



## Advanced Master's Degree Comprehensive Pediatric Nursing

» Modality: online

» Duration: 15 months

» Certificate: TECH Global University

» Credits: 120 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/advanced-master-degree/comprehensive-pediatric-nursing

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Pediatric Nursing is in a stage of continuous development and innovation, and it is essential that nurses can keep updated to meet all the challenges that arise today. Therefore, areas such as School Nursing, Vaccination or Pediatric Emergencies have undergone numerous protocol and technical transformations that require a complete and immediate up-to-date on the part of the professional. That is why, through this program, the nurse will be able to deepen in aspects such as neonatal resuscitation, action in school emergencies or the latest procedures in artificial infant nutrition. All of this in a 100% online format, which will allow the student to adapt their learning to their own needs and schedules.



## tech 06 | Introduction

Nursing has undergone numerous advances and innovations in recent years, incorporating new tools and techniques in areas such as neonatology and in scholar fields. Therefore, the professional requires a complete and deep up- to-date that allows him/her to master the latest procedures of the discipline. It is in this context that the Advanced Master's Degree in Comprehensive Pediatric Nursing arises, an academic program that provides a complete and immediate up-to-date to the student.

Pediatric Nursing is an area that covers various subspecialties such as School Nursing, Neonatal Nursing or Pediatric Emergencies, among others. Thus, in this Advanced Master's Degree the professional will have the opportunity to delve into the latest advances in the most important disciplines of Nursing, mastering aspects such as the admission process of the newborn in the Neonatology Service, dermatological emergencies or the application of vaccines.

One of the highlights of this program is its 100% online methodology, which allows students to make their learning experience more flexible, adapting the academic itinerary to their own schedules. In addition, the nurse will have access to a wide variety of multimedia resources, such as in-focus videos and interactive summaries that will allow them to deepen their knowledge of the subjects in a dynamic way.

This **Advanced Master's Degree in Comprehensive Pediatric Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Pediatric Nursing
- 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 the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Pediatric Nursing
- 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



This Advanced Master's Degree will allow you to update you completely and immediately in areas such as School Nursing or Pediatric Emergencies"



Through this program you will master the most advanced nursing procedures: from the latest techniques in neonatal life support to artificial nutrition techniques"

Its teaching staff includes professionals from the field of Nurses, who bring to this program the experience of their work, as well as recognized specialists from reference 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 an immersive learning experience designed to prepare for real-life situations.

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

Accompanied by a teaching staff of great prestige in the area of Pediatric Nursing.

Enroll now and update yourself with the most advanced multimedia resources: interactive summaries, in focus videos and practical activities, among others.







## tech 10 | Objectives



#### **General Objectives**

- Update the necessary knowledge in the nursing care of pediatric patients, in order to increase the quality and safety of nursing practice in the Intensive Care Unit
- To up-to-date knowledge in nursing care of pediatric patients in emergency situations, in order to increase the quality and safety of their practice in the approach of the different nursing techniques and procedures in the most frequent pediatric emergencies
- Incorporate optimal neonatal care procedures into daily practice
- Update the knowledge of the nursing professional in the new trends in human nutrition, both in health and in pathological situations through evidence-based nursing
- Promote work strategies based on the practical knowledge of the new trends in nutrition and their application to adult and child pathologies, where these strategies play an essential role in treatment
- 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 education
- Encourage professional stimulation through continuous education and research
- Prepare the professional for research into patients with nutritional problems
- Update the nursing professional in the techniques of optimal neonatal care, allowing
  to address the stabilization, nursing diagnosis and care of neonates who usually
  require intensive care with a current and evidence-based approach
- Bring the nursing professional's knowledge up-to-date in the new trends in School Nursing, as well as learn to design, build and implement educational programs, specific educational actions and apply and resolve care processes oriented to the school population as a whole

- Update the techniques of vaccination and disease prevention and their applicability in the population served to enable the nursing professional to increase training when exercising their professional activity
- Know in depth and apply the research methodology at the clinical-care and methodological level in the field of the vaccination process
- Develop skills to transmit and sensibilize the population about the importance and necessity of vaccines, as well as the vaccination process through health promotion strategies
- Train in vaccine management and the implementation of prevention strategies for communicable diseases susceptible to vaccination



Update yourself comprehensively in Pediatric Nursing with TECH and advance your professional career in the health area immediately"





### **Specific Objectives**

#### Module 1. Basics and Fundamentals of Nursing in Child and Adolescent Care

- Update the principles of nursing in child and adolescent care
- Identify the main tools for the care of children and adolescents
- Analyze the nursing processes in medical procedures for children and adolescents

#### Module 2. Maternal and Infant Follow-up and Delivery Care

- Identify and define the stages of pregnancy and childbirth. and the role of nurses in the different stages
- Delve into the postpartum procedure and first quality care for the wellbeing of the infant
- Delve into the postpartum procedure and first-rate care for the mother's wellbeing
- Perform a brief postpartum maternal and child diagnosis

#### Module 3. Newborn Nursing Care

• Determine newborn screening tests

#### Module 4. Caring for Healthy Children

- Describe the different health examinations and controls in healthy child at different stages of development
- Perform newborn accommodation procedure
- Develop a list of vaccines and identify their execution times

