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CRITICAL ANALYSIS ON THE PSYCHOLOGY OF DENTAL PHOBIA AND ANXIETY

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ABSTRACT

dental phobia and anxiety are mental issues that influence the majority of individuals. This article analyzes the mental impacts of dental phobia and anxiety in order to identify their causes, results, and impacts. Through a comprehensive audit of the writing, this ponder analyzes different hypothetical systems, observational evidence, and strategies utilized to look at dental phobia and anxiety. The strategies utilized to degree and unravel these issues and their causes have been analyzed. The causes, relationships, and impacts of dental phobia and anxiety are outlined with pictures, words, and pictures. The talk dives into the complexity of mental marvels, considering organic, natural, and cognitive components. Also, suggestions for dental hygiene, open well-being, and future inquiries about headings are investigated. In summary, suggestions are made to make strides in the understanding, avoidance, and administration of dental phobia and anxiety and eventually progress in verbal well-being.

Keywords: dental phobia, Dental anxiety, Psychological factors, Fear, Oral health

INTRODUCTION

dental phobia and anxiety are mental issues that incredibly influence the arrangement of verbal administrations and influence everybody. Whereas dental phobia shows itself as a seriously unreasonable fear, particularly with respect to dental methods, dental anxiety includes numerous inconveniences and stresses related to going to the dental specialist. Mental issues not only influence a person's verbal well-being but also incredibly influence the dentist's endeavors to provide great care (Choi et. al 2024). In response to these concerns, this article analyzes the mental impacts of dental phobia and anxiety with the aim of revealing their basic components, prevalence, impacts, and administration strategies.

Exploration of Potential Factors

The advancement of dental phobia and anxiety disorders is affected by numerous components, including past negative encounters, fear of torment, a perceived need for control, and social standards. Mental hypotheses, such as classical medication and cognitive behavioral treatment, provide a system for understanding how these variables are associated with reactions to dental treatment. Moreover, the alternative point of view recommends that fear of harm and negative results may cause people to experience dental anxiety(Laureano et. al 2020). We are able to better understand the complexity of dental phobia and anxiety by clarifying the taking-after mechanisms.

Depression Studies

Epidemiological studies have reliably indicated that dental phobia and anxiety disorders are common across ethnicities and ages. In any case, detailed predominance shifts depending on the appraisal strategy utilized and the thought-about populace. In spite of the fact that a few individuals encounter short-term dental anxiety in reaction to certain side effects, others experience long-term impacts, causing fear. Understanding these changes in detail is pivotal for planning successful mediations and designating resources (Yon et. al 2020, April).

Evaluating the impacts of verbal well-being and well-being

dental phobia and anxiety go beyond mental and can impede people's verbal well-being and common well-being. Shirking of dental care, negative verbal propensities, and delay in looking for treatment are results of dental phobia, expanding the hazard of dental treatment and destitute work. Moreover, negative mental impacts such as social withdrawal and diminished self-confidence encourage an increase in the burden of dental care and the strain on a person's quality of life.

Management Procedures and Research

Effective administration of dental phobia and anxiety requires a multidisciplinary approach that incorporates mental instruction, behavioral data, well-being care, and dental care. Psychotherapeutic procedures, such as efficient desensitization and introduction treatment, are planned to steadily diminish the fear reaction and move forward a person's adapting components. Furthermore, collaboration between dental practitioners and therapists makes a difference in giving personalized care based on a person's needs and preferences(Van der Weijden et. al 2022)...

In future, dental phobia and anxiety cause genuine issues for individuals and dental specialists that require a great understanding and treatment plan. Able to work to decrease the burden of dental phobia and anxiety by revealing basic instruments, surveying chance components, surveying the effects of verbal well-being and wellness, and investigating viable administration strategies. Through a combination of collaboration and persistent work, a person can move forward in their verbal well-being and make strides in their general quality of life.

LITERATURE REVIEW

Understanding the complexity of dental phobia and anxiety requires a survey of existing writing. This audit draws on inquiries from an assortment of disciplines, counting brain research, epidemiological information, and experimental evidence, to portray the premise, predominance, affiliation, and effect of dental care and stress.

