

Master's Degree

Updated Pediatric Dentistry





Master's Degree

Updated Pediatric Dentistry

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/dentistry/master-degree/master-updated-pediatric-dentistry

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01

Introduction

The population of children with special care needs is very large and continues to grow. This population group ranks first in unmet health needs and among them, the first place is for dental treatment. There is also a percentage of children who require special care or medically compromised patients, who depend on the great knowledge of the dental professional who treats them. This 100% online program responds to the existing demand and the need for updating with a group of professionals dedicated to the oral care of children. All this with a quality multimedia content, according to the present educational times.



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*Thanks to this Master's Degree you
will get the up-to-date knowledge in
Pediatric Dentistry you were looking for"*

Patients with special dental care needs encounter numerous challenges for adequate, tailored dental care and treatment. It is an important population group, as well as that of children who need highly qualified professionals. This Master's Degree in Updated Pediatric Dentistry delves into the main aspects that make up pediatric dentistry oral care in children, from birth to 14 years of age.

An update that the dental professional will achieve throughout this 12-month program, thanks to the educational content provided by a large teaching team specialized in this field. Their extensive knowledge and extensive experience in oral care and intervention in children will be reflected in multimedia material consisting of video summaries, videos in detail, essential readings and clinical case scenarios that will be very useful in the development of this program.

A program where the professional will delve into the structures of the mouth, its functioning, the establishment of a dental home, the accompaniment of the child and their family, the care and maintenance of a healthy mouth, the recognition of the various pathologies that can occur in the oral and dental area. In addition, this program will help students to be aware of the latest developments in treatments, especially in children who require special dental care.

A 100% online Master's Degree that gives students the flexibility of being able to study a university program, wherever and whenever they wish. It only requires an electronic device with internet connection to access the complete syllabus, without attendance or fixed schedules. This allows you to distribute the teaching load according to your needs, without neglecting other areas of your personal or professional life. An excellent opportunity offered to dental professionals who want to update their knowledge through a high-level educational program.

This **Master's Degree in Updated Pediatric Dentistry** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Practical cases presented by experts in Dentistry
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Download content from the multimedia resource library and access it when you need it"

“Over 12 months you will learn in depth about the main techniques in Pediatric Dentistry. All this online and with the most up-to-date content”

The program's teaching staff includes professionals from the sector who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

It provides an in-depth study of the surgical preoperative period in Pediatric Dentistry and the main techniques applied in dental restoration.

An educational program in which you will delve into oral care and the latest studies on dental trauma.



02 Objectives

The main objective of this Master's Degree is to achieve up-to-date knowledge in Pediatric Dentistry through a comprehensive and detailed syllabus, which allows them to study, in depth, the different areas covered by the comprehensive dental care in pediatric patients. A goal that will be achieved throughout this university program through an enriched multimedia content that is at the academic forefront.



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*Update your work strategies with
a comprehensive approach to the
patient, thanks to this Master's Degree"*

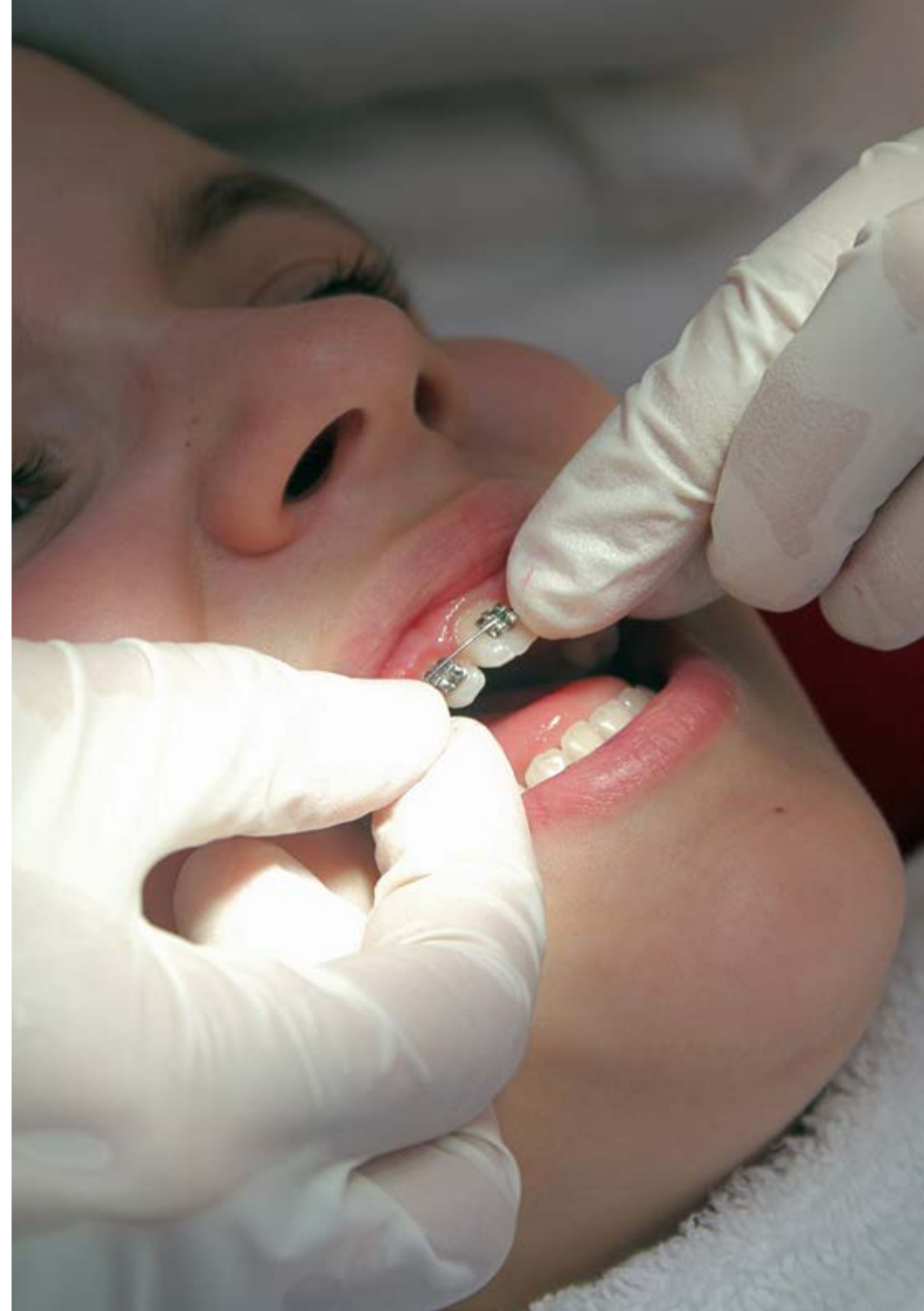


General Objectives

- ♦ Update the professional's knowledge in the different areas covered by comprehensive dental care in pediatric patients from birth to 14 years of age, through data based on scientific evidence
- ♦ Promote work strategies based on a comprehensive approach to the patient and individualized attention to each child according to their age and medical, dental and emotional needs
- ♦ Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training
- ♦ Encourage professional stimulation through continuous education and research
- ♦ Promote understanding of the integral and multidisciplinary nature of pediatric dentistry, the importance of orderly, systematized and ethical teamwork and the role of the dentist working with the pediatric population as a health educator for children and their families



You will achieve your goals thanks to our tools and you will be accompanied along the way by leading professionals"





Specific Objectives

Module 1. Pediatric Dentistry: Basics

- ♦ Identify and describe the stages of cognitive, emotional and social development of children and adolescents
- ♦ Recognize the psychological profile of the child and adolescent
- ♦ Assess possible patient behavior in the dental clinic
- ♦ Analyze the factors that impact the child's behavior
- ♦ Establish the different classifications of patients according to their behavior
- ♦ Describe non-pharmacological behavior management techniques
- ♦ Explain pharmacological management alternatives for uncooperative children
- ♦ Distinguish the different levels of sedation from each other and from general anesthesia
- ♦ Explain the action protocols in each case
- ♦ List the most commonly used drugs for sedation and their antagonists
- ♦ Describe the inherent advantages and risks in the pharmacological sedation procedure
- ♦ Perform adequate basic behavioral guidance in patients according to their ages and cognitive and emotional capacities
- ♦ Explain the different stages of tooth formation and their chronology
- ♦ Define the evolution of the different teeth during childhood and adolescence and their characteristics
- ♦ Identify and name temporary and permanent teeth
- ♦ List the differences between primary and permanent teeth and their clinical implications

Module 2. Growth and Development: Changes in Orofacial Structures and Associated Pathologies

- ♦ Recognize and differentiate primary, mixed first and second stage and permanent teeth, clinically and radiographically
- ♦ Describe the process a drug undergoes in a child's body from the time it is administered until it is excreted
- ♦ Identify differences in drug pharmacokinetics between children and adults and in childhood between different ages
- ♦ Review the main drugs used in pediatric dentistry
- ♦ Explain the importance of the general clinical and stomatological examination in the pediatric patient
- ♦ Recognize the need for systematic and careful collection of clinical data for an appropriate diagnosis

Module 3. Psychology, Behavior and Behavioral Guidance

- ♦ Provide the student with a work scheme that, once internalized, will make their clinical examination system effective and agile
- ♦ Explain the appropriate diagnostic method in pediatric dentistry
- ♦ Describe the different types of X-rays used in pediatric dentistry
- ♦ Explain the advantages of the different complementary tests in each specific case
- ♦ Choose the necessary complementary tests to diagnose the most common oral diseases or the risk of suffering them
- ♦ Establish an appropriate treatment plan for child patients

Module 4. Preventive Pediatric Dentistry

- ♦ Recognize the structures that make up the healthy mouth of an edentulous infant and its physiology
- ♦ Reflect on the rationale and basics of baby dentistry
- ♦ Value an early establishment of the dental home
- ♦ Explain the multifactorial nature of caries and the multifaceted approach to caries prevention
- ♦ Explain the various methods of preventing dental caries and their application at different ages
- ♦ Develop appropriate prevention and maintenance plans for each patient
- ♦ Identify the most frequent deviations from normality in relation to tooth number and size, enamel, alterations and dentin structure alterations
- ♦ Identify the origin and consequences of alterations in tooth number and size, enamel structure and dentin structure alterations
- ♦ Define the criteria for the selection of complementary tests to correctly diagnose these disorders
- ♦ Explain the criteria for selecting the appropriate therapeutic option in each case.
- ♦ Reflect on the rationale and basics of baby dentistry
- ♦ Value an early establishment of the dental home

Module 5. Pathology and Treatment of Dental Caries

- ♦ Explain the criteria for selecting the appropriate therapeutic option in each case
- ♦ Describe dental erosion
- ♦ Understand the role of each etiological factor in the development of erosive lesions
- ♦ Reflect on the current epidemiology of dental erosion and its multifactorial nature
- ♦ Apply available tools to diagnose erosive lesions and establish their severity

- ♦ Understand the role of each etiological factor in the development of caries lesions
- ♦ Reflect on the current epidemiology of dental caries and its multifactorial nature
- ♦ Apply the available tools to diagnose caries lesions
- ♦ Differentiate the different evolutionary stages of caries lesions
- ♦ Describe the concept of early onset or early childhood caries and their characteristics
- ♦ Explain the procedure and the steps to be taken for the correct obturation of cavities prepared for composite
- ♦ Define some systemic diseases that impact the oral cavity
- ♦ Learn to decide when it is necessary to use a preformed steel crown for the restoration of primary molars
- ♦ Learn to determine when it would be possible to use a preformed posterior or anterior aesthetic crown for the restoration of temporary teeth
- ♦ Be able to determine when it would be necessary to restore an anterior tooth using composite and an acetate crown
- ♦ Describe the necessary steps (procedure, material and criteria) for the preparation of an anterior temporary tooth to be restored with composite and an acetate crown

Module 6. Dental Pulp Pathology and Treatment

- ♦ Learn the clinical and radiological characteristics of the different pulp conditions in primary teeth
- ♦ Apply the most appropriate protocol to determine the degree of damage to the temporal pulp
- ♦ Describe the different techniques used in pulp therapy, as well as the possible obturation materials
- ♦ Explain how and when pulp protection is performed on primary teeth
- ♦ Explain how and when indirect pulp treatment is performed on temporary teeth

- ♦ Explain how and when a pulpotomy is performed on primary teeth
- ♦ Explain how and when pulpectomy is performed on primary teeth
- ♦ Acquire criteria to choose which treatment will be performed in young permanent teeth with pulp alterations
- ♦ Define how and when to perform direct pulp capping and indirect pulp capping in young permanent teeth
- ♦ Describe how and when an apicogenesis is performed in young permanent teeth
- ♦ Explain how and when apicoforming is performed on young permanent teeth

Module 7. Dental Trauma. Diagnosis and Therapeutics

- ♦ Recognize the main causes of dental trauma in childhood
- ♦ Understand the critical importance of a correct diagnosis in determining the most appropriate treatment
- ♦ Identify the necessary modifications in the diagnostic procedures for trauma in temporary teeth
- ♦ Explain the diagnosis of the most frequent traumas in young permanent teeth
- ♦ Recognize the differences between trauma to primary teeth and young permanent teeth
- ♦ Acquire criteria to choose the treatment to be performed on a temporary tooth that has suffered dental trauma
- ♦ Reflect on the therapeutic objectives to be established in the different situations of dental trauma that can occur in primary teeth
- ♦ Apply the protocol of periodic controls established according to the type of trauma that the primary tooth has suffered
- ♦ Describe the different after-effects that dental trauma to a permanent tooth can have on the permanent tooth itself or on the permanent successor