#### Module 5. Care for Children with Health Problems

- Establish the vaccination schedule and vaccination in special situations
- Identify the main health complications newborns



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#### Module 6. Research Methodology in Pediatric Nursing

- Delve into the latest updates in pediatric nursing research
- Identify the best tools in pediatric nursing
- Develop comparative methodologies to analyze the different methodologies that exist

#### Module 7. Health Care Organization for Common Pediatric Emergencies

• Describe the procedures that nurses can perform to safely resolve potentially dangerous situations

#### Module 8. Common Advanced Pediatric and Neonatal Cardiovascular Support

- Identify newborn patients and heart condition
- Know how to provide first aid in the event of a complication in pediatric patients
- Develop an action plan for cardiovascular emergencies

#### Module 9. Invasive Techniques in Common Critically III Pediatric Patients

- Define a guide with the first aid and treat them in the most prudent way possible
- Perform emergency medical examinations
- Identify the main invasive techniques

#### Module 10. Cardiologic Emergencies

- Perform a quick general check of the patient's condition
- Identify the implements involved in cardiac processes
- Know the steps to follow in an emergency of this magnitude

#### Module 11. Respiratory Emergencies

- Carry out the correct sequence of basic cardiopulmonary resuscitation maneuvers
- Carry out advanced cardiopulmonary resuscitation maneuvers according to the latest life support recommendations

#### Module 12. Pediatric Trauma and Osteoarticular Injuries

- Identify the main osteoarticular injuries
- Check joints that are most prone to injury
- Specify evaluation and treatment priorities in traumatized children and the characteristics of pediatric patients in general

#### Module 13. Unintentional Injuries Child Accidents

- Define a guide with the first aid and treat them in the most prudent way possible
- Identify the injury and possible treatment
- Develop a preventive guide to the most frequently occurring injuries
- Indicate the management and treatment methods for wounds and burns

#### Module 14. Neurological Emergencies

- Recognize the main neurological diseases
- Develop a preventive guide to identify good care to prevent neurological disease
- Perform periodic evaluations to know the patient's diagnosis
- To establish the correlation between the different types of brain damage and their clinical manifestations
- Describe the diagnostic process, assessment and care of pediatric patients with traumatic brain injury

#### Module 15. Digestive Emergencies

- Identify the main digestive emergencies
- Review the patient's diet
- Increase the ability to manage the acutely intoxicated child or adolescent
- Identify the most risky foods that lead to digestive pathologies

#### Module 16. Endocrinometabolic Emergencies

- Know the patient's age and assess their development to date
- Identify the main treatments for proper endocrine development
- Identify the main problems affecting the patient's metabolism

#### Module 17. Infectious Emergencies

- Identify the main infections and their occurrence in young patients
- Identify the main tools that counteract infections when they are produced
- Develop an action guide to treat infections
- Analyze the specific action protocols by age for pediatric patients with a fever

#### Module 18. Ophthalmologic and Otorhinolaryngologic Emergencies

- Know the main ophthalmologic complications that a patient may present
- Perform a correct diagnosis of the otorhinolaryngological system
- Define the most common prevention techniques and treatments

#### Module 19. Pediatric Skin Emergencies

- Identify the main problems of the nephrourological system
- Develop a preventive plan for the renal system

#### Module 20. Nephrourological Emergencies

- Establish the differential organizational and management characteristics of pediatric emergency departments
- Describe sedoanalgesia procedure preparation and performance

#### Module 21. Special Situations in Pediatric Emergencies

- Define the concept of pain, its types and methods of evaluation
- Recognize from major to minor emergencies that occur in patients

#### Module 22. Admission of a Newborn in the Neonatal Ward or in the NICU

- Determine how to structure a neonatal intensive care unit (NICU), as well as the
  calculation and arrangement of the cribs, the necessary physical space needed,
  the necessary equipment and materials; and the necessary human resources
- Identify the profiles and roles of the "nursing team" as well as its operating system: Primary Nursing
- Describe the guidelines for drug administration in neonatology
- Establish the criteria and objectives for admission of a newborn to the NICU; as well as the necessary nursing interventions
- Identify and classify the types of neonatal transport, its objectives and its purpose
- Select the necessary team and equipment to provide appropriate neonatal transport
- Acquire up-to-date knowledge of the therapeutic measures for treating pain in newborns, as well as how to manage the pain in some of the procedures in the NICU

#### Module 23. Neonatal Resuscitation

- Form a resuscitation team and select the necessary equipment to perform neonatal resuscitation
- Gain up-to-date knowledge of resuscitation procedures
- Incorporate the latest information on the recommendations for neonatal resuscitation techniques, acknowledging the neonatal risk factors, as well as general procedures in the lead-up to birth
- Identify special resuscitation situations as well as the basic principles for a successful resuscitation
- Describe the possible complications that can arise during neonatal resuscitation

## tech 14 | Objectives

#### Module 24. Principles of Drug Administration and Vascular Access in Neonatology

- Updating the techniques necessary for the maintenance and removal of the IV and the occurrence of possible complications
- Determine the precautions and contraindications as well as the appearance of possible complications that can occur with each of the specific ways of administering drugs
- Describe the different techniques to cannulate the umbilical artery or vein in a newborn
- Assess the contraindications and the complications of umbilical cannulation
- Update-to-date knowledge of the catheter removal procedure, the precautions which should be taken, its contraindications and complications