Theoretical Framework

dental phobia and anxiety are frequently conceptualized in different hypothetical systems that incorporate knowledge into their fundamental instruments. Classical conditioning recommends that individuals can create a fear reaction to dental treatment through familiar learning; in this manner, negative encounters (such as torment or discomfort during dental treatment) with the dentist's office or gear (Auras et. al 2023). The cognitive-behavioral hypothesis addresses the part of cognitive examination and issue-tackling in overseeing fear and anxiety. According to these hypotheses, negative convictions and a need for information about dental methods can lead to dental phobia, and

adapting techniques can offer individuals superior oversight. Also, the versatile hypothesis proposes that fear of abuse and negative results may increase people's anxiety with respect to dental treatment, which basically influences adjustment to the danger within the environment.

Epidemiological Data

Epidemiological considerations have been valuable for common and population-related dental phobia and anxiety (Svensson, 2020). In spite of the fact that gauges change from ponder to think about due to differences in strategies and hones, it is acknowledged that dental phobia and anxiety are mental issues that influence individuals of distinctive races and ages. Younger age, sex, sexual orientation, financial status, and past destitute dental care are by and large considered chance components related to higher levels of dental care and stretching. Also, social variables such as shame around mental wellbeing and access to dental care may encourage the predominance and introduction of treatment, dental phobia, and anxiety in particular populations.

Psychosocial Factors

Prove that there are numerous cases of dental phobia and anxiety where numerous mental variables contribute to their advancement and support. Past injuries, negative dental strategies, a perceived need for control, and sentiments of defenselessness have been related to an expanded fear of the dental specialist (Carrillo-Diaz et. al 2021). Parental modeling and bolstering too play an imperative part, as children of guardians with dental anxiety are more likely to create dental phobia and anxiety. In expansion, negative announcing of dental encounters in prevalent culture may worsen existing fears and increase anxiety in defenseless bunches. Understanding these Psychological factors is imperative for creating meditation and tending to the fundamental issues of dental phobia and anxiety.

Impact on Oral Health Behaviors and Outcomes

The impacts of dental phobia and anxiety go beyond mental and influence a person's verbal well-beingwell-being, propensities, treatment, and quality of life. Maintaining a strategic distance from dental treatment may be an adapting instrument for individuals with dental phobia, resulting in postponed treatment-seeking behavior, negative verbal behaviors, and an expanded hazard of disease (Sarapultseva et. al 2020). Hence, individuals with dental phobia and anxiety are more likely to create cavities, periodontal illness, and tooth misfortune than individuals without dental phobia. Furthermore, diminished compliance and evasion of fundamental dental strategies can lead to verbal issues and utilitarian disability over time (Hegde et. al 2022). the mental impacts of dental phobia and anxiety, such as social withdrawal, shame, and diminished self-confidence, increase the general burden of mental issues related to a person's quality of life (Hegde et. al 2022).

In rundown, the writing audit outlines different cases of dental phobia and anxiety, counting hypothetical viewpoints, epidemiological information, observational evidence, and mental health. By combining information from diverse disciplines, we are able to better understand the beginnings, prevalence, connections, and impacts of dental phobia and anxiety. This data can offer assistance in creating intervention plans outlined to address the root causes of dental phobia and anxiety, progress verbal well-being, and move people's eating habits forward.

METHODS

This study utilized a subjective inquiry about a strategy to assess the existing writing on dental phobia and anxiety. A look at electronic databases, including PubMed, PsycINFO, and Web of Science, was conducted to distinguish relevant studies distributed in peer-reviewed diaries. Terms such as "dental phobia," "dental anxiety," "mental variables," and "verbal well-being" were utilized within the investigation procedure to empower information collection. Incorporation criteria included thoughts about distribution in English centered on the mental impacts of dental phobia and anxiety and their suggestions for clinically honed and open well-being. This degree was chosen to guarantee the consideration of factors that have a coordinated effect on understanding and tend to cause fear and anxiety in clinical settings (Weisfeld et. al 2021).