Module 8. Oral Pathology in Pediatric Dentistry

- ♦ Define the oral pathology most frequently observed in pediatric patients and its clinical and/or pharmacological management
- ♦ Identify some systemic diseases that condition dental treatment
- ♦ Learn what precautions to take in children with cardiac pathology, asthma or diabetes
- ♦ Recognize the importance of the systemic phase in the clinical history
- ♦ Recognize the importance of previous consultations in the case of underlying systemic disease
- ♦ Know what precautions to take in children with hematological, renal or oncological pathologies
- ♦ Recognize the importance of previous consultations in the case of underlying systemic disease

Module 9. Pain Control Surgical Treatments in Patients

- ♦ Recognize the phases of the painful process and the action that anaesthetic drugs have on it
- ♦ Know the principles necessary to guide the behavior of pediatric patients during local anesthesia
- ♦ Explain dosage in the administration of local anesthesia
- ♦ Describe the proper way to perform local anesthesia techniques in children to obtain effective anesthesia prior to pain-producing dental procedures
- ♦ Explain the basic principles of preoperative surgery in pediatric dentistry

Module 10. Pediatric Orthodontics

- Apply the extraction protocol in pediatric patients, especially in primary teeth
- Describe the surgical treatment of the most common soft tissue disorders in children
- Explain the indications for postoperative surgery in pediatric dentistry
- Define the concept of therapeutic remineralization in incipient caries lesions
- Recognize the main remineralizing agents currently used and reflect on their mechanisms of action
- Explain the indications, contraindications and techniques for the use of different restorative materials
- Acquire the necessary criteria to select the most appropriate material in each case
- Identify the advantages of using absolute isolation when treating a cavitated caries lesion
- Define the most frequent location of caries development in primary and permanent molars
- List the necessary steps (procedure, material and criteria) for the preparation of a temporary molar to be restored with a preformed steel crown
- List the necessary steps (procedure, material and criteria) for the preparation of a temporary tooth to be restored with a preformed aesthetic crown
- List the necessary steps (procedure, material and criteria) for the preparation of a preformed steel crown for the restoration of a permanent molar



Module 11. Pediatric Patients with Special Care Needs. Medically compromised patients

- Describe the most important causes and consequences of the premature loss of primary teeth
- Explain the reasons behind the importance of space maintenance
- Define what a space maintainer is and what types exist
- Acquire criteria to justify the choice of a certain type of space maintainer on an individual basis
- Explain the reasons behind the importance of the early treatment of harmful habits
- Define the main types of harmful oral habits
- Describe the main causes of oral habits and their most important consequences
- Apply the different therapy protocols against oral habits and their justification
- Describe some systemic diseases that impact the oral cavity
- Recognize the importance of the systemic phase in the clinical history
- Recognize the importance of previous consultations in the case of underlying systemic disease
- Define the oral and dental disorders associated with the conditions discussed on this topic
- Know what modifications need to be added to the treatment plan of a patient with a mental or sensory disability
- Recognize the importance of the systemic phase in the clinical history

Module 12. Relevant Topics in Dentistry

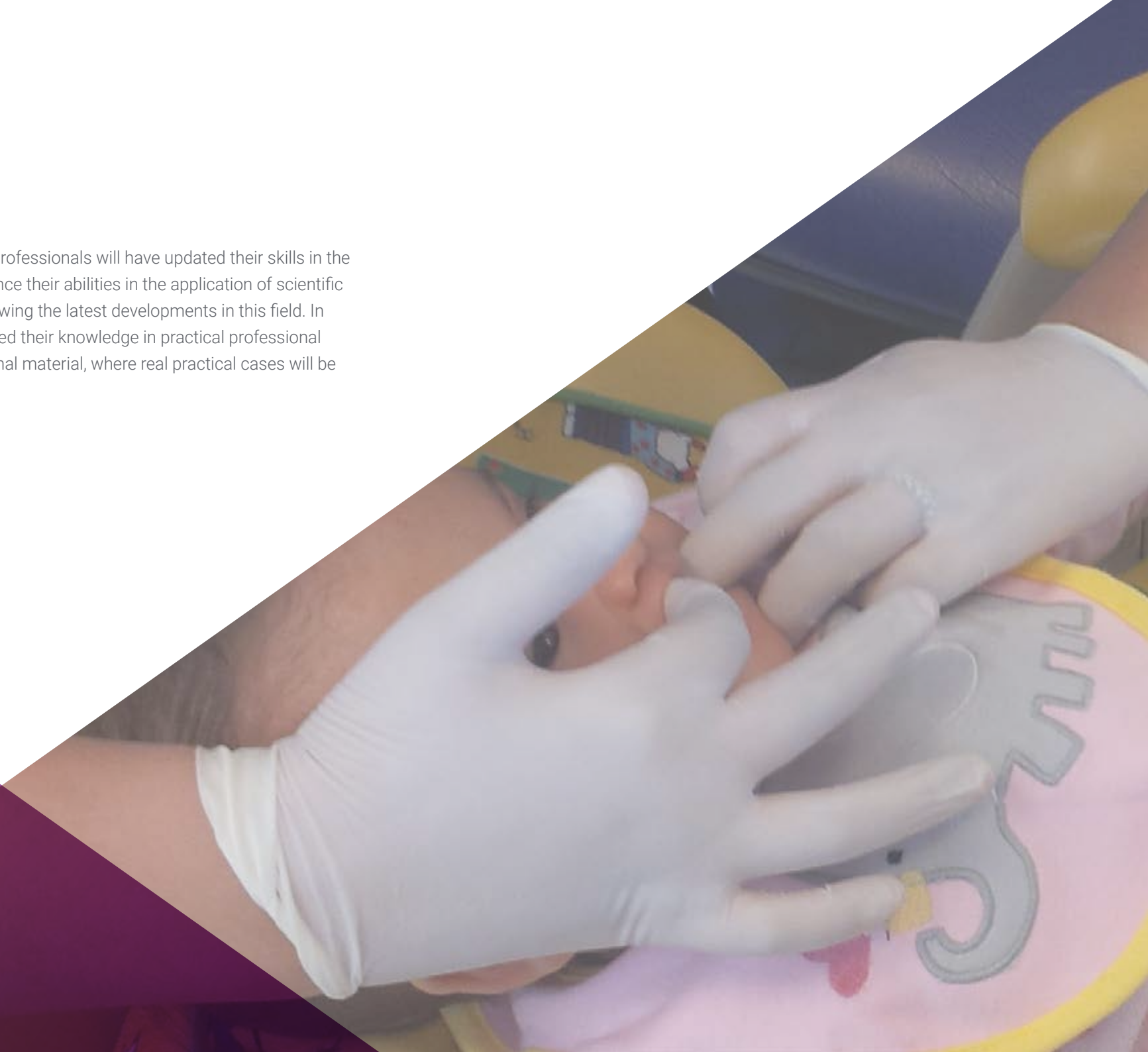
- Encourage dentists to take an interest and join the network of professionals involved in the detection and reporting of child abuse and neglect
- Identify the injuries generated by physical abuse in order to collaborate in the correct diagnosis and detection of child abuse cases
- Describe the physical and behavioral indicators associated with physical abuse and physical neglect
- Explain the role and obligation of the dentist in this social problem, as well as the means of complaint available to him/her
- Recognize the importance of informed consent
- Describe the most frequent medical emergencies that may occur in pediatric patients in the dental clinic and their clinical and/or pharmacological management
- List some systemic diseases that condition dental treatment
- Reflect on the changes that have taken place in the family structure and on its features in the last few decades
- Explain the features of new families



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

03 Skills

By the end of this program, dental professionals will have updated their skills in the pediatric area, where they will advance their abilities in the application of scientific methods and problem solving, following the latest developments in this field. In addition, the dentist will have updated their knowledge in practical professional development. All this with educational material, where real practical cases will be of great use in the regular clinic.



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Renew your skills in the field of Pediatric Dentistry with the recent scientific studies presented in this Master's Degree"



General Skills

- ♦ Integrate the essential elements of the profession, including ethical principles and legal responsibilities
- ♦ Establish the importance of these principles for the benefit of the patient, society and the profession, with special attention to professional secrecy
- ♦ Know how to identify patient concerns and expectations, and comunicacion effectively and clearly, both orally and in writing, with patients, family members, the media and other professionals
- ♦ Understand and recognize the social and psychological aspects relevant to the treatment of patients
- ♦ Know how to apply the principles of anxiety and stress management to oneself, patients and other members of the dental team
- ♦ Explain the importance of developing a professional practice with respect for patient autonomy, beliefs and culture
- ♦ Promote the autonomous learning of new knowledge and techniques, as well as motivation for quality
- ♦ Know how to share information with other healthcare professionals and work as part of a team
- ♦ Explain the importance of maintaining and using patient agile records for further analysis, preserving the confidentiality of the data
- ♦ Understand the basic biomedical sciences on which dentistry is based in order to ensure proper oral and dental care.
- ♦ Describe the normal structure and function of the stomatognathic apparatus, at the molecular, cellular, tissue and organic levels, in the different stages of life
- ♦ Describe the general processes of the disease, including infection, inflammation, immune system alterations, degeneration, neoplasia, metabolic alterations and genetic disorders
- ♦ Understand and recognize the principles of ergonomics and occupational safety (including cross-infection control, radiation protection and occupational and biological diseases)
- ♦ Know, critically evaluate and know how to use clinical and biomedical information sources to obtain, organize, interpret and communicate scientific and health information
- ♦ Define and apply the scientific method and have the critical capacity to evaluate established knowledge and new information Be able to formulate hypotheses, collect and critically evaluate information for problem solving, following the scientific method



Specific Skills

- ♦ Describe the implications of behavioral guidance in all preventive or therapeutic clinical procedures and incorporate the expectations of patients' parents about clinical safety
- ♦ Perform preoperative assessment of patient behavior and patient classification to establish an approach strategy
- ♦ Identify the implications of psychology as a preparatory work for any procedure in the pediatric patient and their parents
- ♦ Adequately handle the different materials available for the treatment of the various oral pathologies, as well as the main drugs used in pediatric dentistry.
- ♦ Value research as the only way to progress in Dentistry and Pediatric Dentistry
- ♦ Point out the specific implications of advances in the knowledge of MIH and dental erosion lesions
- ♦ Point out the implications of specific advances in the preventive approach and management for the maintenance of oral health in children regardless of their age and health status or level of disability
- ♦ Associate new developments in infant dentistry with the specific care of this age group in the dental clinic
- ♦ Describe the most important considerations in the approach to a patient who is suspected in a substantiated manner to be a victim of child maltreatment
- ♦ Point out the main characteristics of the pathologies affecting infants, children and adolescents
- ♦ Identify the main characteristics of advances in the management of incipient caries lesions
- ♦ Describe the main diagnostic and therapeutic procedures in pediatric dentistry and incorporate the advances that have been established in recent years.
- ♦ Incorporate the latest advances in anesthesia in preparation for therapeutic procedures that require it
- ♦ Incorporate the latest advances in bioactive materials to dental therapeutics in children
- ♦ Identify the main characteristics of advances in pulp therapy in young primary and permanent teeth
- ♦ Describe the main characteristics of space management and interception of detrimental habits and their implications in achieving correct dental alignment and occlusion
- ♦ Incorporate the techniques for approaching patients with ASD in the dental clinic to make it a friendly and non-threatening space
- ♦ Describe advances in the most commonly used advanced behavioral guidance techniques in precooperative or noncooperative patients
- ♦ Incorporate the latest advances in motivational interviewing and the CAMBRA method into daily clinical practice

04

Course Management

In order to offer an elite and quality education for all, all TECH programs have a highly qualified and experienced management and teaching staff in the area they teach. In this Master's Degree, this academic institution has carefully selected the extensive teaching team that integrates this online program. With this, it maintains its commitment to offer students a high-level educational program in accordance with the current needs of dental professionals. In addition, the quality and human proximity of the faculty will allow you to resolve any questions that may arise during the development of the program.



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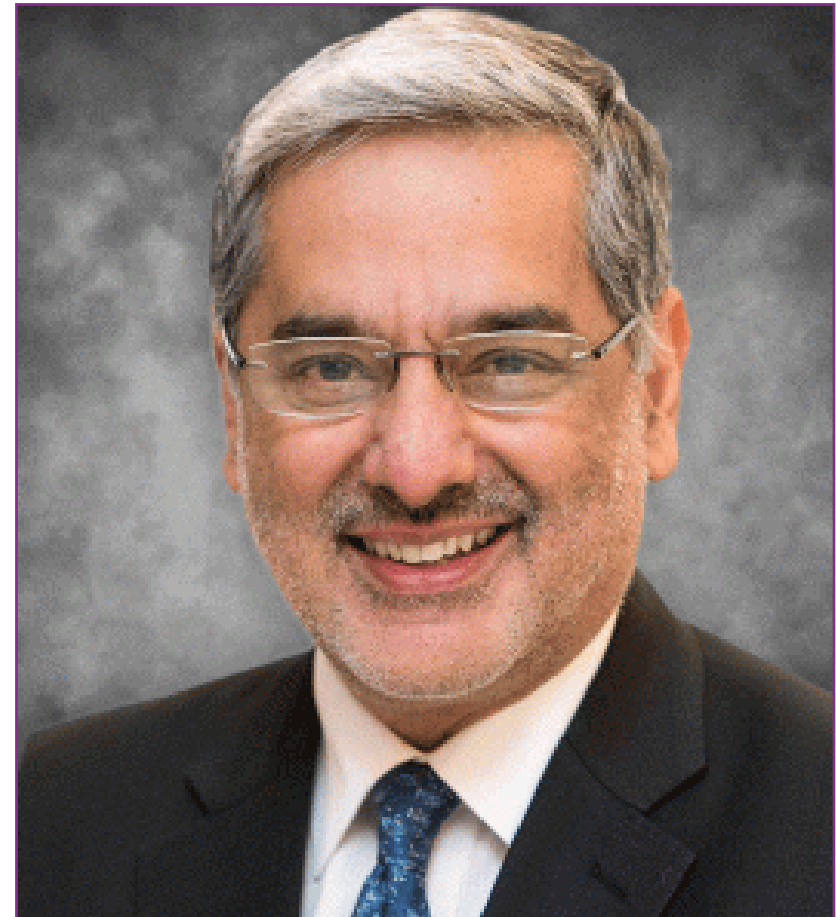
Update your knowledge through the Master's Degree with a teaching team with extensive professional experience"

International Guest Director

Professor Raman Bedi is the Chairman of the Global Child Dental Fund and was previously Chief Dental Officer in England, i.e. the most senior advisor on dentistry in each of the four UK governments and head of the dental profession.