#### Module 25. Thermal Management, Pain Control and Sedation of the Newborn

- Describe thermal management in the newborn, its thermoregulation and the use of a neutral thermal environment
- Incorporate newborn temperature assessment guidelines into nursing practice
- Apply hypothermia in the newborn with hypoxic-ischemic encephalopathy as a neuroprotective measure, as well as the neuroprotective mechanisms of action
- Differentiate the indications and contraindications of hypothermia
- Describe the exit criteria once hypothermia has been initiated
- Assess pain control in a newborn as well as the short and long term consequences
  of the pain
- Evaluate the different techniques for measuring pain in a newborn
- Predict the onset of withdrawal syndrome in the newborn and how to manage it

# Module 26. Nursing Interventions: Family Care, Perinatal Death and Neonatal Development

- Explain family-centred care, as well as the ways to promote and rebuild the family bond
- Evaluate the importance of family in the neonatal unit and NICU
- Establish coping strategies for perinatal death, the intervention of professionals if it occurs, the grieving process and the stages
- Relate the influence of the impact of the NICU environment on newborn development
- Target neonatal care which is focused on the development, as well as the interventions, regarding the macro- and micro-environment of the newborn
- Acquire up-to-date knowledge of the nursing staff's own involvement when discharging patients from hospital

#### Module 27. Clinical Nutrition and Hospital Dietetics

- Acquire teamwork skills as a unit in which professionals and other personnel related to the diagnostic evaluation and treatment of dietetics and nutrition are structured in multidisciplinary and interdisciplinary way
- Acquire technical knowledge on the handling of systems and devices necessary for nutritional support in critically ill patients

#### Module 28. Physiology of Infant Nutrition

- Review current trends in premature infant nutrition
- Describe current trends in the nutrition of infants with delayed intrauterine growth and the implication of nutrition on metabolic diseases
- Reflect on the role of human milk as a functional food
- Review the physiology of breastfeeding
- Explain how milk banks work
- Reflect on new trends and models in infant feeding
- Reflect and identify risk factors in school and adolescent nutrition
- Describe the pathophysiological aspects of pediatric diseases
- Reflect on the role of nutrition in autistic children
- Match the different types of malnutrition and their impact on the developing organism
- Update the different educational methods of application in health sciences, as well
  as communication techniques applicable to food and human nutrition with a special
  focus on children and adolescents
- Update knowledge on probiotics and prebiotics in infant feeding
- Reflect on the usefulness of the school cafeteria as an educational vehicle
- Review the relation between physiology and nutrition in the different stages of infant development
- Review and update the role that fats play in children's diets

#### Module 29. Artificial Nutrition in Pediatrics

- Apply Food Science and Nutrition to the practice of pediatric dietetics
- Update the dietary management of oral cavity pathologies in children
- Update knowledge on new formulae used in infant feeding
- Identify children at nutritional risk who are eligible for specific support
- Evaluate and monitor the supervision of children on nutritional support
- Apply the knowledge acquired on nutritional assessment Artificial in Pediatrics

#### Module 30. Infant Malnutrition

- Identify children suffering from malnutrition
- Explain the correct nutritional support for a malnourished child
- Describe the nutritional requirements in the different periods of childhood
- Identify the repercussion that a pregnant and lactating mother's nutrition has on the intrauterine growth and evolution of new-borns and infants

#### Module 31. Childhood Nutrition and Pathologies

- Determine the management of the infant with gastroesophageal reflux
- Reflect on the etiology, repercussions, and treatment of childhood obesity
- Comprehend the implications of nutrition in the growth process and in the prevention and treatment of different pathologies in childhood
- Determine the dietary guidelines for adults with chronic renal failure and on dialysis
- Get up-to-date on the dietary management of dyslipidemias

## tech 16 | Objectives

- Assess the psychological and physiological aspects involved in eating disorders in young children
- Identify the appropriate nutritional therapy for pediatric patients with chronic pulmonary pathology
- Identify exclusion foods in the diets of children with celiac disease
- Explain the dietary management of children with nephropathy
- Reflect on the relationship between constipation and infant nutrition
- Manage diabetic children's diet

# Module 32. Newborn Feeding: Breastfeeding/Formula Feeding and Feeding of the Hospitalized Infant

- Explain what a newborn diet consists of
- Describe the requirements and feeding objectives of the breastfeeding infant
- Gain up-to-date knowledge of the process and the benefits of breastfeeding

#### Module 33. Health Promotion in Schools Integration of the School Nurse

- Identify those aspects of risk that may affect the health of schoolchildren, such as pathologies, psychosocial alterations, etc.) and draw up action plans
- Identify the nutritional needs of healthy children and adolescents, as well as develop menus and diets adapted to students with special needs
- Explain basic hygiene concepts and devise strategies for action in the entire school community (Pediculosis, etc.)
- Describe the current vaccination schedule, apply it correctly and identify possible complications related to the administration of vaccines

#### Module 34. Prevention of Drug Addiction and Other Addictive Behaviors

- Identify the main strategies to prevent drug dependence in the school environment
- Manage the problem of alcohol consumption and its consequences