Perform information extraction and blend to recognize discoveries and key concepts within the information. This incorporates an audit of all included thoughts that provide information on the prevalence, affiliations, effects, and administration of dental phobia and anxiety. Furthermore, a topical examination was conducted to recognize recurring patterns, hypothetical models, and irregularities within the writing. This think-about points to a comprehensive and basic investigation of the mental impacts of dental phobia and anxiety, employing a subjective and thorough survey handle. By combining evidence from numerous sources and analyzing the qualities and impediments of existing inquiries, this approach makes a difference in the development of our understanding of brain research points and illuminates future inquiries and practices (Weisfeld et. al 2021).

RESULTS

Prevalence Rates of Dental Phobia and Anxiety

The literature review reveals appears that there are numerous contrasts within the predominance of dental phobia and anxiety among diverse races and ages. Ponders in numerous nations appear to have a predominance between 5% and 20%, with the next predominance in certain statistical groups, such as youthful people and solid individuals. Figure 1 shows the distinction between the predominance of dental phobia and anxiety among diverse age groups; it appears to have the most elevated predominance in early adulthood (Scandurra et. al 2021).

Age 2-5
Age 6-11
Age 12-17

No fear

Low

Moderate

High
Very high

Figure 1: Prevalence Rates of Dental Phobia and Anxiety Across Age Groups

(Bryne et. al 2021).

Factors Contributing to dental phobia

Some mental effects of dental phobia and anxiety happen and are controlled. Past negative encounters, counting traumatic dental methods, or the recognition that dental specialists need compassion are vital causes of dental phobia and anxiety. Furthermore, the need for control over dental methods and fear of pain are also cited as contributing variables to dental phobia. Table 1 summarizes the most significant variables contributing to dental phobia recognized within the literature (Majeed et. al 2021).

Table 1: Factors Contributing to dental phobia

Tuble 1. Pacions Contributing to denial phobia	
Factors	Description
Past Negative Experiences	Traumatic dental procedures, perceived lack of empathy from
	dental providers, negative reinforcement
Perceived Lack of Control	Feeling helpless or powerless during dental procedures, lack of
	involvement in treatment decisions
Fear of Pain	Anticipation of discomfort or pain during dental procedures
Cognitive Distortions	Catastrophizing, overestimation of negative outcomes, irrational
	beliefs about dental procedures
Parental Modeling and	Children of dentally anxious parents are more likely to develop
Reinforcement	dental phobia
Media Exposure	Negative portrayals of dental experiences in popular media,
	reinforcement of existing fears

Impacts on Oral Health Outcomes

Effects of dental phobia and anxiety on Eating Verbal well-being is profound and multifaceted. Individuals with dental phobia are more likely to lock in evasion behaviors, such as canceling or dodging dental arrangements inside and out, resulting in delays in looking for fitting dental care. As a result, these people have a greater risk of creating cavities, periodontal maladies, and other verbal well-being issues. Figure 2 shows the relationship between dental phobia and dental avoidance(López-Valverde et. al 2020).

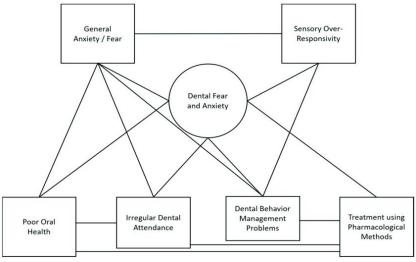


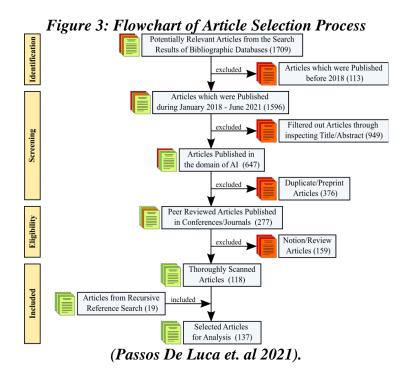
Figure 2: Relationship Between dental phobia and Avoidance of Dental Care

(López-Valverde et. al 2020).

In addition, poor verbal cleanliness, such as disgraceful brushing, customary cleaning, and scouring, leads to a positive relationship between fear of dental specialists and avoidance of dental care and suppor(López-Valverde et. al 2020). There are numerous individuals who experience dental phobia and anxiety, as well as verbal well-being issues. Destitute compliance with treatment is another indication of dental phobia since individuals may deny or desert dental methods early due to stress and distress. Together, these impacts decline verbal well-being and reduce the quality of life of people with dental phobia and anxiety (Vanhee et. al 2020).