Since 2012 Raman has been the founding chair of the oral health working group of the World Federation of Public Health Associations, which raises the importance of oral health issues affecting global public health. He is a practicing specialist, focusing exclusively on the comprehensive oral rehabilitation of young children. He was a consultant to the NHS in pediatric dentistry from 1991 to 2005 and is on the General Dental Council's list of specialists in pediatric dentistry and dental public health. He is a consultant to WHO on curriculum development in the field of patient safety and dentistry, and was co-chair of the World Expert Committee on the management and prevention of dental caries. Recently, he was asked by WHO to review dental services in Oman.

Raman served as head of dental public health at the Eastman Dental Institute at University College London and director of the National Centre for Transcultural Oral Health. He was also co-director of the World Health Organization Collaborating Centre at the Eastman Dental Institute. He is currently professor emeritus at King's College London. He is one of the few researchers to have been awarded a Doctor of Science degree by the University of Bristol (2003) for his contribution to dental research and a Doctor of Humane Letters degree (2010) by AT Still University (Arizona) for his scholarly contribution to the social sciences.



Dr. Bedi, Raman

- Professor Emeritus of King's College London.
- Formerly Director of Dentistry England.
- Extraordinary Professor of Pediatric Dentistry at the University of the Western Cape, South Africa
- Adjunct Professor at the University of Pennsylvania
- Doctor of Dental Surgery, University of Bristol
- Doctor of Humane Letters from AT Still, U.S.A.
- Doctor of Science, University of Bristol
- Honorary Fellow of Dental Surgery of the Royal College of Physicians and Surgeons of Glasgow
- Honorary Fellow of the Faculty of Public Health, UK.

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Thanks to TECH, you will be able to learn with the best professionals in the world”

Professors

Dr. Del Campo Rodríguez, Angel

- ♦ Specialist in Pediatric Dentistry and Preventive and Interceptive Orthodontics.
- ♦ Ad Honorem collaborating professor in the Master of Aesthetic, Adhesive and Minimally Invasive Dentistry at the Lluís Alcanyis Foundation Dental Clinic, University of Valencia.
- ♦ Member of the American Academy of Pediatric Dentistry
- ♦ Member of the Spanish Society of Pediatric Dentistry
- ♦ PhD in Dentistry from the University of Valencia
- ♦ Degree in Dentistry from the Intercontinental University of Mexico City.
- ♦ Postgraduate degree in Pediatric Dentistry from New York University College of Dentistry
- ♦ Master in Gestalt Therapy and Diploma in Child and Adolescent Gestalt Therapy from the Gestalt Therapy Institute of Valencia

Dr. González Aranda, Cristina

- ♦ Exclusive private practice in pediatric dentistry in Madrid (Spain)
- ♦ Degree in Dentistry. Complutense University of Madrid
- ♦ PhD in Dentistry Complutense University of Madrid
- ♦ Master's Degree in Pediatric Dentistry. Complutense University of Madrid
- ♦ Master's Degree in Dental Sciences. Complutense University of Madrid
- ♦ Collaborating Professor of the Master's Degree in Pediatric Dentistry. Faculty of Dentistry, Complutense University of Madrid
- ♦ Associate Professor in Pediatric Dentistry. Faculty of Dentistry at the Complutense University of Madrid
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Dr. Figueroa García, Angela

- ♦ Degree in Dentistry, Los Andes University, Merida, Venezuela
- ♦ Master in Periodontics, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ♦ Doctor in Dentistry, Faculty of Medicine and Dentistry, University of Valencia, Spain
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Dr. Barreda Ramos, Isai

- ♦ Dental Surgeon, Popular Autonomous University of the State of Puebla (UAEP)
- ♦ Specialty in Orthodontics, UNITEC 2000-2002
- ♦ Research Award 2003 by the Mexican Association of Orthodontics (AMO)

Dr. Palma Carrió, Cristina

- ♦ Master's Degree in Oral Surgery and Implantology University of Valencia
- ♦ Doctor at the University of Valladolid
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- ♦ Master's Degree in Oral Surgery and Implantology University of Valencia
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Dr. Cruz Pamplona, Marta

- ♦ Private clinical practice of general dentistry
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- ♦ Master's Degree in Medicine and Oral Surgery Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Diploma in Oral Medicine, General University Hospital Consortium in Valencia. Spain
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- ♦ Professor of the degree in Dentistry (regular degree and international degree) at the European University of Valencia, Valencia, Spain
- ♦ Professor of Adult and Child Clinical Practice" at the European University of Valencia, Valencia, Spain
- ♦ Author of several research papers, publications and oral communications.
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Dr. Ureña Cirret, Jose Luis

- ♦ Master of Science. (M.S.) Pediatric Dentistry. University of Michigan, Ann Harbor, Mi. USA
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- ♦ Degree in Dentistry. University of Granada
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- ♦ Member of the Spanish Association of Endodontics (AEDE)
- ♦ Member of the Spanish Society of Conservative and Esthetic Dentistry (SEOC)
- ♦ Spanish Society of Periodontics and Osseointegration (SEPA)
- ♦ Speaker and lecturer of courses at national and international level
- ♦ Author of several article papers, posters and communications
- ♦ Private Clinical Practice

Ms. Cargill Foster, Nelly Ruth

- ♦ Specialist in Dentistry

Dr. Enciso Ripoll, Manuel Jesús

- ♦ Degree in Dentistry, Faculty of Medicine and Dentistry, University of Valencia, Valencia, Spain
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- ♦ Frequent lecturer of courses on Restorative and Aesthetic Dentistry, Pediatric Dentistry and Dental Materials at national and international level
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- ◆ Diploma in Periodontics. Faculty of Medicine and Dentistry, University of Valencia, Spain.
- ◆ Former Associate Professor Master's Degree in Dentistry in Special Patients. University of Valencia. Valencia, Spain
- ◆ Full professor of Special Patients. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU University, Moncada, Valencia, Spain
- ◆ Associate Professor of Periodontics. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU University, Moncada, Valencia, Spain
- ◆ Collaborating professor in Master's Degree in Oral Surgery and Implantology Faculty of Experimental

Dr. Segarra Ortells, Cristina

- ◆ Specialist in Dentistry
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- ◆ Member of the Spanish Society of Odontostomatology for patients with special needs (SEOENE)
- ◆ Member of the Spanish Society of Periodontology and Osseointegration (SEPA)
- ◆ Private practice with exclusive dedication in Oral Surgery, Periodontics, Implants and Special Patients.

Dr. Gianni, Manfredi

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- ♦ Certificate of conscious sedation and basic instrumental cardiopulmonary resuscitation San Vicente Mártir Catholic University Spain
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- ♦ Associate Professor of Orthodontics at undergraduate and postgraduate levels European University of Valencia
- ♦ Professor of Pediatric Dentistry at Postgraduate level San Vicente Mártir Catholic University Spain
- ♦ Oral communication at the 36th, 38th, 39th Annual Meeting of the Spanish Society of Pediatric Dentistry (SEOP)
- ♦ Exclusive private practice in Pediatric Dentistry and Orthodontics

Ms. Limonchi Palacio, Landy Vianey

- ♦ Specialist in Dentistry

Dr. Leyda Menéndez, Ana

- ♦ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Postgraduate Course in "Dentistry in special patients: Physically and mentally disabled patients and medically compromised patients". Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Postgraduate Course in Pediatric Dentistry. Faculty of Health Sciences. Scientific University of the South. Lima Peru
- ♦ Postgraduate Course in Pediatric Dentistry. Cayetano Heredia Peruvian University Lima Peru
- ♦ Doctor in Dentistry, Faculty of Medicine and Dentistry, University of Valencia Spain
- ♦ Associate Professor of the Master's Degree in Comprehensive Pediatric Dentistry. Faculty of Dentistry, CEU - Cardenal Herrera University. Alfara del Patriarca. Valencia Spain
- ♦ Contract pediatric dentist, Clinic of Dentistry, Faculty of Dentistry of the CEU - Cardenal Herrera University. Alfara del Patriarca. Valencia Spain
- ♦ National and International Lecturer
- ♦ Exclusive Practice in Pediatric Dentistry

Dr. Haya Fernández, Maria Celia

- ♦ Private practice in general dentistry
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- ♦ PhD in Dentistry Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Master's Degree in Oral Medicine. General University Hospital University of Valencia. Spain
- ♦ Master's Degree in Health Education for Patients and Dependent People. Faculty of Medicine and Dentistry, University of Valencia. Spain

- ♦ Course on Pedagogical Adaptation. University of Valencia. Spain
- ♦ Professor of Gerodontology and Oral Medicine. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ♦ Member of the Spanish Society of Oral Medicine, the Spanish Society of Gerodontology and the Center for Dental Studies of Valencia
- ♦ Private practice in general dentistry

Dr. Lozano Pajares, Melanie

- ♦ Degree in Dentistry. Central University of Venezuela. Caracas, Venezuela
- ♦ Degree in Dentistry. Degree from the European University of Valencia
- ♦ Degree in Dentistry. European University of Valencia. Valencia, Spain
- ♦ Diploma in Pediatric Dentistry. Advanced training in Minimally Interventionist Multidisciplinary Dentistry. Barcelona, Spain
- ♦ Course on Conscious sedation in Dentistry. YaCare institute. Valencia, Spain
- ♦ Certification from Invisalign, Invisalign Essentials course in Madrid, Spain
- ♦ Member of the Spanish Society of Pediatric Dentistry
- ♦ Communications and presentations in different courses and congresses at national level.
- ♦ Exclusive private practice in Pediatric Dentistry with specialized attention in special patients with the use of Nitrous Oxide Sedation or anxiolysis

Dr. López Zamora, Maria Isabel

- ♦ Exclusive private practice of Pediatric Dentistry
- ♦ Degree in Dentistry. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ♦ Master's Degree in Comprehensive Pediatric Dentistry. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain

- ♦ Master's Degree in Pediatric Dentistry at the CEU Cardenal Herrera University. Moncada, Valencia, Spain
- ♦ Course on Conscious sedation and Advanced life support for dentistry. InsvaCare training center. Paterna, Valencia
- ♦ Course on aesthetic pediatric crowns taught by NuSmile
- ♦ Oral communications at congresses of the Spanish Society of Pediatric Dentistry (SEOP)
- ♦ Exclusive private practice of Pediatric Dentistry

Dr. Manzano, Alberto

- ♦ Degree in Dentistry Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Degree in Dentistry Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Master's Degree in Dental Pathology and Therapeutics. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ University Diploma in Implantology and Oral Rehabilitation. Paris XII University. Faculty of Medicine. Paris France
- ♦ Doctor in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Executive Program in Management and Marketing for Dental Clinics. E-Universitas
- ♦ Professor in charge of the Endodontics course for the international group at the European University of Valencia
- ♦ Director of the postgraduate course in Management and Direction of Dental Clinics of Plan Synergia
- ♦ Lecturer of courses on Management and Marketing for dental clinics nationwide

Dr. Mut Ronda, Salvador

- ♦ Active pharmacist in a Pharmacy
- ♦ Degree in Pharmacy from the University of Valencia
- ♦ PhD in Pharmacy from the University of Valencia
- ♦ Expert course in Biomedical English at the European University of Valencia
- ♦ Associate Professor of General Pharmacology, Anesthesia, Resuscitation; Human Nutrition and General Pathology I and II (Spanish and English degree) at the Faculty of Health Sciences, Department of Dentistry of the European University of Valencia
- ♦ Author of several publications
- ♦ Director of Undergraduate Final Projects
- ♦ Participation in various specialized training programs in pharmacology.
- ♦ Active pharmacist in a Pharmacy

Dr. Negre Barber, Adela

- ♦ Private practice in general dentistry
- ♦ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ PhD in Dentistry Outstanding Cum Laude. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Master's Degree in Dental Sciences. Faculty of Medicine and Dentistry, University of Valencia. Valencia, Spain
- ♦ Master's Degree in Individual and Community Clinical Dentistry. Faculty of Medicine and Dentistry, University of Valencia. University-Company foundation (ADEIT). Valencia, Spain
- ♦ Author of several scientific articles in impact journals
- ♦ Communications in several Conferences (SESPO, SEOP)
- ♦ Best Novel Communication Award SEOP 2015
- ♦ Private practice in General Dentistry





Dr. Pérez Chicote, Víctor

- ◆ Degree in Dentistry 95 -00 at the University of Valencia
- ◆ Cum Laude Doctor in Dentistry from the University of Valencia
- ◆ Master's Degree in Dentistry in Special Patients. University of Valencia
- ◆ Master's Degree in Oral Implantology and Rehabilitation E.S.O.R.I.B
- ◆ University Diploma in Implantology and Maxillofacial Surgery. Fac. de Créteil, París
- ◆ Master's Degree in Dental Sciences University of Valencia
- ◆ Postgraduate course in Oral Surgery and Implantology at Univ. of Santa Clara, Cuba
- ◆ Postgraduate course in Advanced Surgery and Zygomatic Implants in Maringá -Brazil
- ◆ Member of SEI
- ◆ Experience: private practice in Valencia since 2000 and teaching training courses in oral surgery and Implantology in a private clinic

Dr. Saavedra Marbán, Gloria

- ◆ Specialist in Dental Care for children at high biological risk
- ◆ Degree in Dentistry. Complutense University of Madrid, Spain
- ◆ Master's Degree in Pediatric Dentistry. Complutense University of Madrid, Spain
- ◆ Specialist in Dental Care for children at high biological risk. Complutense University of Madrid. Spain
- ◆ PhD in Dentistry Complutense University of Madrid, Spain
- ◆ Professor at the Master's Degree in Pediatric Dentistry. Complutense University of Madrid, Spain
- ◆ Associate Professor of the Department of Stomatology IV of the Faculty of Dentistry, Complutense University of Madrid, Spain
- ◆ Member of the Pediatric Dentistry Scientific Commission of the Illustrious College of Dentists and Stomatologists of the I Region
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Dr. Sastriques Mateu, Cristina

- ♦ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Master's Degree in Endodontics Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ♦ Postgraduate course in Implantology and Basic Oral Surgery, Coppel Doctors. Rubber Clinic. Madrid, Spain
- ♦ Expert Degree in Endodontics and Restorative Dentistry. Dr. Hipólito Fabra Clinic Valencia, Spain
- ♦ Conscious Sedation Course. Dentist Council of Barcelona Spain
- ♦ Professor of Pediatric Dentistry. European University of Valencia
- ♦ Member of the Spanish Association of Endodontics (AEDE)
- ♦ Author of Communications and Posters in several Conferences
- ♦ Private Practice in Endodontics and Pediatric Dentistry

Dr. Savall Orts, Maria

- ♦ Degree in Dentistry, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ♦ Master's Degree in Oral Medicine and Surgery, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ♦ Master in Aesthetic, Adhesive and Minimally Invasive Dentistry, University of Valencia, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ♦ Postgraduate course in Occlusion, Temporomandibular Dysfunction and Orofacial Pain by the Catalan Society of Odontology and Stomatology (SCOE)
- ♦ Ad Honorem Adhesive and Minimally Invasive Aesthetic Dentistry Master, Dental Clinic Lluís Alcanyis Foundation, University of Valencia, Valencia, Spain
- ♦ Private practice in General Dentistry specializing in Oral Medicine and Aesthetic Dentistry.