#### Module 35. School Hygiene and Ergonomics in the School Environment

- Know in depth the relevance of body hygiene
- Explain ergonomics applied to the classroom

# Module 36. Prevention and Attention to Risk Situations and the Most Frequent Diseases in School-Age Children

- Review the vaccination schedule
- Acquire the necessary skills to care for children with pathologies such as diabetes, epilepsy or allergies

#### Module 37. Nursing in Special Education Schools

- Master ICTs in children with special needs
- Know the basics of nutrition and healthy habits

#### Module 38. Action in the Case of an Emergency in the School Environment

- Reference documents from the latest guidelines
- Identify environmental and injury emergencies

#### Module 39. Nursing Methodology in Vaccines

- Identify the different stages of the nursing care process and apply it to the vaccination process
- Integrate the vaccination process within the nursing care process in a theoretical-practical way
- Know in depth the most appropriate standardized nursing diagnoses according to the current methodology within the vaccination process

- Apply the most appropriate nursing interventions for each situation within the vaccination process according to the NIC classification
- Relate the different types of prevention in a community context to the nursing vaccination process
- Integrate the vaccination process within the theoretical nursing specialization and in conjunction with advanced practice nursing
- Determine the actuality of nursing within immunization

#### Module 40. Child Vaccination

- Understand in depth the numerous pediatric immunization schedules existing in the healthcare environment and the main differences between them
- Integrate the bases on which the concept of the paediatric vaccination schedule is based within the disease prevention and health promotion strategies of the different health systems
- Differentiate the stages of vaccination at the pediatric level, from primary vaccination to booster vaccines
- Specialize in the main vaccines, their characteristics and the correct vaccination schedule for the pediatric population aged 0 and 12 months
- In-depth knowledge of the main vaccines, their characteristics and the correct vaccination schedule for the pediatric population between 12 months and 4 years of age
- In-depth knowledge of the main vaccines, their characteristics and the correct vaccination schedule for the pediatric population aged 4 and 14 years
- Specialize in the main vaccines, their characteristics and the correct vaccination schedule for the adolescent population
- Know in depth the differences in the vaccination process in an infant considered premature according to current standards with respect to full-term infants
- Determine the concept of a global immunization strategy GIVS
- Recognize the myths and false beliefs that exist within the pediatric vaccination process

#### Module 41. The Future of Vaccines

- Know the different vaccines currently being created in the world and where they are in the process
- Relate the vaccination process to how it is exposed to the rest of the world through the media in its different ways
- Establish the basis of the concept called reverse vaccinology and to know the genome concept
- Identify the different vaccination strategies existing worldwide by the different existing organizations and their most important differences
- Have an in-depth knowledge of the current anti-vaccine movements and what should be a correct approach in daily practice
- Relate the current epidemiological situation to the COVID-19 situation and vaccines
- Familiarize yourself with the different sources of reliable information available on the web about vaccines information on vaccines in order to be able to pass it on to patients at a later date
- Identify the Vaccine Safety Network concept and know its theoretical basis
- Establish different basic tips when finding reliable scientific information about vaccines on the Internet

# 03 **Skills**

This program aims to develop the necessary skills to provide comprehensive and updated health care. Therefore, during the study program, the professional will be able to acquire the most advanced techniques and procedures in the area of Nursing, deepening in aspects such as Clinical Nutrition or Pediatric Emergencies. In this way, at the end of the program, the student will be able to provide care adapted to the latest scientific evidence in specialties such as Neonatology and Neonatal Care. in specialties such as Neonatology.



## tech 20 | Skills



#### **General Skills**

- Possess knowledge and understanding that provides a basis or opportunity to develop and/or apply original ideas, often in a research context
- Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study
- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Know how to communicate their conclusions, knowledge and reasons to specialized and non-specialized audiences in a clear and unambiguous way
- Acquire study skills that will enable further study in a largely self-directed or autonomous manner
- Develop within the profession in terms of working with other health professionals, acquiring skills to work as a team
- Recognize the need to maintain your professional skills and keep them up to date, with special emphasis on autonomous and continuous learning of new information
- $\bullet$  Develop the capacity for critical analysis and research in your professional field
- Perform this vaccination process safely, improving the quality of care you provide to your patients
- Counsel patients in health education







### **Specific Skills**

- Provide specialized pediatric nursing care at all levels of care, including health promotion, disease prevention and assistance to the healthy or sick newborn, child or adolescent, and their rehabilitation
- Perform the different procedures and techniques in the pediatric setting, facilitating the appropriate interrelation with the child and family
- Comprehensive and contextualized assessment of pediatric patients and their families, detecting any anomalies and possible deficits in their needs
- Manage nursing care aimed at meeting the needs of the pediatric patient and preventing complications, ensuring safe and quality practice
- Provide comprehensive care from an ethical and legal perspective, with respect and tolerance
- Discharge care planning and continuity of care report preparation
- Discharge care planning and continuity of care report preparation
- Elaborate protocols for action in situations of risk in children and adolescents
- Identify the fundamentals and activities necessary to educate school children in values
- Identify those aspects of risk that may affect the health of schoolchildren, such as pathologies, psychosocial alterations, etc., and draw up action plans
- Identify the nutritional needs of healthy children and adolescents, as well as develop menus and diets adapted to students with special needs
- Explain basic hygiene concepts and devise strategies for action in the entire school community