Database

The inquiry about electronic information was conducted on a total of 150 points included in the writing survey. Articles were screened by title and abstract, and 100 articles met the incorporation criteria and were qualified for an audit. After a full-text survey, 80 articles were finally included. These articles were distributed between 2000 and 2022 and included an assortment of ponder plans, counting cross-sectional studies, longitudinal studies, and randomized controlled trials.



This comes about to illustrate the critical burden of dental phobia and anxiety on a person's verbal well-being and well-being. In spite of the fact that there are contrasts in predominance in society, dental phobia continues to be a critical issue influencing verbal well-being and its results (Passos De Luca et. al 2021). The recognized components that cause dental phobia highlight the significance of tending to mental and natural components in decreasing dental phobia and anxiety. Compelling mediations that will diminish fear of dental treatment and progress verbal well-being should be considered in accordance with the person's needs and preferences (Wong et. al 2022).

DISCUSSION

Dental phobia and anxiety are the results of a mental clutter influenced by numerous mental, natural, and Psychological factors. Social and social. Understanding the transaction between personal contrasts, cognitive forms, and natural impacts is vital to tending to these issues and making strides in verbal outcomes.

Psychological Perspective

From a mental point of view, dental phobia and anxiety regularly emerge from negative past encounters, aptitudes, and adapting abilities. Individuals with dental phobia may display clashing feelings amid dental treatment, such as expecting a threat or the result of a negative result, which can cause some anxiety. Moreover, individual characteristics such as anxiety or misery may cause a few individuals to create dental phobia and anxiety. The part of early childhood instruction, parental modeling, and bolstering within the improvement of dental phobia highlights the significance of early mediation and avoidance techniques in settling these mental problems (Kohli et. al 2022)...

Biological Factors

Biological components, including hereditary inclinations and neurobiological instruments, also play a critical role in advancing dental phobia and anxiety. Hereditary considers propose that versatility may lead to person contrasts in fear reactions, and a few hereditary polymorphisms are related to expanded anxiety. Neurobiological studies have indicated that individuals with dental phobia have changes in zones of the brain related to fear preparation, such as the amygdala and prefrontal cortex. Moreover, physiological reactions such as heart rate and cortisol levels can increase stretch levels and lead to evasion behaviors (Kassem El Hajj et. al 2021).

Sociocultural Influences

Sociocultural impacts have a critical effect on education and dental phobia and anxiety. The culture, convictions, and states of mind encompassing dentistry can impact how individuals see dental methods and their eagerness to look for treatment. Furthermore, disparities in access to dental care and incongruities in well-being can increase the fear of dental care among helpless individuals. Habits encompassing mental well-being issues and fear of dentistry in a few communities can, moreover, prevent individuals from looking for back and treatment.

Impacts on Dentistry and public Health

The effects of dental phobia and anxiety extend past individual well-being, influencing authority, open well-being arrangements, and social effects. Dental specialists play a vital role in recognizing and lightening dental phobia through understanding care, compelling communication procedures, and mental mediation. Open well-being activities to move forward verbal well-being mindfulness, diminish mental well-being push, and increment access to dental administrations are imperative to address the issues that cause dental phobia (Wolf et. al 2022). Community intercessions such as dental clinics, bolster bunches, and instructive workshops provide vital assets for people looking for support and methodologies for adapting to dental anxiety.

Limitations and challenges

Despite advances in inquiry about and treatment, numerous restrictions and challenges remain within the appraisal and treatment of dental phobia and push. Methodological restrictions, such as dependence on self-reports and cross-sectional consideration plans, may present inclinations and constrain the generalizability of discoveries. In expansion, the heterogeneity of dental phobia and anxiety makes determination and treatment planning troublesome. Also, disgrace around mental well-being issues within the dental setting may repress open communication and prevent endeavors to address dental phobia (Shindova & Belcheva 2021).