Dr. Serrano Martínez, Concepción

- ♦ Degree in Medicine and General Surgery, University of Murcia, Spain
- ♦ Specialist in Stomatology, University of Murcia, Spain
- ♦ Postgraduate degree in Dentistry for the special and medically compromised patient, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ♦ Doctor of Medicine and General Surgery, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ♦ National referral specialist, DEBRA Spain Association, for dental care in patients with epidermolysis bullosa.
- ♦ Private practice in general dentistry
- ♦ Former Director of the Faculty of Dentistry. Faculty of Dentistry, Intercontinental University (UIC), Mexico City, Mexico
- ♦ Representative of the Mexican Dental Association (ADM) in the program for the accreditation of dental degree programs

Dr. Melo Almiñana, Maria Pilar

- ♦ Private practice in Comprehensive dentistry
- ♦ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ PhD in Dentistry Outstanding Cum Laude. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ♦ Master's Degree in Aesthetic Dentistry Faculty of Medicine and Dentistry, University of Valencia. University-Company foundation (ADEIT). Valencia, Spain
- ♦ Master's Degree in Forensic sciences. Faculty of Medicine and Dentistry, University of Valencia. University-Company foundation (ADEIT). Valencia, Spain

- ♦ Biomaterials teacher, Spanish and English degree. European University of Valencia. Valencia, Spain
- ♦ Associate Professor of Dental Pathology and Therapeutics. Faculty of Medicine and Dentistry, University of Valencia. Valencia, Spain
- ♦ Publication of several scientific articles in JCR journals
- ♦ Private practice in general dentistry

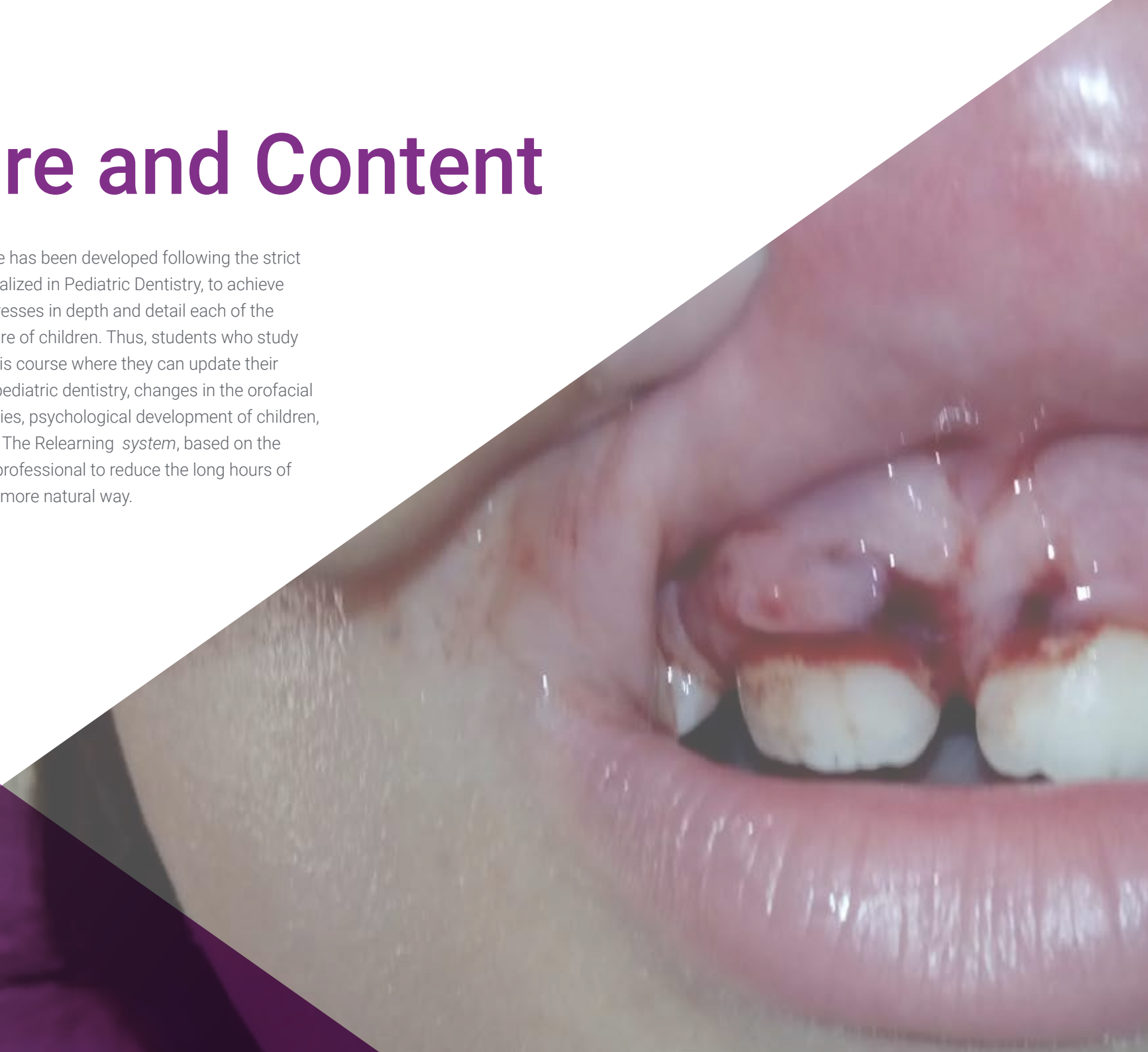
Dr. Ramírez Mendoza, Jeannette

- ♦ Dentist surgeon. Juárez Autonomous University of Tabasco, Villahermosa, Tabasco, Mexico
- ♦ Specialist in Pediatric Dentistry. Juárez Autonomous University of Tabasco. Villahermosa, Tabasco, México
- ♦ Specialist in Dentistry. Mexican Dentistry Association for Teaching and Research
- ♦ Diploma in Dentofacial Orthopedics, AOMEI. Mexico City, Mexico
- ♦ Master's Degree in Medical Education. Higher Institute in Medical Sciences of La Habana, Habana, Cuba
- ♦ Doctor in Education. Iberoamericana University Foundation
- ♦ Diploma in Emotional Intelligence. Center for Human Development
- ♦ Juárez Autonomous University of Tabasco (CSUM-UJAT), Villahermosa, Tabasco, Mexico
- ♦ Research Professor of the Postgraduate Course in Orthodontics and Pediatric Dentistry. Juárez Autonomous University of Tabasco. Villahermosa, Tabasco, México
- ♦ Certification and Recertification. National Council of Children's Dentistry and National Council of Orthodontics of Mexico
- ♦ Exclusive consultation for Babies, Children and Adolescents

05

Structure and Content

The syllabus of this Master's Degree has been developed following the strict guidelines of a teaching team specialized in Pediatric Dentistry, to achieve a comprehensive syllabus that addresses in depth and detail each of the most relevant aspects in the oral care of children. Thus, students who study this program have 12 modules in this course where they can update their knowledge in the fundamentals of pediatric dentistry, changes in the orofacial structures and associated pathologies, psychological development of children, orthodontics or control of the child. The *Relearning system*, based on the repetition of content, will allow the professional to reduce the long hours of study and progress in teaching in a more natural way.



“

Renew your knowledge in pediatric dental practice through this program, where you will find the best educational material with real case studies”

Module 1. Pediatric Dentistry: Basics

- 1.1. Introduction to Pediatric Dentistry
 - 1.1.1. What Is Pediatric Dentistry and What Is the Role of the Pediatric Dentist in Current Dentistry?
 - 1.1.2. Vision and Objectives of the Pediatric Dentist
 - 1.1.3. Historical Evolution of Pediatric Dentistry
 - 1.1.4. Comprehensive Care of the Pediatric Patient
 - 1.1.5. Differences between Pediatric Dentistry and Other Dental Specialties. Differences between Pediatric and Adult Patients.
 - 1.1.6. Characteristics of an "Ideal" Pediatric Dentist and the Future Challenges of Pediatric Dental Care
- 1.2. Clinical Examination in Pediatric Dentistry
 - 1.2.1. First Visit in Pediatric Dentistry: Objectives, Requirements and Tools
 - 1.2.2. Medical History: Objective, Fundamentals and Structure
 - 1.2.3. Clinical Examination: Objective, Characteristics and Structure
 - 1.2.4. Extraoral Clinical Examination
 - 1.2.5. Intraoral Clinical Examination
 - 1.2.6. Oral Hygiene Evaluation
 - 1.2.7. Diet Evaluation
- 1.3. Radiological Examination and Complementary Tests
 - 1.3.1. Radiological Tests
 - 1.3.1.1. Advantages Types
 - 1.3.1.2. Extraoral X-Rays: Lateral Skull Orthopantomography, Wrist X-ray: Objectives
 - 1.3.1.3. Advantages Indicated Time of Execution and Disadvantages
 - 1.3.1.4. Intraoral X-Rays. Bitewing, Periapical and Occlusal X-Rays: Objectives, Indications, Advantages, Disadvantages and Materials Criteria: Age and Risk of Caries
 - 1.3.2. Complementary Tests
 - 1.3.2.1. Laboratory Tests: Usefulness
 - 1.3.2.2. Study Models: Indications
 - 1.3.2.3. Clinical Images: Advantages



- 1.4. Diagnosis and Treatment Plan
 - 1.4.1. The Diagnostic Process. Concept
 - 1.4.2. Information: Need and Requirement
 - 1.4.3. Provisional Diagnosis, Differential Diagnosis and Definitive Diagnosis
 - 1.4.4. Therapeutic Process: Objectives
 - 1.4.5. Adequate Treatment: Rationale, Requirements, Objectives and Phases
 - 1.4.5.1. Immediate Phase (Urgent Measures)
 - 1.4.5.2. Systemic Phase (Medical Alerts)
 - 1.4.5.3. Preparatory Phase (Preventive Measures)
 - 1.4.5.4. Corrective Phase (Operative Dentistry)
 - 1.4.5.5. Maintenance Phase
 - 1.4.5.6. Schedule or Appointment-Based Planning: Importance
- 1.5. Chronology and Morphology of Primary and Permanent Dentition, Eruption and Dental Occlusion
 - 1.5.1. Chronology of Human Dentition. Importance
 - 1.5.2. Nolla's Phases of Dental Development
 - 1.5.3. Morphology of Temporary Dentition. Importance Features
 - 1.5.4. Differences Between Temporary Teeth (TT) and Permanent (PT) Teeth
 - 1.5.5. General Characteristics of the Temporal Incisor Group
 - 1.5.6. Clinical Repercussions of the Differences Between TT and PT
 - 1.5.7. General Characteristics of the Temporal Canine Group
 - 1.5.8. General Characteristics of the Temporal Molar Group
- 1.6. Nomenclature and Dental Identification Systems
 - 1.6.1. Introduction
 - 1.6.2. Guide for the Identification of Teeth. Shape and Color, Presence of Mamelons, Eruption Status, Chronological Age and History of Premature Extractions
 - 1.6.3. Primary and Permanent Dentition Nomenclature
 - 1.6.4. Dental Identification Systems
 - 1.6.4.1. International System or FDI
 - 1.6.4.2. Universal or American System
 - 1.6.4.3. Zsigmondy or Palmer System
 - 1.6.4.4. Haderup or German System

Module 2. Growth and Development: Changes in Orofacial Structures and Associated Pathologies