## tech 22 | Skills

- Describe the current vaccination schedule, apply it correctly and identify possible complications related to the administration of vaccines
- Develop a smooth and effective communication plan with parents, as well as with teachers
- Describe the different health controls and examinations in healthy children and adolescents
- Review and acquire skills to deal with accidents, and emergencies at school
- Perform the nursing role in a basic pediatric situation and/or advanced life support situation, according to the latest CKD recommendations
- Prepare and supervise in-hospital and inter-hospital transfer of critically ill pediatric patients
- Manage the main methods and techniques in quantitative and qualitative research applicable in the pediatric field
- Know the most important documentary databases in Health Sciences
- Acquire skills in documentary research through the electronic tools available on the web. Internet search and electronic databases
- Know the characteristics of the different quantitative and qualitative research designs
- Acquire skills in writing materials for publication or presentation at conferences, as well as in critical reading of scientific publications
- Promote healthy lifestyles and self-care, supporting the maintenance of preventive and therapeutic behaviors in children and young people
- Base nursing interventions on scientific evidence and available means
- Establish effective communication with patients, family, social groups, and peers, and promote health education in the pediatric hospital nursing setting

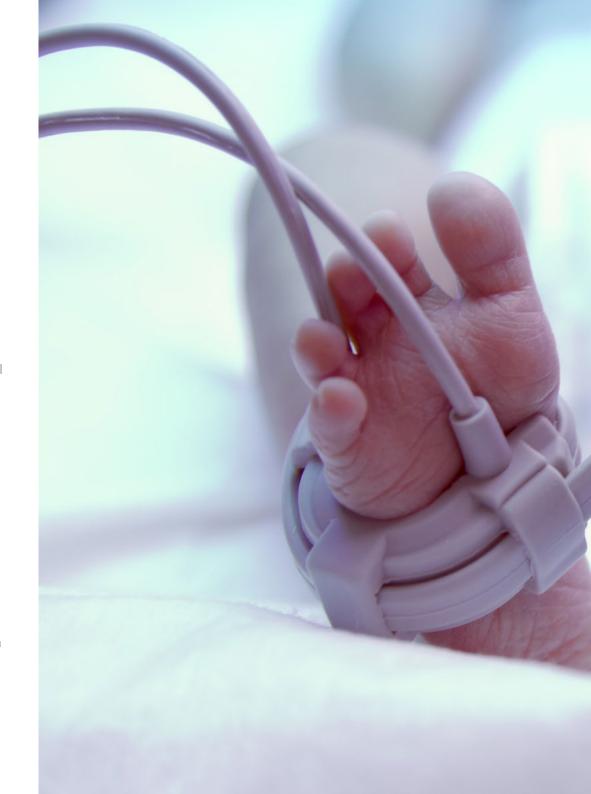
- Acquire skills in the use and indication of medical devices related to pediatric nursing care
- Deepen the knowledge of the different groups of drugs used in children and adolescents, the principles of their authorization, use and indication, and their mechanisms of action
- Know the most frequent pathophysiological processes in childhood and adolescence, as well as their manifestations and the risk factors that determine the states of health and disease in the different stages of the life cycle
- Recognize the most frequent life-threatening situations in childhood and adolescence
- Apply the nursing process to provide and ensure the well-being, quality and safety of the child and youth population (and their families)
- Apply general care during the maternity process to facilitate the adaptation of women and newborns to the new demands, and thus prevent complications
- Perform the different procedures nurses can carry out to safely resolve potentially dangerous situations in pediatric emergencies
- Perform basic and advanced cardiopulmonary resuscitation on children
- Describe the procedure to completely clear the upper airway due to foreign body obstruction
- Perform nursing care on children with endocrinometabolic emergencies
- Assess the degree of pain in the pediatric patient
- Explain the sedoanalgesia procedure and know how to prepare the drugs required for it
- Apply the specific protocols of action for pediatric patients with fever
- Connect the different types of brain damage and their clinical manifestations
- Perform initial assessment of traumatic brain injury
- Identify characteristics of the traumatized child and priorities for assessment and treatment

- State and describe the differences between viral and bacterial meningitis
- Manage pediatric patients with acute intoxication
- Respond to emergencies in special needs children
- Explain and identify the most frequent causes of an apparently lethal episode
- Define anaphylaxis and its clinical manifestations to guide the diagnosis
- List the situations where child abuse is suspect
- Describe burn care, including cleanup, phlyctenas management, draping and analgesia and prophylaxis
- Identify the differential organizational and management characteristics of pediatric emergency departments
- Adapt their decision-making to the current situation, environment, time, and available resources
- Analyze the importance of nutrition in childhood growth processes
- Question nutritional requirements at different stages of childhood
- Determine how to calculate the dietary needs and risks of child and adolescent athletes
- Describe current trends in neonatal nutrition
- Explain how milk banks work
- Screen children who are at nutritional risk for targeted support
- Design an assessment and monitoring plan for children with nutritional support
- Analyze the differences between probiotic and prebiotic foods, and their application in the infant stage
- Develop correct nutritional support for malnourished children
- Describe the etiology, repercussions, and treatment of childhood obesity