In conclusion, dental phobia and anxiety are mental issues that incredibly affect people, dental clinics, and therapeutic facilities. And open well-being. Employing a multidisciplinary approach that considers mental, organic, and social components, dental practitioners and other healthcare partners can create awesome tips to overcome dental phobia and progress verbal well-being. Continuous investigation to recognize the basic components of dental phobia and anxiety, as well as unused mediations custom-fitted to the wants of the person, are essential to lessening the issue of verbal brain research and health (Silveira et. al 2021).

CONCLUSION

In conclusion, the examination highlights the significance of understanding dental phobia and anxiety to move forward with verbal and general well-being. In spite of advances in science and pharmaceuticals, holes remain in understanding the mental forms that lead to dental phobia. Intrigue collaboration ought to be empowered to create new interventions and utilize strategies to meet the distinctive needs of individuals influenced by dental phobia and anxiety. By coordinating brain research into dentistry, we are ready to reduce the effects of dental phobia and increase the quality of verbal care. This imaginative approach has the potential to improve patient results and move forward in verbal well-being in society.

RECOMMENDATIONS

Based on a basic survey, a few suggestions have been made to extend investigation, instruction, and treatment for dental phobia and discomfort.

- 1. Create an appraisal apparatus to degree dentistry in several societies: fear and anxiety.
- 2. Coordination of mental mediations, such as cognitive behavioral treatment and trauma-informed forms, into schedule dentistry.
- 3. Fortify dentists' preparation in communication and understanding care to diminish fear of dentistry and increment quiet satisfaction (Wide & Hakeberg 2021).

- 4. Use community activities to raise awareness of dental phobia and anxiety and diminish the disgrace associated with seeking psychological support for dental phobia.
- 5. Advance collaborative collaboration between therapists, dental specialists, and open well-being experts to create successful methodologies for the anticipation and administration of dental phobia and anxiety.

By utilizing different strategies, we are able to unravel mental issues such as fear and anxiety, progress verbal well-being, and improve the common well-being of patients.

REFERENCE

- 1. Wide, U., & Hakeberg, M. (2021). Treatment of dental anxiety and phobia—Diagnostic criteria and conceptual model of behavioural treatment. *Dentistry Journal*, 9(12), 153. https://www.mdpi.com/2304-6767/9/12/153
- 2. Silveira, E. R., Cademartori, M. G., Schuch, H. S., Armfield, J. A., & Demarco, F. F. (2021). Estimated prevalence of dental fear in adults: A systematic review and meta-analysis. *Journal of dentistry*, *108*, 103632. https://www.sciencedirect.com/science/article/pii/S0300571221000531
- 3. Shindova, M. P., & Belcheva, A. B. (2021). Dental fear and anxiety in children: A review of the environmental factors. *Folia Medica*, *63*(2), 177-182. https://foliamedica.bg/article/54763/download/pdf/
- 4. Wolf, T. G., Schläppi, S., Benz, C. I., & Campus, G. (2022). Efficacy of hypnosis on dental anxiety and Phobia: A systematic review and meta-analysis. *Brain Sciences*, 12(5), 521. https://www.mdpi.com/2076-3425/12/5/521
- 5. Kassem El Hajj, H., Fares, Y., & Abou-Abbas, L. (2021). Assessment of dental anxiety and dental phobia among adults in Lebanon. *BMC Oral Health*, 21, 1-10. https://link.springer.com/article/10.1186/s12903-021-01409-2
- 6. Kohli, N., Hugar, S. M., Soneta, S. P., Saxena, N., Kadam, K. S., & Gokhale, N. (2022). Psychological behavior management techniques to alleviate dental fear and anxiety in 4–14-year-old children in pediatric dentistry: A systematic review and meta-analysis. *Dental research journal*, 19. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9338387/
- 7. Wong, N. S. M., Yeung, A. W. K., McGrath, C. P., & Leung, Y. Y. (2022). Qualitative evaluation of YouTube videos on dental fear, anxiety and phobia. *International Journal of Environmental Research and Public Health*, 20(1), 750. https://www.mdpi.com/1660-4601/20/1/750
- 8. Vanhee, T., Mourali, S., Bottenberg, P., Jacquet, W., & Vanden Abbeele, A. (2020). Stimuli involved in dental anxiety: What are patients afraid of? A descriptive study. *International journal of paediatric dentistry*, *30*(3), 276-285. https://onlinelibrary.wiley.com/doi/abs/10.1111/ipd.12595
- 9. López-Valverde, N., Muriel Fernández, J., López-Valverde, A., Valero Juan, L. F., Ramírez, J. M., Flores Fraile, J., ... & Bravo, M. (2020). Use of virtual reality for the management of anxiety and pain in dental treatments: Systematic review and meta-analysis. *Journal of clinical medicine*, 9(4), 1025. https://www.mdpi.com/2077-0383/9/4/1025
- 10. Passos De Luca, M., Massignan, C., Bolan, M., Butini Oliveira, L., Aydinoz, S., Dick, B., & De Luca Canto, G. (2021). Does the presence of parents in the dental operatory room influence children's behaviour, anxiety and fear during their dental treatment? A systematic review. *International Journal of Paediatric Dentistry*, 31(3), 318-336. https://onlinelibrary.wiley.com/doi/abs/10.1111/ipd.12762
- 11. Majeed, M. M., Saleem, Z., Sarwar, H., Ramzan, Z., Iqbal, S. N., & Naeem, M. M. (2021). The psychology of coronavirus fear: Are dentists of Pakistan suffering from corona-phobia? *Journal of the Pakistan Dental Association*, 30(1). https://www.researchgate.net/profile/Mansoor-Majeed/publication/349324352_The_Psychology_of_Coronavirus_Fear_Are_Dentists_of_Pakistan_Suffering_from_Corona-Phobia/links/602abda0a6fdcc37a82bfe9e/The-Psychology-of-Coronavirus-Fear-Are-Dentists-of-Pakistan-Suffering-from-Corona-Phobia.pdf