- 2.1. Growth and Development
 - 2.1.1. Introduction
 - 2.1.2. Definitions and Fundamentals of Growth and Development
 - 2.1.2.1. Prenatal Growth
 - 2.1.2.2. Postnatal Growth
 - 2.1.2.3. Factors That Impact Growth and Development
 - 2.1.2.4. Theories of Growth and Development
 - 2.1.2.5. Basic Concepts of General and Craniofacial Growth
 - 2.1.2.6. Development of the Maxilla
 - 2.1.2.7. Jaw Development
 - 2.1.2.8. Growth and Development of the Dental Arches. Primary Dentition Stages, Mixed Dentition Stages, Anterior Replacement, Lateral Replacement. Dimensional Changes of the Arches
 - 2.1.2.9. Differential Human Growth. Krogman's Childhood Ages, Growth Markers, Growth Acceleration (Spikes) and Growth Assessment Methods and Their Importance in Pediatric Dentistry
- 2.2. Dentition Development, Eruption, Exfoliation and Occlusion of Teeth
 - 2.2.1. Introduction. Dental Development. Odontogenesis
 - 2.2.2. Stages of Dental Development
 - 2.2.2.1. Stages of Morphological Development
 - 2.2.2.2. Stages of Histophysiological Development
 - 2.2.3. Dental Eruption and Exfoliation
 - 2.2.3.1. Concepts and Theories of Eruption
 - 2.2.3.2. Stages of Eruption: Pre-Eruptive/Pre-Functional and Post-Eruptive/Functional Eruption
 - 2.2.3.3. Dental Exfoliation
 - 2.2.4. Clinical Problems During Dental Eruption
 - 2.2.4.1. Eruption of the First Teeth, "Teething", and Their Management
 - 2.2.4.2. Natal and Neonatal Teeth
 - 2.2.4.3. Other Oral Lesions Connected to Eruption
 - 2.2.4.3.1. Factors Affecting Dentition Development. Local and Systemic Factors

- 2.2.5. Occlusion Development
 - 2.2.5.1. Characteristics and Different Stages
 - 2.2.5.2. Gingival Flange
 - 2.2.5.3. Occlusion in Primary Dentition
 - 2.2.5.4. Occlusion in Mixed Dentition
 - 2.2.5.5. Occlusion in Permanent Dentition
- 2.3. Tooth Development Abnormalities
 - 2.3.1. Shape and Number Abnormalities
 - 2.3.1.1 Introduction
 - 2.3.1.2. Tooth Number Abnormalities: Concept
 - 2.3.1.3. Dental Agenesis: Etiology and Manifestations
 - 2.3.1.4. Clinics, Diagnosis and Therapeutic Options
 - 2.3.1.5. Supernumerary Teeth: Etiology and Manifestations
 - 2.3.1.6. Clinics, Diagnosis and Therapeutic Options
 - 2.3.1.7. Local Morphological Alterations: Regional Odontodysplasia, Macrodonia and Microdonia, Gemmation, Fusion, Cusps and Accessory Tubercles, Dens in Dente and Taurodonism
 - 2.3.2. Enamel Structure Disorders
 - 2.3.2.1. Enamel. Nature
 - 2.3.2.2. Histology of Healthy Enamel
 - 2.3.2.3. Amelogenesis
 - 2.3.3. Enamel Disorders as a Syndromic Feature
 - 2.3.4. Genetic Dysplasias: Amelogenesis Imperfecta. Generalities and Types
 - 2.3.4.1. AI Type I Hypoplastic
 - 2.3.4.2. AI Type II Hypomaturative
 - 2.3.4.3. AI Type III Hypocalcified
 - 2.3.4.4. AI Type IV Hypomaturative-Hypoplastic With Taurodonism
 - 2.3.5. Environmental Dysplasias
 - 2.3.5.1. Hypoplasia Due to Fluoride Ingestion
 - 2.3.5.2. Hypoplasia Due to Nutritional Deficits
 - 2.3.5.3. Hypoplasias Due to Exanthematous Diseases
 - 2.3.5.4. Hypoplasias Due to Prenatal Infections
 - 2.3.5.5. Hypoplasias Due to Neuropathies
 - 2.3.5.6. Hypoplasias Due to Inborn Errors of Metabolism
- 2.3.6. Hypoplasias Due to Local Factors: Apical Infection, Trauma, Surgery, Irradiation
- 2.3.7. Treating Hypoplastic Teeth
- 2.4. Incisor-Molar Hypomineralization (IMH). Etiology and Diagnosis
 - 2.4.1. The Concept of Incisor-Molar Hypomineralization
 - 2.4.2. Histological Features of Hypomineralized Enamel
 - 2.4.3. The Tissues Under Hypomineralized Enamel: Dentin-Pulp Complex
 - 2.4.4. Etiological Factors
 - 2.4.4.1. Genetic and Ethnic Factors
 - 2.4.5. Environmental Factors
 - 2.4.5.1. Hypoxia
 - 2.4.5.2. Hypocalcemia
 - 2.4.5.3. Hypokalemia
 - 2.4.5.4. High Fever
 - 2.4.5.5. Drugs:
 - 2.4.5.6. Environmental Toxicity
 - 2.4.5.7. Breastfeeding
 - 2.4.5.8. Fluoride
 - 2.4.5.9. Others
 - 2.4.6. Influence of the Period of Action of the Causative Agent on the Development of Incisor-Molar Hypomineralization
 - 2.4.7. Clinical Manifestations
 - 2.4.7.1. Pattern of Affectation
 - 2.4.7.2. Diagnostic Criteria
 - 2.4.7.3. Associated Clinical Problems
 - 2.4.8. Differential Diagnosis
 - 2.4.9. Severity Criteria
 - 2.4.10. Epidemiological Analysis
- 2.5. Incisor-Molar Hypomineralization (IMH). Prevention and Treatment.
 - 2.5.1. Prevention
 - 2.5.1.1. Dietary and Oral Hygiene Recommendations
 - 2.5.1.2. Early Diagnosis
 - 2.5.1.3. Remineralization and Desensitization
 - 2.5.1.4. Pit and Fissure Sealants



- 2.5.2. Restorative Treatment
 - 2.5.2.1. Treatment of Enamel Opacities in Incisors
 - 2.5.2.2. Restorative and Prosthetic Treatment of Molar Teeth
 - 2.5.2.3. General Aspects of Cavity Preparation
 - 2.5.2.4. Molar Restoration
 - 2.5.2.5. Difficulties Treating Teeth With IMH
 - 2.5.2.6. Causes and Consequences of Bonding Difficulties in Enamel and Dentin
- 2.5.3. Exodontics
- 2.5.4. Affected Behavior in Patients with Previous Experience of Pain
- 2.6. Dentin Structure Abnormalities
 - 2.6.1. Introduction
 - 2.6.2. Dentin Alterations as a Syndromic Element: Familial Hypophosphatemic Rickets, Pseudohypoparathyroidism, Other Syndromes
 - 2.6.3. Genetic Dysplasias
 - 2.6.3.1. Dentinogenesis Imperfecta: Classification: Shields Type I, II and III.
 - 2.6.3.2. Dentin Dysplasia: Classification: Shields Type I, II and III
 - 2.6.4. Treating Hypoplastic Teeth
- 2.7. Eruption Abnormalities
 - 2.7.1. Introduction
 - 2.7.2. Natal and Neonatal Teeth
 - 2.7.3. Development Cysts
 - 2.7.4. Early Eruption. Late Eruption
 - 2.7.5. Premature Loss of Primary Teeth
 - 2.7.6. Ectopic Eruption
 - 2.7.7. Dental Ankylosis
 - 2.7.8. Failure of Permanent Teeth to Erupt
- 2.8. Dental Erosion in Children
 - 2.8.1. Concept
 - 2.8.2. Epidemiology of Dental Erosion
 - 2.8.3. Pathogenesis of Dental Erosion
 - 2.8.4. Etiological Factors

2.8.4.1. Biological Factors: Saliva and the Anatomy of the Hard and Soft Tissues of the Mouth

2.8.4.2. Chemical Factors: Nature, Acidity, pH and Buffery Capacity, Adhesion and Mineral Content of Food

2.8.4.3. Behavioral Factors: Daytime and Night-Time Food and Beverage Consumption, Vomiting, Regurgitation, and Intake of Medications and Oral Hygiene

2.8.4.4. General Health Status of the Child

2.8.4.5. Habits

2.8.4.6. Education and Socioeconomic Level

2.8.4.7. Knowledge on the Etiology of the Disease

2.8.5. Clinical Manifestations

2.8.6. Diagnosis of Dental Erosion

2.8.7. Differential Diagnosis of Dental Erosion

Module 3. Psychology, Behavior and Behavioral Guidance

3.1. Pediatric Psychological Development. Applied Pediatric Psychobiology

3.1.1. Applied Pediatric Psychobiology: Children's Characteristics

3.1.2. Theories of Childhood Development and Factors that Govern Children's Behaviour

3.1.3. Characteristics of Children Under 3 Years Old

3.1.4. Characteristics of Children Between 3 and 5 Years Old

3.1.5. Characteristics of Children Between 6 and 12 Years Old

3.1.6. Characteristics of Preadolescents and Adolescents

3.1.7. The "Dos" and "Dont's" of Pediatric Dentistry

3.2. Factors that Determine Childhood Behaviour in the Dental Clinic

3.2.1. Patient Age

3.2.2. Degree of Maturity

3.2.3. Temperament: Anxiety, Fear and Anger

3.2.4. Previous Medical or Dental Life Experiences

3.2.5. The Pediatric Dentistry Team

3.2.5.1. Auxiliary Staff

3.2.5.2. The Pediatric Dentist: Attitudes of the Professional, Training and Experience



- 3.3. Childhood Behaviour Guide. Basic Techniques
 - 3.3.1. Patient Classification According to Their Degree of Collaboration
 - 3.3.1.1. Wright's Classification
 - 3.3.1.2. Lampshire's Classification
 - 3.3.1.3. Frankl's Classification
 - 3.3.1.4. Venham's Classification
 - 3.3.2. Principles for Behavioral Guidance
 - 3.3.3. Basic Techniques for Behavioral Guidance
 - 3.3.3.1. Techniques for Establishing Communication: Say/Show/Do
 - 3.3.3.2. Techniques for Prevention or Modification of Inappropriate or Dangerous Behavior; Positive and Negative Reinforcement; Nonverbal Communication/Voice Control; Gradual Exposure; Parental Presence/Absence; Modeling; Distraction; Hand Over Mouth
 - 3.3.3.3. Nitrous Oxide
- 3.4. Guide of Childhood Behaviour. Limiting Techniques and Advanced Techniques
 - 3.4.1. Advanced Techniques for Behavioral Guidance
 - 3.4.1.1. Stabilization for Physical Protection. Mechanical Stabilization of the Body. Mechanical Stabilization of the Mouth
 - 3.4.1.2. Sedation
 - 3.4.1.3. General Anesthesia
- 3.5. Pharmacological Handling of Behavior
 - 3.5.1. Minimal and Moderate Sedation
 - 3.5.1.1. Principles
 - 3.5.1.2. Objectives
 - 3.5.1.3. Warnings on Minimal and Moderate Sedation
 - 3.5.2. Deep Sedation
 - 3.5.2.1. Warnings on Deep Sedation
 - 3.5.3. Patient Selection
 - 3.5.4. Patient's Medical Background
 - 3.5.5. Physical Evaluation

Module 4. Preventive Pediatric Dentistry

- 4.1. First Dental Visit
 - 4.1.1. Introduction
 - 4.1.2. Objectives of the First Dental Visit
 - 4.1.3. Preparing the Child for their First Dental Visit
 - 4.1.4. Dental Visit by Ages. Techniques and Suggestions
- 4.2. Oral Health of the Child and Anticipatory Guide for Parents and/or Tutors
 - 4.2.1. Risk Evaluation. Definition and Tools
 - 4.2.2. CAMBRA Method
 - 4.2.2.1. Children Under the Age of 6
 - 4.2.2.2. Over the Age of 6
 - 4.2.3. "Dental Home". Concept
 - 4.2.3.1. Features
 - 4.2.3.2. Benefits
 - 4.2.4. Anticipatory Guide for Parents
 - 4.2.4.1. Concept
 - 4.2.4.2. Oral Health Protocols for Babies
 - 4.2.4.3. Importance of Non-Dental Professionals in the Oral Health of Infants
- 4.3. Measures to Control Plaque in Pediatric Dentistry
 - 4.3.1. Introduction. Concept. Dental Plaque in Caries Etiology
 - 4.3.2. Mechanical Control of the Plaque
 - 4.3.2.1. Toothbrush. Characteristics and Techniques
 - 4.3.2.2. Toothpastes
 - 4.3.2.3. Dental Floss. Characteristics and Techniques
 - 4.3.3. Chemical Control of the Plaque
 - 4.3.3.1. Chemical Anti-Plaque Agents. Properties
 - 4.3.4. Preventive Oral Hygiene Measures for Children by Age
- 4.4. Dietary Measures and Nutrition in the Pediatric Patient
 - 4.4.1. Introduction. Nutrition in the Dental Development of the Child
 - 4.4.2. Diet: Feeding Mode and Frequency of Intake, Factors of Dietary Cariogenicity. Protective Food

- 4.4.2.1. Food Pyramid Guide
- 4.4.2.2. Dietary Survey
- 4.4.2.3. Balanced and Non-Cariogenic Diet
- 4.4.2.4. Dietary Advice ("Counseling") in the Consultation Room
- 4.4.2.5. Clinic
- 4.5. Use of Fluorides in Pediatric Dentistry
 - 4.5.1. Introduction. Metabolism. Mechanisms of Action
 - 4.5.1.1. Systemic Fluoride. Fluoridation of Water and Other Sources. Advantages and Disadvantages.
 - 4.5.1.2. Topical Fluoride: Mechanisms of Action, Types and Fluoride Products
 - 4.5.1.3. Acute Toxicity
 - 4.5.1.4. Chronic Toxicity. Dental Fluorosis
 - 4.5.1.5. Appropriate Prescription of Topical Fluoride According to Age and Risk of Caries
- 4.6. Dentistry for Babies
 - 4.6.1. Patients Under 3 Years of Age: Characteristics
 - 4.6.2. The Edentulous Baby's Mouth
 - 4.6.2.1. Constituent Elements and Functions
 - 4.6.3. Possible Findings
 - 4.6.3.1. Inclusion Cysts
 - 4.6.3.2. Microkeratocysts
 - 4.6.3.3. Geographic Tongue
 - 4.6.3.4. Natal and Neonatal Teeth
 - 4.6.3.5. Ankyloglossia
 - 4.6.3.6. Riga-Fede Syndrome
 - 4.6.4. Baby Dentistry: Concept, Rationale and Fundamentals
 - 4.6.5. The First Visit for a Child Under 3 Years of Age: Timing, Objectives and Constituent Elements
- 4.7. Maintenance of the Oral and Dental Health of Children Under 3 Years of Age
 - 4.7.1. Information: Type of Information and Methodology
 - 4.7.2. Transmission. Education
 - 4.7.2.1. Motivational Interviewing: Characteristics and Objectives
 - 4.7.2.2. Anticipatory Guide