- Reltate psychological and physiological aspects involved in eating disorders in young children
- Determine how to manage diabetic children's diet correctly
- Analyze and determine the nutritional support of pediatric oncological patients in different phases of the disease
- Describe methods and programs to promote the health of school children in coordination with other health agents
- Describe methods to identify health problems and inadequate health habits
- Describe the methodology for training others as health promotion agents
- Integrate and develop new and innovative work methodologies adapted to the scientific/research, technological or professional field of child health
- Explain uses and applications of technological tools in the educational field in order to apply them in the field of School Nursing
- $\bullet$  Develop educational and health promotion interventions at school and in the community
- Communicate effectively with children, family, social groups and other educational agents in order to carry out effective Health Education programs
- Define the basic principles of School Nursing and its functions in the European Union
- Describe the role of the nurse in the current educational system in Spain
- Identify necessary foundations and activities to educate in values to the school population
- Describe the normal growth and development of the child in order to detect the most frequent health problems at this stage of life
- Describe the implementation of systems to promote self-care in the school population

## tech 24 | Skills

- Describe methodologies and systems based on natural therapies for their application in the school environment
- Identify the nutritional needs of healthy children and adolescents in order to develop menus and diets adapted to students with special needs
- Explain basic hygiene concepts in order to devise strategies for action in the entire school community
- Describe the appropriate measures to be applied in the event of an emergency at school
- Perform documentation searches through the electronic tools available on the web in order to locate quality information
- Identify the most important documentary databases in the health sciences in order to perform adequate and reliable researches
- Describe the process of critical reading of scientific publications
- Write material to be published or presented at conferences
- Explain the role of the school nurse in special education centers in order to identify and delve into their functions
- Describe the main addictions that can affect children in childhood and their characteristics, in order to detect them early and be able to implement corrective or preventive actions
- Conduct a critical and in-depth study on a topic of scientific interest in the field of School Nursing
- Communicate result findings after having analyzed, evaluated, and synthesized the data
- Act safely in the vaccination process in children, improving the quality of their care
- Providing patients with tools to improve their self-care in health







You are just one step away from getting up-to-date on the latest advances in areas such as artificial nutrition in pediatric patients or protocols for dealing with school health emergencies"





#### **International Guest Director**

Lara Al-Dandachi is one of the few registered dietitians in California, and the rest of the United States, to hold a triple certification in Diabetes Care specialty CDES, Advanced Diabetes Management BC-ADM and in Obesity with Subspecialty Weight Management (CSOWM). Her work as a clinical nutritionist has led her to lead projects such as UCLA Health's Gonda Diabetes Prevention Program, which has received special recognition from the Center for Disease Control and Prevention (CDC) and has allowed her to work with multiple cohorts.

In addition, she coordinates the **Obesity Reduction Program** (PRO) as **Director of Nutrition**. From that group, she is in charge of developing and updating the professional curriculum for **overweight** education **in adults and adolescents**, as well as training new dietitians. In all of these settings, she counsels her patients on how to improve their lifestyle by incorporating **healthy eating** habits, **increased physical activity** and the fundamentals of **Integrative Medicine**.

At the same time, Al-Dandachi continually seeks to stay at the forefront of clinical research in Nutrition. She has attended the Harvard Blackburn Course in Obesity Medicine twice. In those participations, she has received the Certificate of Training in Pediatric and Adult Obesity through the Commission on Dietetic Registration (CDR), the accrediting agency of the American Academy of Nutrition and Dietetics.

Also, her mastery of this healthcare field allows her to provide **personalized care** to patients with rare conditions such as latent **Autoimmune Diabetes** in adulthood. She has also worked in her **Public Health** internship as a volunteer, collaborating with **underprivileged populations** in initiatives for HIV education and prevention, the Head Start program, among others.



## Ms. Al-Dandachi, Lara

- Nutrition Director of the Obesity Reduction Program at UCLA Health, California, United States
- Clinical Dietitian with CareMore Health Plan
- Director of Nutrition at Hollywood Presbyterian Medical Center
- Clinical Dietitian at Sodexho Health Care Services
- Clinical Dietitian at Beverly Hospital
- Master's Degree in Public Health at Loma Linda University
- Bachelor of Science in Nutrition Science and Dietetics at the American University of Beirut



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

#### **International Guest Director**

Dr. Todd Florin is a recognized Pediatric Emergency Physician and clinical epidemiologist, expert in Lower Respiratory Tract Infections in children, especially in the field of Bronchiolitis and Pneumonia. In addition, at international level, he is a leader in the use of biomarkers and predictive analysis to improve the diagnosis and treatment of these conditions.

In this way, he has served as Director of Research in Emergency Medicine at the Ann & Robert H. Lurie Children's Hospital in Chicago. In addition, at the same hospital, he has directed the Grainger Research Program in Pediatric Emergency Medicine, where he has led key projects, such as the CARPE DIEM study (Catalyzing Ambulatory Research in Pneumonia Etiology and Diagnostic Innovations in Emergency Medicine), a pioneering investigation of community-acquired pneumonia, as well as other global studies, such as PERN, focused on understanding the severity of pneumonia and the impact of COVID-19 in children.