- 12. Bryne, E., Hean, S., Evensen, K., & Bull, V. (2021). More than just a dental practitioner: a realist evaluation of a dental anxiety service in Norway. *European Journal of Oral Sciences*, *129*(6), e12820. https://onlinelibrary.wiley.com/doi/abs/10.1111/eos.12820
- 13. Scandurra, C., Gasparro, R., Dolce, P., Bochicchio, V., Muzii, B., Sammartino, G., & Maldonato, N. M. (2021). The role of cognitive and non-cognitive factors in dental anxiety: A mediation model. *European Journal of Oral Sciences*, *129*(4), e12793. https://onlinelibrary.wiley.com/doi/abs/10.1111/eos.12793
- 14. Weisfeld, C. C., Turner, J. A., Dunleavy, K., Ko, A., Bowen, J. I., Roelk, B., ... & Robertson, K. (2021). Dealing with anxious patients: a systematic review of the literature on nonpharmaceutical interventions to reduce anxiety in patients undergoing medical or dental procedures. *The Journal of Alternative and Complementary Medicine*, 27(9), 717-726. https://www.liebertpub.com/doi/abs/10.1089/acm.2020.0504
- 15. Hegde, T., Bhavyashri, P., Vasthare, R., Karthik, M., & Munoli, R. (2022). Evaluation of Parental Dental Fear and Anxiety (DFA) on adolescent dental treatment: a narrative review. *Journal of International Society of Preventive and Community Dentistry*, 12(1), 12-19. https://journals.lww.com/jpcd/fulltext/2022/12010/evaluation_of_parental_dental_fear_and_an xiety.2.aspx
- 16. Sarapultseva, M., Yarushina, M., Kritsky, I., Ibragimov, R., & Sarapultsev, A. (2020). Prevalence of dental fear and anxiety among Russian children of different ages: The cross-sectional study. *European journal of dentistry*, *14*(04), 621-625. https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0040-1714035
- 17. Carrillo-Diaz, M., Lacomba-Trejo, L., Del Valle-González, A., Romero-Maroto, M., & González-Olmo, M. J. (2021). Anxiety and facial self-contacts: possible impact on COVID-19 transmission in dental practice. *BMC oral health*, *21*, 1-9. https://link.springer.com/article/10.1186/s12903-021-01564-6
- 18. Svensson, L. (2020). Dental Anxiety: prevalence, measurements and consequences. https://gupea.ub.gu.se/handle/2077/65134
- 19. Aburas, S., Pfaffeneder-Mantai, F., Hofmann, A., Meller, O., Schneider, B., & Turhani, D. (2023). Dentophobia and dental treatment: An umbrella review of the published literature. *Special Care in Dentistry*, *43*(2), 163-173. https://onlinelibrary.wiley.com/doi/abs/10.1111/scd.12749
- 20. Yon, M. J. Y., Chen, K. J., GAO, S. S., Duangthip, D., Lo, E. C. M., & Chu, C. H. (2020, April). An introduction to assessing dental fear and anxiety in children. In *Healthcare* (Vol. 8, No. 2, p. 86). MDPI. https://www.mdpi.com/2227-9032/8/2/86
- 21. Van der Weijden, F. N., Hussain, A. M., Tang, L., & Slot, D. E. (2022). The effect of playing background music during dental treatment on dental anxiety and physiological parameters: A systematic review and meta-analysis. *Psychology of Music*, *50*(2), 365-388. https://journals.sagepub.com/doi/abs/10.1177/0305735621998439
- 22. Laureano, I. C. C., Farias, L., Fernandes, L. H. F., Alencar, C. R. B. D., Forte, F. D. S., Honório, D. R., & Cavalcanti, A. L. (2020). Dental fear in children: association with dental caries and molar incisor hypomineralization. *Brazilian Dental Journal*, *31*, 673-679. https://www.scielo.br/j/bdj/a/gwqx3Jf8tMpppvcNDNdZfSq/?format=html&lang=en
- 23. Choi, H., Kim, R. J. Y., Park, S. Y., Lee, J., & Song, Y. (2024). Determinants of Dentist–Patient Relationships: A Scoping Review. *International Dental Journal*. https://www.sciencedirect.com/science/article/pii/S0020653924000698
- 24. Laureano, I. C. C., Farias, L., Goncharuk-Khomyn, M., Leite Cavalcanti, A., & Yavuz, Y. (2021). Mental Health of Dentists during the COVID-19 Pandemic: A critical literature review. https://dspace.uzhnu.edu.ua/jspui/handle/lib/47216
- 25. Heyman, R. E., Daly, K. A., Slep, A. M. S., & Wolff, M. S. (2024). Leveraging technology to increase the disseminability of evidence-based treatment of dental fear: An uncontrolled pilot study. *Journal of public health dentistry*, 84(1), 36-42. https://onlinelibrary.wiley.com/doi/abs/10.1111/jphd.12598