- 4.7.3. Preventive Strategies for Children Under the Age of 3
 - 4.7.3.1. Caring for the Oral Health of Parents
 - 4.7.3.2. Oral Hygiene
 - 4.7.3.3. Balanced Non-Cariogenic Diet
 - 4.7.3.4. Adequate Fluoride Intake
 - 4.7.3.5. Periodic Professional Monitoring

Module 5. Pathology and Treatment of Dental Caries

- 5.1. Dental Caries. Etiology, Pathogenesis and Clinical Manifestations
 - 5.1.1. Concept of Caries Disease
 - 5.1.2. Current Relevance of Caries Disease
 - 5.1.3. Etiological Factors of Caries Disease
 - 5.1.3.1. Factors Relative to the Host: Teeth and Saliva
 - 5.1.3.2. Factors Related to Plaque Microbiology
 - 5.1.3.3. Factors Related to the Diet: Factors Dependent on the Food Ingested. Dietary Factors Dependent on the Individual
 - 5.1.3.4. Factors Dependent on the Individual's Cultural and Socioeconomic Context
 - 5.1.4. Pathogenesis of the Caries Lesion
 - 5.1.4.1. Demineralization/Remineralization Process. Critical pH
 - 5.1.4.2. Oral Regulation of pH Fluctuations and Remineralization
 - 5.1.5. Clinical Manifestations of Caries Lesions
 - 5.1.5.1. Incipient Caries Lesions
 - 5.1.5.2. Cavitated Caries Lesions
 - 5.1.6. Epidemiology of Dental Caries
 - 5.1.6.1. Caries in Primary Dentition
 - 5.1.6.2. Caries in Mixed Dentition
 - 5.1.6.3. Caries in Young Permanent Dentition



- 5.2. Diagnosis of Dental Caries
 - 5.2.1. Detecting and Monitoring Caries Lesions
 - 5.2.1.1. Methods That Do Not Require Technological Support: Visual Method and Tactile Method
 - 5.2.1.2. Methods that Require Technological Support: Radiological Methods, Methods Based on Visible Light, Methods Based on Laser Light, Methods Based on Ultrasound and Methods Based on Electric Current
 - 5.2.1.3. Injury Activity Assessment: ICDAS System
 - 5.2.1.4. Establishing the Patient's Risk of Caries
- 5.3. Early Childhood Caries. Early Childhood Caries. (ECC)
 - 5.3.1. Feeding Up to 6 Months of Age
 - 5.3.1.1. Exclusive Breastfeeding on Demand: Its Influence on Craniofacial Development. Benefits
 - 5.3.1.2. Bottle Feeding: Indications and Consequences of its Use
 - 5.3.2. The Process of Eruption: Timeline
 - 5.3.3. The Tasks of Temporal Dentition
 - 5.3.4. Feeding After the Eruption of the First Tooth: Ablactation
 - 5.3.5. Feeding After the Eruption of the Second Temporal Molar
 - 5.3.6. Prolonged Breastfeeding: Concept and Risks
 - 5.3.7. Early Childhood Caries
 - 5.3.7.1. Concept
 - 5.3.7.2. Types
 - 5.3.7.3. Transmissibility Habits and Infectivity Window
 - 5.3.7.4. Characteristics: Rapid Progression: Reasons
 - 5.3.7.5. Consequences
- 5.4. Therapeutic Remineralization in Incipient Caries Lesions
 - 5.4.1. Objectives and Requirements of Therapeutic Remineralization
 - 5.4.2. Remineralization Products and Systems
 - 5.4.2.1. Fluoride: Mechanisms of action for Remineralization
 - 5.4.2.2. Casein Phosphopeptide-Amorphous Calcium Phosphate Phosphopeptide Complexes (CPP-ACP): Nature, Mechanisms of Action, Presentations and Mode of Use
 - 5.4.2.3. New Materials in Remineralization. Materials Derived from Nanotechnology: Nano-Hydroxyapatite and Nano-Carbonate Apatite Bioactive Crystals Based on Amorphous Sodium Phosphosilicate and Calcium Phosphates
 - 5.4.2.4. Alternative Products to Favour Remineralization

- 5.5. Treatment of Cavitated Caries Lesions. Principles
 - 5.5.1. Objectives of Dental Surgery in Children
 - 5.5.2. Factors That Modify Dental Surgery in Children
 - 5.5.2.1. Behaviour
 - 5.5.2.2. Dentition Development
 - 5.5.2.3. Extent and Depth of Cavitated Caries Lesions
 - 5.5.2.4. Systemic Status of the Patient
 - 5.5.2.5. Morphological Characteristics of Temporary Teeth
 - 5.5.3. Principles of Minimally Invasive Dentistry
 - 5.5.3.1. Removal of the Minimum Necessary Dental Tissue
 - 5.5.3.2. Preservation of Pulp Vitality
 - 5.5.3.3. Using Bioactive Materials
 - 5.5.4. Absolute Isolation
 - 5.5.4.1. Objectives
 - 5.5.4.2. Materials and Their Adaptation to Children: Dike, Clamps and Young's Arc
 - 5.5.4.3. Placement Techniques by Age: Preschoolers, Schoolchildren and Adolescents
- 5.6. Pit and Fissure Sealants (PFS). Preventive Resin Restorations (PRR)
 - 5.6.1. Introduction. Historical Background of Fissure Sealants
 - 5.6.1.1. Types of Fissures
 - 5.6.1.2. Cariostatic Properties
 - 5.6.1.3. Types of Sealants
 - 5.6.1.4. Patient Selection: Indications and Contraindications
 - 5.6.1.5. Placement Technique
 - 5.6.1.6. How to Prevent Fissure Sealants from Fracturing and Falling Off
 - 5.6.2. Preventive Resin Restorations (PRR)
 - 5.6.2.1. Concept
 - 5.6.2.2. Types
 - 5.6.2.3. Placement Technique
- 5.7. Atraumatic Restorative Treatment (ART). Temporary Therapeutic Restorations (TTR)
 - 5.7.1. Introduction. Concept
 - 5.7.2. Principles of ART and Its Evolution to TTR



- 5.8. Treatment of Cavitated Caries Lesions. Materials
 - 5.8.1. Pulp Protection Materials
 - 5.8.1.1. Calcium Hydroxide: Mechanism of Action. Indications. Advantages and Disadvantages.
 - 5.8.2. Glass Ionomer: Self-Curing and Light Curing
 - 5.8.2.1. New Bioactive Materials
 - 5.8.3. Materials for Dental Restoration
 - 5.8.3.1. Restorative Glass Ionomer: Characteristics, Indications, Contraindications, Advantages, Disadvantages and Mode of Use
 - 5.8.3.2. Composite Resins or Composites. Concept and Types
 - 5.8.3.3. Principles of Use
 - 5.8.3.4. Preparation of the Remaining Tooth Structure for the Use of Composites: Dentin Adhesives: Types Available Today and Selection Criteria
- 5.9. Treatment of Large Cavitated Caries Lesions in Pediatric Dentistry
 - 5.9.1. Complex Lesions in Temporary and Permanent Teeth
 - 5.9.1.1. Characteristics and Consequences
 - 5.9.1.2. Treatment Options in Temporary and Permanent Dentition
 - 5.9.2. Treatment of Molars: Preformed Crowns
 - 5.9.2.1. Indications. Advantages and Disadvantages.
 - 5.9.2.2. Types: Metallic Preformed Crowns. Pediatric Aesthetic Crowns
 - 5.9.2.3. Technique of Preparation, Adaptation and Cementation of Metal Crowns. Defective Crowns and Complications
 - 5.9.2.4. Technique of Preparation and Cementation of Aesthetic Pediatric Crowns
 - 5.9.2.5. Defective Crowns and Complications
 - 5.9.3. Treatment of Anterior Teeth
 - 5.9.3.1. Preformed Acetate Crowns. Indications and Contraindications. Procedure. Complications
 - 5.9.3.2. Aesthetic Pediatric Crowns. Aesthetic Pediatric Crown Preparation and Cementation Technique
 - 5.9.3.3. Defective Crowns and Complications

- 5.9.4. Treatment of Anterior Teeth
 - 5.9.4.1. Preformed Acetate Crowns
 - 5.9.4.2. Indications and Contraindications
 - 5.9.4.3. Procedure
 - 5.9.4.4. Complications

Module 6. Dental Pulp Pathology and Therapeutics

- 6.1. Pulp Pathology in Temporary Teeth (TT)
 - 6.1.1. Peculiarities of Temporary Teeth in Relation to Pulp Involvement
 - 6.1.2. Posteruptive Evolution of the Pulp of Primary Teeth
 - 6.1.3. Characteristics of the Dentin-Pulp Organ in TT
 - 6.1.4. Diagnosis
 - 6.1.4.1. General Factors: Pathologies That Contraindicate Pulp Capillary Treatment
 - 6.1.4.2. Regional Factors
 - 6.1.4.3. Local Factors
 - 6.1.5. History of Pain
 - 6.1.5.1. Stimulated, Thermal/Chemical, Intermittent Pain
 - 6.1.5.2. Spontaneous, Nocturnal, Prolonged Pain
 - 6.1.5.3. Clinical Examination: of Mucosa, Teeth. Reliability of Pulp Vitality Tests
 - 6.1.5.4. Radiological Examination: Information it Provides
 - 6.1.5.5. Classification
 - 6.1.5.5.1. Conditioning Factors in Children
 - 6.1.5.5.2. Healthy Pulp: Characteristics and Radiology
 - 6.1.5.5.3. Reversible Pulpitis: Characteristics and Radiology
 - 6.1.5.5.4. Irreversible Pulpitis: Characteristics and Radiology
 - 6.1.5.5.5. Pulp Necrosis: Characteristics and Radiology
- 6.2. Pulp Therapeutics in Temporary Teeth
 - 6.2.1. Pulp Protection
 - 6.2.1.1. Indications. Objectives
 - 6.2.2. Indirect Pulp Treatment
 - 6.2.2.1. Indications
 - 6.2.2.2. Objectives
 - 6.2.2.3. Keys
 - 6.2.2.4. Procedure

- 6.2.3. Pulpotomy
 - 6.2.3.1. Concept
 - 6.2.3.2. Objective
 - 6.2.3.3. Indications and Contraindications
 - 6.2.3.4. Drugs That Act on the Pulp: Types and Mode of Action
 - 6.2.3.5. Procedure.
 - 6.2.3.6. Remnant Crown Reconstruction
- 6.2.4. Pulpectomy
 - 6.2.4.1. Concept
 - 6.2.4.2. Objective
 - 6.2.4.3. Indications and Contraindications
 - 6.2.4.4. Canal Sealing Materials Requirements, Types and Mode of Action
- 6.2.5. Procedure
- 6.2.6. Remnant Crown Reconstruction
- 6.3. Pulp Pathology in Young Permanent Teeth (YPT)
 - 6.3.1. Assessment of Pulp Status
 - 6.3.1.1. Medical History
 - 6.3.1.2. Clinical Examination
 - 6.3.1.3. Radiographical Examination
 - 6.3.1.4. Vitality Tests
 - 6.3.1.5. Direct Pulp Evaluation
 - 6.3.2. Establishing the Prognosis of the Affected Tooth
- 6.4. Pulp Therapeutics in Young Permanent Teeth
 - 6.4.1. Indirect Pulp Coating
 - 6.4.1.1. Objectives
 - 6.4.1.2. Contraindications
 - 6.4.1.3. Procedure
 - 6.4.1.4. Criteria for Success or Failure of the Treatment in Its Evolution
 - 6.4.2. Direct Pulp Coating
 - 6.4.2.1. Objectives
 - 6.4.2.2. Contraindications
 - 6.4.2.3. Procedure
 - 6.4.2.4. Criteria for Success or Failure of the Treatment in its Evolution





- 6.4.3. Apex Formation
 - 6.4.3.1. Objectives
 - 6.4.3.2. Contraindications
 - 6.4.3.3. Procedure
 - 6.4.3.4. Periodic Controls
 - 6.4.3.5. Criteria for Success or Failure of the Treatment in Its Evolution
- 6.4.4. Apexogenesis
 - 6.4.4.1. Objectives
 - 6.4.4.2. Contraindications
 - 6.4.4.3. Procedure
 - 6.4.4.4. Periodic Controls
 - 6.4.4.5. Criteria for Success or Failure of the Treatment in its Evolution

Module 7. Dental Trauma. Diagnosis and Therapeutics

- 7.1. Diagnosis, Classification and Examination of the Traumatized Patient
- 7.2. Fracture Management in Young Teeth
- 7.3. Luxation Management in Young Teeth
- 7.4. Avulsion Management in Young Teeth
- 7.5. Trauma Management in Temporary Teeth