Dr. Todd Florin has also received numerous awards for his outstanding medical and research work, including the Young Investigator Award from the Academic Pediatric Association, and has been recognized for his research leadership and mentorship at renowned institutions such as Cincinnati Children's Hospital Medical Center. His vision of combining translational science with clinical care has driven significant advances in the management of Pediatric Respiratory Infections.

In fact, his work has been endorsed by prestigious institutions such as the National Heart, Lung and Blood Institute and the National Institute of Allergy and Infectious Diseases. In addition, his focus on Precision Medicine has transformed the way Respiratory Infections in children are managed, contributing to the reduction of unnecessary antibiotic use.



## Dr. Florin, Todd

- Director of Emergency Medicine Research, Ann & Robert H. Lurie Children's Hospital, Chicago, United States.
- Chief of the Grainger Research Program in Pediatric Emergency Medicine at Ann & Robert H. Lurie Children's Hospital
- Assistant Physician, Division of Emergency Medicine, Ann & Robert H. Lurie Children's Hospital
- Principal Investigator of the Catalyzing Ambulatory Research in Pneumonia Etiology and Diagnostic Innovations in Emergency Medicine Study (CARPE DIEM)
- Director of Strategy and Operations at the Society for Pediatric Research
- Specialist in Pediatric Emergency Medicine at the Children's Hospital of Philadelphia
- Doctor of Medicine from the University of Rochester
- Master's Degree in Clinical Epidemiology from the University of Pennsylvania
- B.A. in Music from the University of Rochester

- Young Investigator Award from the Academic Pediatric Association
- Member of:
  - Academic Pediatric Association
  - American Academy of Pediatrics
  - Pediatric Infectious Diseases Society
  - Society for Academic Emergency Medicine
  - Society for Pediatric Research



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#### **Guest Director**



#### Dr. García Briñón, Miguel Ángel

- Emergency Nurse Practitioner
- Supervisor of the Emergencies Department of the Clinical Hospital San Carlos of Madric
- Supervisor of the Neonates-Ophthalmology Unit at the San Carlos Clinical Hospital
- Nurse collaborator in the Multipharma pharmaceuticals "InMEDIATE" study
- Degree in Nursing
- Master's Degree in Health Services and Health Companies Management
- Expert in Out-of-Hospital Emergencies and Urgencies by the European University of Madrid

#### Management



#### Ms. Alfaro Ramírez, Concepción

- Specialist in Pediatric Nursing
- Nursing Supervisor of the Pediatrics Service of the Hospital Vithas Valencia 9 de Octubre
- University Professor in the "Diploma in Neonatal Nursing and Neonatal Intensive Care" at the CEU Cardenal Herrera University
- Teacher in the Child Nutrition Course of the Nisa Hospitals Foundation
- Diploma in Nursing from the University Catholic of Valencia



#### Ms. Roldán del Amo, Adela

- Specialist in Pediatric Nursing
- Pediatric Nurse in the Pediatric Hospitalization Unit at Vithas Nisa 9 de Octubre Hospitalization
- University Professor in the areas of Neonatal Nursing and Neonatal Intensive Care, First Aid, Cardiopulmonary Resuscitation and Emergency Situations
- University Diploma in Nursing from the University School of Nursing Nuestra Señora de los Desamparados in Valencia



#### Ms. Aunión Lavarías, María Eugenia

- Pharmacist and Clinical Nutrition Expert
- Author of the reference book in the field of Clinical Nutrition Dietary Management of Overweight in the Pharmacy Office"
- Pharmacist with extensive experience in the public and private sector
- Pharmacist in Valencia Pharmacy
- Pharmacy Assistant in the British pharmacy and health and beauty retail chain Boots, Uk
- Degree in Pharmacy and Food Science and Technology from the University of Valencia
- Head of Postgraduate Certificate Dermocosmetics in the Pharmacy Office



#### Dr. López Ruiz, María Amparo

- Pediatric medicine Doctor
- Area Supervisor in Health of Castilla y León (SACYL)
- Coordinator of Medicine at CEU Cardenal Herrera University
- University Professor of Nursing, Medicine and Pharmacy, specifically in the areas of: Pediatric Emergencies, Neonatal Nursing, Intensive Care, First Aid, Cardiopulmonary Resuscitation and Emergency Situations, and Advanced Aesthetic and Laser Techniques
- Coordinator of Medicine in Erasmus Internships for Medicine and at CEU Cardenal Herrera University
- Personal Tutor for international students of Medicine at CEU Cardenal Herrera University
- Entrepreneurship tutor for Medicine at the University CEU Cardenal Herrera
- Nestlé Award for Best Oral Communication at the XXIV National Congress of the Spanish Society of Outpatient Pediatrics and Primary Care, held in Murcia, for the paper: *Analysis of the use of Analgesic-Antipyretics in pediatric patients attending an emergency department*"
- Doctor Cum Laude in Outstanding Medicine by the University CEU Cardenal Herrera with the Thesis: Analysis of medication in a pediatric population attending an emergency department
   Degree in Medicine and Surgery from the University of Valencia
   Expert in Neonatology: Premature Newborn Care



#### Ms. Ortiz Vela, María del Mar

- School Nurse at the Virgen de la Luz Special Education School. Elche, Spain
- President of the Spanish Scientific Society of School Nursing
- Member of the Official College of Nursing of Alicante
- Nurse at the General University Hospital of Elche
- Master's Degree in Nursing Sciences from the University of Alicante
- University Specialist in Health Education
- University Specialist in Prevention and Drug Addictions
- Technician Promotion of Health
- · Member of the scientific Spanish Society of School Nursing