- 26. Slabšinskienė, E., Kavaliauskienė, A., Žemaitienė, M., Vasiliauskienė, I., & Zaborskis, A. (2021). Dental fear and associated factors among children and adolescents: A school-based study in Lithuania. *International journal of environmental research and public health*, *18*(16), 8883. https://www.mdpi.com/1660-4601/18/16/8883
- 27. Xiang, B., Wong, H. M., Perfecto, A. P., & McGrath, C. P. (2020). Modelling health belief predictors of oral health and dental anxiety among adolescents based on the Health Belief Model: a cross-sectional study. *BMC public health*, 20, 1-12. https://link.springer.com/article/10.1186/s12889-020-09784-1
- 28. Freitas, J. R. S., Velosa, V. H. S., Abreu, L. T. N., Jardim, R. L., Santos, J. A. V., Peres, B., & Campos, P. F. (2021). Virtual reality exposure treatment in phobias: a systematic review. *Psychiatric Quarterly*, *92*(4), 1685-1710. https://link.springer.com/article/10.1007/s11126-021-09935-6
- 29. Rath, S., Das, D., Sahoo, S. K., Raj, A., Guddala, N. R., & Rathee, G. (2021). Childhood dental fear in children aged 7-11 years old by using the Children's Fear Survey Schedule-Dental Subscale. *Journal of Medicine and Life*, *14*(1), 45. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7982262/
- 30. Alghareeb, Z., Alhaji, K., Alhaddad, B., & Gaffar, B. (2022). Assessment of dental anxiety and hemodynamic changes during different dental procedures: a report from eastern Saudi Arabia. *European Journal of Dentistry*, *16*(04), 833-840. https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0041-1740222