Module 8. Oral Pathology in Pediatric Dentistry

- 8.1. Periodontal Pathology in Pediatric Dentistry
 - 8.1.1. Diagnosis: Periodontal Evaluation in Children
 - 8.1.2. Gingival Inflammation
 - 8.1.2.1. Gingivitis Associated with Plaque Not Systemically Aggravated
 - 8.1.2.2. Systematically Aggravated Gingivitis
 - 8.1.2.3. Gingivitis Induced by Drugs
 - 8.1.2.3.1. Chronic Periodontitis
 - 8.1.2.3.2. Aggressive Periodontitis in Temporary and Mixed Dentition
 - 8.1.3. Aggressive Localized Periodontitis
 - 8.1.3.1. Aggressive General Periodontitis
 - 8.1.4. Necrotizing Periodontal Disease
 - 8.1.4.1. Acute Ulceronecrotizing Gingivitis (AUNG)
 - 8.1.4.2. Ulceronecrotizing Periodontitis (UNP)

- 8.2. Oral Mucosal Pathology of Viral and Fungal Origin. Diagnosis and Treatment
 - 8.2.1. Viral Diseases of the Oral Mucosa. Herpes Simplex Virus
 - 8.2.1.1. Etiology
 - 8.2.1.2. Pathogenesis.
 - 8.2.1.3. Primo-Herpetic Infection
 - 8.2.1.4. Recurrent Herpes Simplex
 - 8.2.1.5. Diagnosis/Differential Diagnosis
 - 8.2.1.6. Treatment
 - 8.2.2. Viral Diseases of the Oral Mucosa. Coxsackievirus
 - 8.2.2.1. Hand-Mouth-Foot Disease
 - 8.2.2.2. Herpangina
 - 8.2.3. Mycotic Diseases of the Oral Mucosa. Acute or Muguet Pseudomembranous Candidiasis
 - 8.2.3.1. Etiology
 - 8.2.3.2. Diagnosis
 - 8.2.3.3. Differential Diagnosis
 - 8.2.3.4. Treatment
 - 8.2.4. Mycotic Diseases of the Oral Mucosa. Angular Cheilitis
 - 8.2.4.1. Etiology
 - 8.2.4.2. Diagnosis
 - 8.2.4.3. Differential Diagnosis
 - 8.2.4.4. Treatment
 - 8.2.5. Recurrent Aphthous Stomatitis
 - 8.2.5.1. Etiopathogenesis: Immunological Factors, Heredity and Predisposing Factors
 - 8.2.5.2. Minor Aphthous Ulcers and Major Aphthous Ulcers
 - 8.2.5.3. Diagnosis
 - 8.2.5.4. Treatment
- 8.3. Oral Mucosal Pathology of Traumatic or Allergic Origin. Diagnosis and Treatment
 - 8.3.1. Trauma Lesions of the Oral Mucosa
 - 8.3.1.1. Nibbled Mucosa
 - 8.3.1.2. Traumatic Ulcerations
 - 8.3.2. Irritative Lesions Caused by Chemical Agents
 - 8.3.2.1. By Direct Contact with the Oral Mucosa
 - 8.3.2.2. Palatal Necrosis after Anesthesia





- 8.3.2.3. Ulcers Generated by Chemotherapeutic Treatment
- 8.3.2.4. Allergic Stomatitis: Drug-Induced Stomatitis
- 8.3.2.5. Contact Stomatitis
- 8.3.3. Irritative Lesions Caused by Physical Agents
 - 8.3.3.1. Lesions Secondary to Radiotherapeutic Treatment
 - 8.3.3.2. Electrical Burn
 - 8.3.3.3. Lesions Caused by Excessive Heat or Cold
- 8.4. Pathologies of the Oral Mucosa. Most Frequent Benign Lesions in Pediatrics. Diagnosis and Treatment
 - 8.4.1. White Lesions
 - 8.4.1.1. Focal Hyperkeratosis
 - 8.4.1.2. Leukoedema
 - 8.4.1.3. White Spongy Nevus
 - 8.4.2. Pigmented Lesions
 - 8.4.2.1. Physiological Pigmentation
 - 8.4.2.2. Oral Melanotic Macule
 - 8.4.2.3. Nevus
 - 8.4.2.4. Petechiae and Ecchymosis
 - 8.4.3. Red Lesions
 - 8.4.3.1. Erythema Multiform
 - 8.4.4. Exophytic Lesions
 - 8.4.5. Fibrous Hyperplasia or Fibroma Due to Irritation
 - 8.4.5.1. Giant Cell Fibroma
 - 8.4.5.2. Peripheral Ossifying Fibroma
 - 8.4.5.3. Hereditary Gingival Fibromatosis
 - 8.4.5.4. Papillary Hyperplasia
 - 8.4.5.5. Pyogenic Granuloma
 - 8.4.5.6. Giant Cell Peripheral Granuloma
 - 8.4.5.7. Vulgaris or Virus Verruca
 - 8.4.5.8. Condyloma Acuminatum
 - 8.4.5.9. Hemangioma
 - 8.4.5.10. Lymphangioma
 - 8.4.5.11. Neurofibroma
 - 8.4.5.12. Congenital Granular Cell Gingival Tumor
 - 8.4.5.13. Mixed Tumor or Pleomorphic Adenoma

- 8.5. Oral Pathology. Most Frequent Cystic Lesions, Benign Tumors and Neoplasms in Pediatrics. Diagnosis and Treatment
 - 8.5.1. Cysts and Pseudocysts of Soft Tissues
 - 8.5.1.1. Lymphoepithelial Cysts
 - 8.5.1.2. Hematoma and Rash Cyst
 - 8.5.1.3. Mucocele
 - 8.5.1.4. Cannula
 - 8.5.1.5. Dentigerous Cyst
 - 8.5.1.6. Odontogenic Cyst
 - 8.5.1.7. Traumatic Bone Cyst
 - 8.5.1.8. Static Bone Cyst
 - 8.5.2. Benign Tumors
 - 8.5.2.1. Adenomatoid Odontogenic Tumor
 - 8.5.2.2. Composite and Complex Odontoma
 - 8.5.2.3. Ameloblastic Fibroma and Fibroodontoma
 - 8.5.2.4. Central Ossifying Fibroma
 - 8.5.2.5. Fibrous Dysplasia
 - 8.5.2.6. Benign Cementoblastoma
 - 8.5.2.7. Benign Osteoblastoma
 - 8.5.2.8. Cherubism
 - 8.5.3. Neoplasms
 - 8.5.3.1. Ameloblastoma
 - 8.5.3.2. Childhood Neuroectodermal Tumor
 - 8.5.3.3. Giant Cell Central Granuloma
 - 8.5.3.4. Osteoma
 - 8.5.3.5. Ameloblastic Odontoma
 - 8.5.3.6. Ewing Sarcoma
 - 8.5.3.7. Osteogenic and Chondrogenic Sarcoma
 - 8.5.3.8. Primary Bone Lymphoma
 - 8.5.3.9. Burkitt Lymphoma
 - 8.5.3.10. Histiocytosis X





Module 9. Pain Control Surgical Treatments in Pediatric Patients

- 9.1. The Process of Pain
 - 9.1.1. Pain
 - 9.1.2. Nociceptive System
 - 9.1.3. Local Anesthetic. Mechanism of Action
- 9.2. Local Anesthesia in Pediatric Dentistry
 - 9.2.1. Concepts
 - 9.2.1.1. Analgesia
 - 9.2.1.2. Local Anesthesia
 - 9.2.1.3. General Anesthesia
 - 9.2.2. Local Anesthesia: Advantages and Objectives
 - 9.2.3. Local anesthetics
 - 9.2.3.1. Composition
 - 9.2.3.2. Action and Structure
 - 9.2.3.3. Vasoconstrictor: Actions, Importance in Pediatric Dentistry and Undesired Effects
 - 9.2.3.4. Antioxidants
 - 9.2.3.5. Preservatives
 - 9.2.3.6. Fungicides
 - 9.2.4. Calculating Individualized Anesthetic Dosage
 - 9.2.5. Techniques for Local Anesthesia
 - 9.2.5.1. Topical Anesthesia: Efficacy. Acceptance by The Child. Topical Anesthetics Most Commonly Used Today. Application and Possible Complications
 - 9.2.5.2. Maxillary Anesthesia: Supraperiosteal and Intrapapillary Infiltration
 - 9.2.5.3. Mandibular Anesthesia: Supraperiosteal Infiltration, Inferior Dental Nerve Block (Truncal), Intraligamentous (LPD)
 - 9.2.6. Variations on the Technique in Adults
 - 9.2.7. Guide of Behaviour. Preparing the Pediatric Patient for Local Anesthesia
 - 9.2.8. Causes of Anesthesia Failure
 - 9.2.9. Complications: General and Local
 - 9.2.9.1. Overdose of Local Anesthetics

- 9.3. Analgesia for Children
 - 9.3.1. Graphic Pain Assessment for Children in Preverbal Period
 - 9.3.2. Most Common Analgesics Prescribed in Children
 - 9.3.2.1. Generic Name. Function
 - 9.3.2.2. Recommended Oral Dose
 - 9.3.2.3. Advantages and Disadvantages.
 - 9.3.2.4. Introduction
- 9.4. Surgery of Soft Tissues
 - 9.4.1. Low Insertion Upper Frenulum
 - 9.4.1.1. Diagnosis
 - 9.4.1.2. Frenectomy: Indications and Procedure
 - 9.4.2. Ankyloglossia
 - 9.4.2.1. Consequences
 - 9.4.2.2. Frenectomy: Procedure
 - 9.4.2.3. Mucocele: Surgical Excision
 - 9.4.2.4. Pyogenic Granuloma: Surgical Excision
 - 9.4.2.5. Eruption Cyst: Drainage and Operculectomy
- 9.5. Hard Tissue Surgery Extraction

Module 10. Pediatric Orthodontics

- 10.1. Preventive and Interceptive Orthodontics
 - 10.1.1. Introduction. Concepts
 - 10.1.2. Diagnosis and Treatment Plan
 - 10.1.3. Classification of Malocclusions
 - 10.1.4. Crowding Management
 - 10.1.4.1. Serial Extractions
 - 10.1.4.2. Crossbites: Anterior and Posterior
 - 10.1.4.3. Diastemas
 - 10.1.4.4. Deep Bite
 - 10.1.4.5. Open Bites: Anterior and Posterior
 - 10.1.4.6. Pre-Orthodontic Trainers
 - 10.1.4.7. Ectopic Eruptions
 - 10.1.4.8. Treatment to Modify Growth



- 10.2. Space Management and Maintenance
 - 10.2.1. Factors Causing Loss of Space
 - 10.2.2. Premature Loss of Temporary Teeth
 - 10.2.2.1. Associated Problems
 - 10.2.2.2. Damping Factors
 - 10.2.2.3. Clinical Situations
 - 10.2.3. Space Maintenance
 - 10.2.3.1. Objective
 - 10.2.3.2. Requirements
 - 10.2.3.3. Procedures
 - 10.2.3.4. Factors to Consider
 - 10.2.4. Space Maintenance
 - 10.2.4.1. Concept
 - 10.2.4.2. Indications
 - 10.2.4.3. Contraindications
 - 10.2.4.4. Requirements
 - 10.2.5. Classification of Space Maintainers
 - 10.2.5.1. Fixed Maintainers: Concept, Indications, Advantages, Disadvantages and Types
 - 10.2.5.2. Removable Retainers: Concept, Indications, Advantages, Disadvantages and Types
 - 10.2.6. Clinical Situations
 - 10.2.6.1. Premature Loss of Incisors
 - 10.2.6.2. Premature Loss of Canines
 - 10.2.6.3. Premature Loss of Temporary Molars
 - 10.2.6.4. Multiple Losses
- 10.3. Oral Habits and Their Interceptive Treatment
 - 10.3.1. Habits
 - 10.3.1.1. Concept
 - 10.3.1.2. Types

- 10.3.1.3. Classification
- 10.3.2. Oral Habits
 - 10.3.2.1. Importance
 - 10.3.2.2. Consequences
 - 10.3.2.3. Prevention
 - 10.3.2.4. Professional Attitude
 - 10.3.2.5. Requirements
 - 10.3.2.6. Diagnosis: Anamnesis, Clinical and Functional Examination
 - 10.3.2.7. Criteria for Treatment and Therapeutic Objectives
 - 10.3.2.8. Finger Sucking Habit: Types, Etiology, Consequences and Treatment
 - 10.3.2.9. Pacifier Suction: When Is it Harmful? Consequences and Treatment
 - 10.3.2.10. Atypical Swallowing: Etiology, Classification, and Treatment
 - 10.3.2.11. Lip Suction
 - 10.3.2.12. Breathing through the Mouth
 - 10.3.2.13. Bruxism
 - 10.3.2.14. Onychophagia

Module 11. Pediatric Patients with Special Care Needs. Medically Compromised Patients

- 11.1. Cardiovascular Pathology
 - 11.1.1. Congenital Heart Disease
 - 11.1.2. Rheumatic Fever
 - 11.1.3. Heart Murmur and Cardiac Arrhythmias
 - 11.1.4. High Blood Pressure
 - 11.1.5. Congestive Heart Failure
 - 11.1.6. Bacterial Endocarditis
 - 11.1.6.1. Pathogenesis.
 - 11.1.6.2. Complications
 - 11.1.6.3. Dental Procedures Requiring Prophylactic Antibiotic Therapy to Prevent Bacterial Endocarditis

