/instrução da equipe de trabalho em relação aos fatores de biossegurança para controle de infecção em Odontologia.

FATOR D: Medo/ansiedade — Este fator engloba as percepções dos Cirurgiões-Dentistas ao lidarem com o risco de contaminação cruzada por doenças infectocontagiosas.

FATOR E: estigma/preconceito – Este fator engloba as percepções dos Cirurgiões-Dentistas em relação a como são vistos por outras pessoas, em virtude dos riscos de contaminação cruzada por doenças infectocontagiosas oferecidos pela profissão.

Por favor, julgue os itens da tabela abaixo indicando se os mesmos pertencem ao fator **A, B, C, D ou E**. Ressalta-se que cada item deverá ser categorizado **EM APENAS UM** fator. Consulte a escala em anexo para julgar os itens.

		O item é representativo do conceito explorado?	O item é claro e compreensível?	Qual dos fatores o item pertence?
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48				
49				

Com relação aos **Passos 1 e 2**, caso tenha julgado algum item como -1, ou 0, solicitamos sugestões para aperfeiçoar o item ou indicações para inclusão de novos itens. O espaço abaixo está reservado para este procedimento.

Número do item	Sugestão de alteração

Sugestão de novos itens

ANÁLISE DO INSTRUMENTO

Pedimos que avalie o título, o formato (layout), as instruções e o escore total do instrumento. Caso responda -1 ou 0, solicito sugestões para o aperfeiçoamento do instrumento. **O novo instrumento encontra-se em anexo.**

I) TÍTULO: Avalie o título e a sigla da escala quanto à clareza.

"Escala de Biossegurança e Aspectos Psicológicos relacionados a doenças infectocontagiosas em Odontologia" (EAPDIO)

O título do instrumento é claro e expressa a medida?

-1= Não claro	
0= Pouco Claro	
1= Muito Claro	

Comentários:

II) FORMATO DO INSTRUMENTO: Avalie o formato (*layout*) quanto à clareza (verificar se o formato é compreensível) e à adequação. (Ver o formato no instrumento em anexo)

O formato do instrumento é claro e adequado?

-1= Não claro	
0= Pouco Claro	
1= Muito Claro	

Comentários:

III) INSTRUÇÕES: Avalie as instruções quanto à clareza (verificar se a redação está correta e se expressa adequadamente o que se espera medir). **(Ver as instruções no instrumento no Anexo I)**

As instruções do instrumento são claras e adequadas?

-1= Não claro	
0= Pouco Claro	
1= Muito Claro	

Comentários:

IV) ESCORE TOTAL: Avalie o cálculo do escore total quanto à clareza (verificar se é compreensível).

A escala terá opções de resposta em escala *Likert* de 5 pontos, assim especificados: (1) Nunca, (2) Quase nunca, (3) Às vezes, (4) Quase sempre e (5) Sempre. A resposta "Sempre" indica uma frequência muito alta de um comportamento, portanto tem atribuído o maior valor (5 pontos); enquanto "Nunca" indica que o comportamento nunca é realizado, tendo atribuído o menor valor (1 ponto). Alguns itens possuem escore reverso (o "nunca" é o melhor comportamento e o "sempre" o pior comportamento). O escore total do instrumento será realizado a partir da soma de todos os itens e quanto maior o somatório dos escores, maior a adesão do Cirurgião-Dentista ao controle de infecção e melhor são os aspectos psicológicos relacionados à profissão.

O escore do instrumento é claro e adequado?

-1= Não claro	
0= Pouco Claro	
1= Muito Claro	

Comentários:

APÊNDICE D – Versão do instrumento após análise semântica, que foi encaminhado para os participantes da pesquisa (via Google Forms) antes da análise fatorial exploratória e confirmatória

38 questões / 74 itens

Fatores:

Equipamentos de proteção individual (9 questões / 21 itens)

Proteção ambiente trabalho (6 questões / 22 itens)

Capacitação da equipe (8 questões / 16 itens)

Medo/ansiedade (9 questões / 9 itens)

Estigma/preconceito (6 questões / 6 itens)

Equipamentos de proteção individual

1. Você utiliza equipamentos de proteção individual (EPI) durante os atendimentos?

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Jaleco de tecido					
Jaleco descartável					
Luvas					
Óculos de proteção					
Máscara comum					
Máscara N95/FFP2/FFP3 ou equivalentes					
Protetor facial (*faceshield*)					
Propé					
Touca(Gorro)					

Calçado Fechado					

2. A colocação e remoção dos EPI acontece fora do local de atendimento ao paciente?
( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

3. Você realiza a remoção de adornos (relógios, pulseiras, anéis, colares, brincos) previamente à colocação dos EPI?
( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

4. Você considera os riscos envolvidos no atendimento do paciente para escolha dos EPI a serem utilizados?
( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

5. Você realiza o protocolo de higienização das mãos, previamente aos atendimentos?(23)

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
com água e sabão por 40 a 60 segundos					
com álcool 70% por 20 a 30 segundos					

6. Você realiza a remoção dos EPI respeitando a ordem: luvas, avental, óculos de proteção e máscara?
( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

7. Você realiza a higienização das mãos após a desparamentação:

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre

com água e sabão por 40 a 60 segundos					
com álcool 70% por 20 a 30 segundos					

8. Ao ajustar a máscara de proteção após a instalação, você realiza higienização das mãos:(15)

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Antes					
Após					

9. Você ou seu(sua) auxiliar realizam a desinfecção dos EPI reutilizáveis (Face shield, óculos de proteção) entre os atendimentos?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

Proteção do ambiente de trabalho

10. Você utiliza barreiras descartáveis na(o)?

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Cadeira Odontológica (braços, assento e encosto)					
Mocho					
Alça do refletor					

Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
Materiais odontológicos (resinas, cimentos, etc.)					