11.2. Allergic and Immunologic Pathology

11.2.1. Anaphylaxis.

11.2.1.1. Concept

11.2.1.2. Diagnosis

11.2.1.3. Causes

11.2.1.4. Evolution

11.2.1.5. Diagnosis

11.2.1.6. Treatment

11.2.2. Allergic rhinitis

11.2.2.1. Etiology

11.2.2.2. Clinical Picture

11.2.2.3. Diagnosis and Management

11.2.2.4. Complications

11.2.2.5. Dental Considerations

11.2.3. Atopic Dermatitis.

11.2.3.1. Clinical Picture

11.2.3.2. Etiology

11.2.3.3. Diagnosis and Management

11.2.3.4. Complications

11.2.3.5. Dental Considerations

11.2.4. Urticaria and Angioedema

11.2.4.1. Concept

11.2.4.2. Clinical Picture

11.2.4.3. Etiology

11.2.4.4. Diagnosis and Management

11.2.4.5. Dental Considerations

11.2.5. Food Allergy and Latex Allergy

11.2.5.1. Clinical Picture

11.2.5.2. Etiology

11.2.5.3. Diagnosis and Management

11.2.5.4. Dental Considerations

11.2.5.5. Preventive Measures

11.2.5.6. Treatment for Acute Allergic Reaction to Latex

11.2.6. Asthma

11.2.6.1. Concept

11.2.6.2. Epidemiology

11.2.6.3. Causes

11.2.6.4. Progression of the Disease and Prognosis

11.2.6.5. Complications

11.2.6.6. Dental Considerations

11.2.6.7. Psychological Profile of the Asthmatic Child and Recommendations

11.3. Endocrine Pathology

11.3.1. Pancreatic Disorders

11.3.1.1. Diabetes Mellitus: Concept, Epidemiology, Diagnosis. Causes

11.3.1.2. Type I Diabetes: Clinical Features, Symptomatology, Treatment Goals, Oral Findings

11.3.1.3. Type II Diabetes: Clinical Features

11.3.1.4. Type III Diabetes: Clinical Features

11.3.1.5. Type IV Diabetes: Clinical Features

11.3.1.6. Dental Considerations for the Pediatric Diabetic Patient

11.3.2. Thyroid and Parathyroid Gland

11.3.3. Adrenal Gland

11.3.4. Pituitary Gland

11.4. Hematological Disorders

11.4.1. Anemia

11.4.1.1. Types

11.4.1.2. Dental Considerations

11.4.2. Hemostasis Disorders.

11.4.2.1. Alterations in Platelet Number or Function

11.4.2.2. Plasma Phase Alterations Recommendations

11.4.2.3. Anticoagulated Patients. Recommendations

11.5. Infectious Diseases

11.6. Nephropathies

11.7. Pediatric Oncology Processes



- 11.8. Neurological Pathology
- 11.9. Hereditary Pathologies: Hereditary Epidermolysis Bullosa (EB)
- 11.10. Oral Care for Patients with Sensory Impairment
- 11.11. Oral Care for Patients with Intellectual Impairment
- 11.12. Oral Care for Patients with Autism Spectrum Disorder

Module 12. Relevant Topics in Dentistry

- 12.1. Emergencies in Pediatric Dentistry. Diagnosis and Management
- 12.2. Clinical Repercussions of New Parenting Patterns. Informed Consent
- 12.3. Child Abuse and Neglect
- 12.4. Dental Materials in Pediatric Dentistry
- 12.5. Rational Management of a Pediatric Dentistry Clinic
- 12.6. Most Common Drugs in Pediatric Dentistry

“*Learn about the latest advances in Pediatric Dentistry with this Master's Degree and improve the care of your young patients and their families*”

06 Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





“

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the dentist's professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Dentists who follow this method not only grasp concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

The student will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 115,000 dentists with unprecedented success, in all specialties regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning will allow you to learn with less effort
and better performance, involving you more
in your training, developing a critical mindset,
defending arguments, and contrasting opinions: a
direct equation for success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



Interactive Summaries

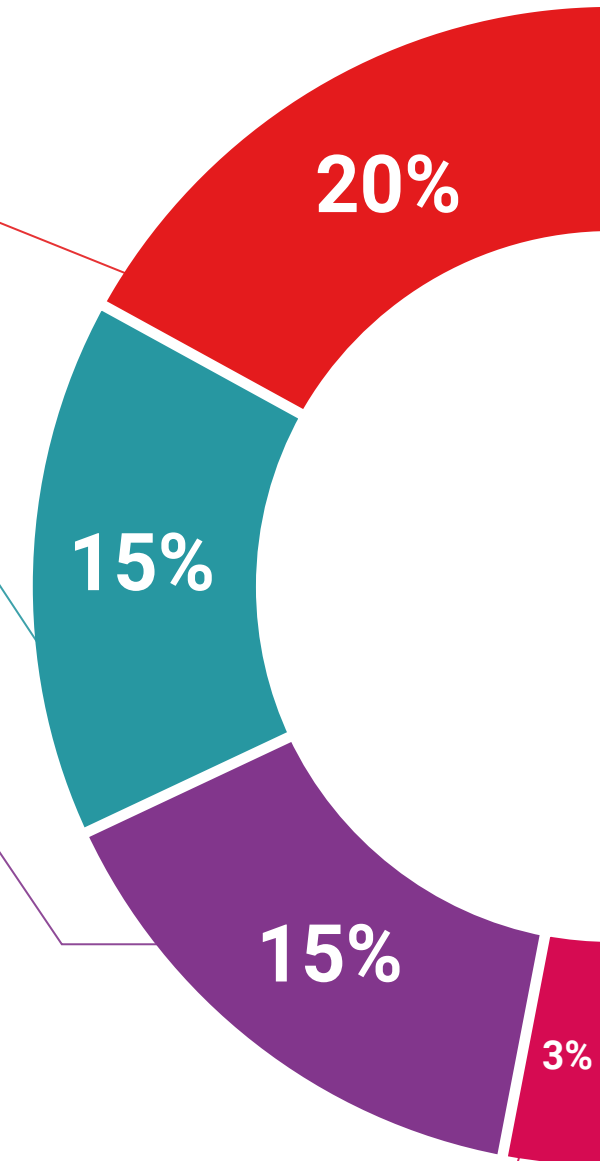
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

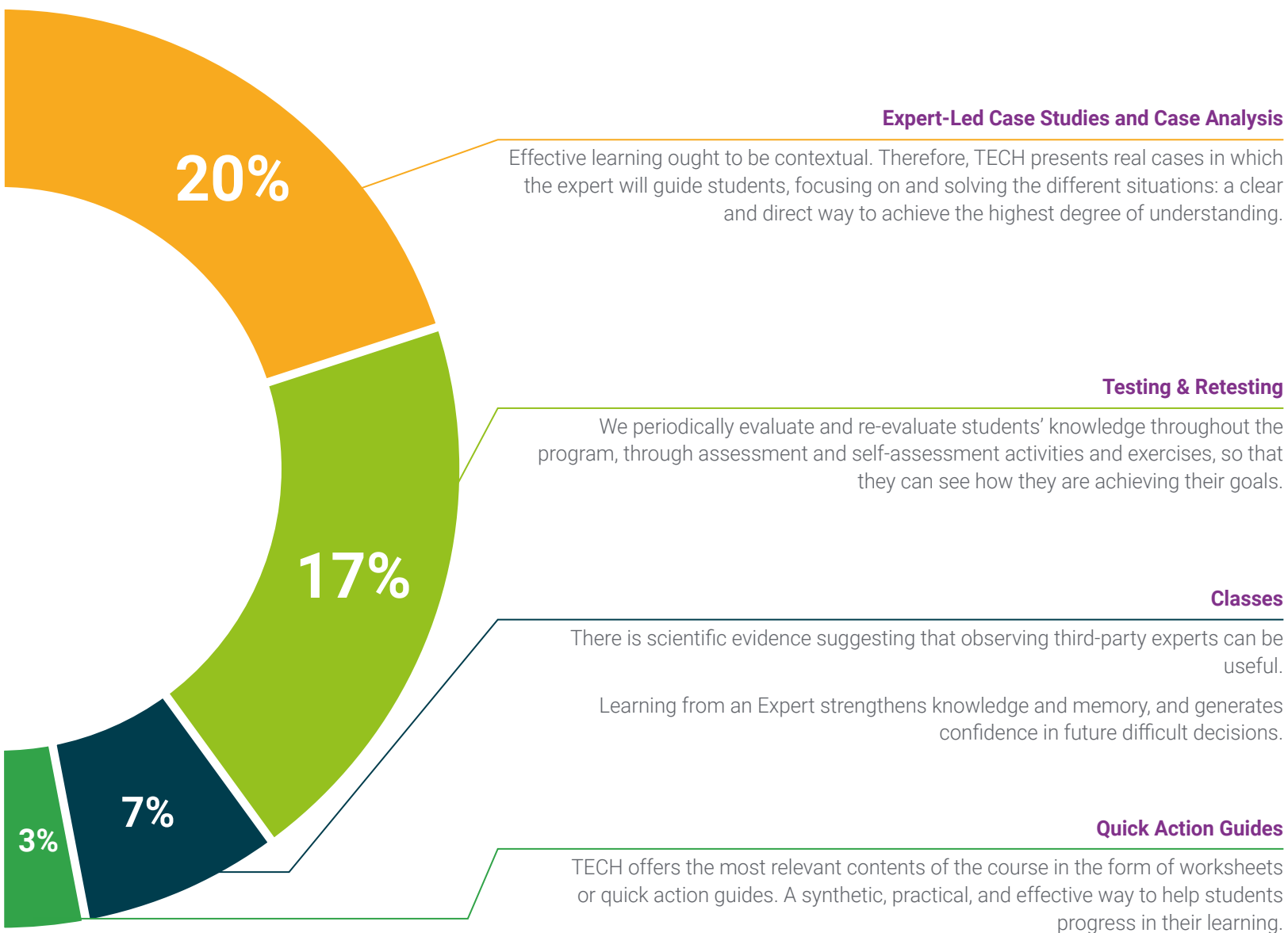
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





07 Certificate

The Master's Degree in Updated Pediatric Dentistry guarantees you, in addition to the most rigorous and updated training, access to a Master's Degree issued by TECH Global University.



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*Successfully complete this program
and receive your university degree
without travel or laborious paperwork”*

This program will allow you to obtain your **Master's Degree diploma in Updated Pediatric Dentistry** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

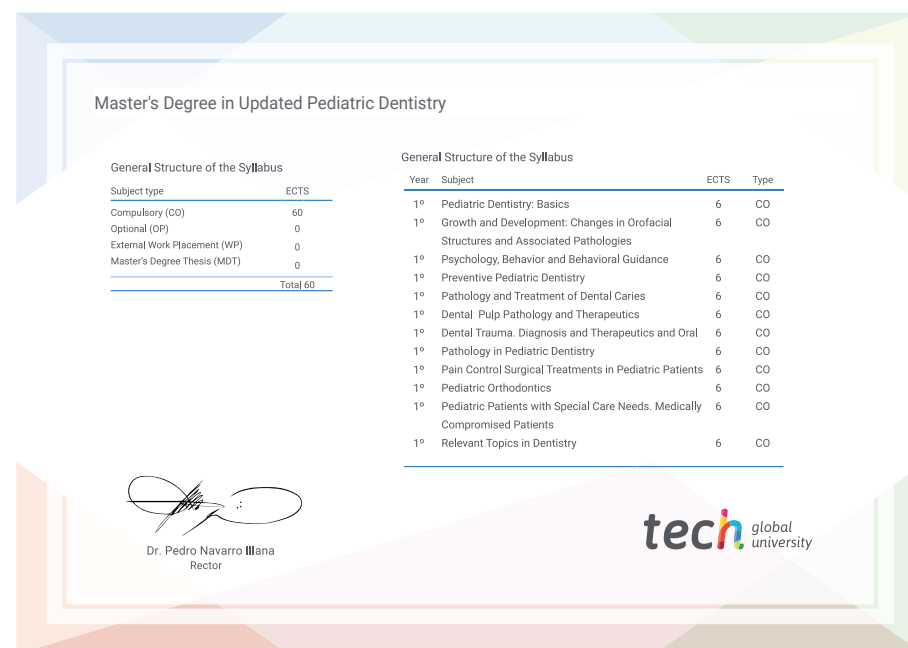
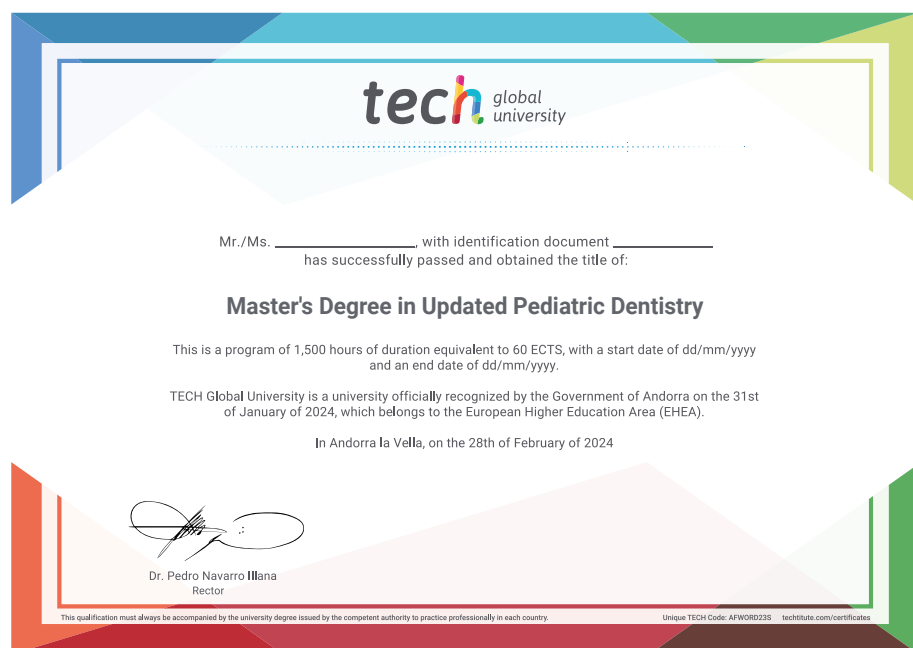
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Updated Pediatric Dentistry**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**





Master's Degree

Updated Pediatric Dentistry

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Master's Degree

Updated Pediatric Dentistry