11. Você ou seu(sua) auxiliar trocam as barreiras descartáveis dos itens abaixo entre cada paciente:(25)

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Cadeira Odontológica (braços, assento e encosto)					
Mocho					
Alça do refletor					
Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
Materiais odontológicos (resinas, cimentos, etc.)					

12. Você ou seu(sua) auxiliar realizam a desinfeção da(o)?

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Cadeira Odontológica (braços, assento e encosto)					

Mocho					
Alça do refletor					
Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
Materiais odontológicos (resinas, cimentos, etc.)					

13.Você ou seu(sua) auxiliar repetem a desinfecção dos itens abaixo entre o atendimento de cada paciente?

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Cadeira Odontológica (braços, assento e encosto)					
Mocho					
Alça do refletor					
Equipamentos periféricos (fotopolimerizador, ultrassom, etc.)					
Materiais odontológicos (resinas, cimentos, etc.)					

14. Você, seu(sua) auxiliar, ou membro da equipe realizam a desinfecção das superfícies do consultório (chão, bancadas, móveis, interruptores de luz, maçanetas) entre cada paciente atendido?

15. Você, seu(sua) auxiliar, ou membro da equipe realizam a desinfecção da sala de espera (chão, bancadas, móveis, interruptores de luz, maçanetas, campainha) entre cada paciente atendido?(4)

Capacitação da equipe

16. O(a) seu(sua) auxiliar participa de capacitações (palestras, cursos, congressos) sobre biossegurança em Odontologia?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

17. Você orienta/treina a sua equipe sobre infecções cruzadas durante o atendimento odontológico?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

18. Os membros da sua equipe são treinados em relação à: (02)

	Nunca	Quase nunca	Às vezes	Quase sempre	Sempre
Uso e lavagem de jalecos de tecido					
Uso e descarte de jalecos descartáveis					
Uso e descarte de luvas					
Uso e desinfecção de óculos de proteção					

Uso e descarte de máscara comum					
Uso e descarte de máscara N95/FFP2/FFP3 ou equivalentes					
Uso e desinfecção de protetor facial					
Uso e limpeza de sapatos fechados					
Uso e descarte de propé					

19. Os membros da sua equipe já foram treinados em relação ao uso de EPI durante a lavagem do material após a realização dos atendimentos?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

20. A equipe de limpeza do consultório/clínica é orientada sobre o uso de EPI?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

21. Você já alertou/orientou sua equipe sobre uso de adornos (relógios, pulseiras, anéis, colares, brincos) durante os atendimentos clínicos?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

22. O seu auxiliar é orientado a não tocar nas superfícies com luvas contaminadas durante os atendimentos?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

23. Você se reúne com sua equipe para avaliar e dar "feedback" sobre desempenho relacionado à biossegurança durante atendimentos clínicos?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

Medo/ansiedade

24. Você tem medo infectar um colega de trabalho ou um paciente durante o atendimento clínico?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

25. Você tem medo de atender um paciente com tosse, espirros ou dor de garganta?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

26. Você se sente com medo de ter que interromper os atendimentos se adquirir doença infectocontagiosa?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

27. Você se sente ansioso ao atender paciente portador de doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

28. Você tem medo de contrair alguma doença infectocontagiosa durante o exercício da profissão?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

29. Você tem medo de transmitir uma doença infectocontagiosa para seus familiares?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

30. Você se sente mais irritado quando atende pacientes com doenças infectocontagiosas?(44)

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

31. Você já apresentou episódios de pânico após o atendimento a pacientes com doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

32. Você sente dificuldades para dormir após o atendimento a pacientes com doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

Estigma/preconceito

33. Você nota que pessoas do seu círculo social te tratam diferente por atender pacientes possivelmente contaminados com doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

34. Você acredita que possa transmitir doenças infectocontagiosas em virtude de você realizar atendimento a pessoas possivelmente contaminadas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

35. A possibilidade de contrair doenças infectocontagiosas te faz adotar medidas extras de biossegurança no atendimento de pacientes com doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

36. Você já percebeu evasão de pacientes do seu consultório por saberem que você atende outros pacientes com doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

37. Você se distancia de outras pessoas do seu convívio pelo fato da sua profissão estar entre as com maior risco de contaminação cruzada?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre

38. Você já percebeu olhares e sussurros em sua direção em virtude de você realizar atendimento a pessoas possivelmente contaminadas por doenças infectocontagiosas?

( ) Nunca ( ) Quase nunca ( ) Às vezes ( ) Quase sempre ( ) Sempre