#### Ms. Hernández Solís, Andrea

- Family and Community Nurse in the Madrid Health Service (SERMAS)
- Nurse in the Intensive Care Unit at the Puerta de Hierro University Hospita
- Nurse Specialist in Family and Community Nursing at Getafe University Hospital
- Teacher at the Foundation for the Development of Nursing (FUDEN)
- Diploma in Nursing from the Autonomous University of Madrid

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#### **Professors**

#### Dr. Estevez García, Adolfo

- Specialized Nurse in Out-of-Hospital Urgencies and Emergencies
- Nurse in the Emergency Department, Hospital Clínico San Carlos, Madrid
- Laboratory technician specialized in Anatomic Pathology
- Teacher Collaborator of Practices of the Faculty of Nursing, Physiotherapy and Podiatry at the Complutense University of Madrid
- Degree in Nursing from the European University of Madrid
- Expert in Emergency Nursing and Outpatient Emergencies by the European University of Madrid
- Course on Pediatric Triage at Gregorio Marañón Hospital

#### Dr. Cozar López, Gabriel

- Emergency Nurse and Researcher
- Nurse in the Emergency Department at Clinical Hospital San Carlos
- Collaborator with the Health Research Institute at the Clinical Hospital San Carlos in Madrid
- Degree in Nursing from the University of Alcalá
- Master's Degree in Urgencies, Emergencies and Critical Care in Nursing from the European University of Madrid
- Teaching Member of the Foundation for Nursing Development

#### Ms. Lorenzo Salinas, Almudena

- Emergency Nurse Practitioner
- Nurse in the Emergency Department at the San Carlos Clinical Hospital in Madrid
- Graduate in Nursing from the University School of Nursing Fundación Jiménez Díaz
- Expert in Urgencies and Emergencies by the School of Health Sciences of the Nursing Collegiate Organization, Center attached to the Complutense University of Madrid
- Course in Nursing in the neonatal adaptation to extrauterine life

#### Ms. Espílez Laredo, Irene

- Nurse Practitioner in Intensive Care and Emergency Medicine
- Nurse in the Emergency Department at the San Carlos Clinical Hospital in Madrid
- Degree in Nursing from the Complutense University of Madrid
- Master's Degree in Intensive Care from the University of Avila
- Pediatric Specialist in life-threatening situations with CODEM
- Expert in Out-of-Hospital Accidents and Emergencies
- Higher Module in Clinical Laboratory Technician by the Puerta de Hierro University Hospital

#### Ms. Alonso Pérez, Marta

- Nurse Practitioner in Intensive Care and Emergency Medicine
- Nurse in the Emergency Department at Clinical Hospital San Carlos in Madrid
- Degree in Nursing from the Complutense University of Madrid
- Master's Degree in Intensive Care Nursing from CEU San Pablo University
- Postgraduate Diploma in Nursing Processes and Interventions for Pediatric Patients in Life-Threatening Situations, University of Avila, Spain
- Expert in Out-of-Hospital Accidents and Emergencies with FUDEN
- Diploma in Advanced Cardiopulmonary Resuscitation in Pediatrics and Neonatal

#### Ms. Antón García, Gema

- Obstetrics Service Nurse at the General University Hospital of Elche
- Obstetrics clinical practice tutor at the Hospital General Universitario de Elche
- University Diploma in Nursing (DUE) at the University School of Nursing. Alicante, Spain
- Professional experience in childbirth and neonatology

#### Ms. Lospitao Gómez, Sara

- Intensive Care and Interventional Cardiology Nurse at Hospital Universitario de Fuenlabrada (HUF)
- Nurse of the Post-Surgical Intensive Care Unit (PICU) of Cardiac Surgery at the Hospital Universitario 12 de Octubre (HUF)
- Coronary Intensive Care Unit Nurse at the Hospital Universitario de la Hospital Universitario 12 de Octubre
- Nurse of the Interventional Cardiology Unit (Hemodynamics, EEF and Implants)
- Responsible for the #TEAyudamos program at HUF and member of the #JuntosXEICáncer group
- Instructor in Advanced Life Support by the National CPR Plan of the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units (SEMICyUC) Member of: Care Sub-Commission (HUF), Care Commission (HUF), Secretary of the Ulcers and Wounds Working Group (HUF)

#### D. Mora Rivero, Jorge

- Emergency Nurse Practitioner
- Emergency Nurse at the General University Hospital of Elche
- University tutor for clinical training
- Professional teaching experience in University Masters and Postgraduate Courses
- Degree in Nursing from the University of Alicante
- Master's Degree in Nursing Sciences
- Postgraduate Diploma in Primary Care Emergencies
- Degree in Emergency Medical Transportation (SAMU)

#### Ms. Balboa Navarro, Ana

- Emergencies Service Nurse at the General University Hospital of Elche
- Teacher in academic institutions
- Instructor of Basic Life Support and Advanced Cardiovascular Life Support at the Spanish Society of Emergency Medicine and American Heart Association (SEMES-AHA)
- Pediatric and Neonatal CPR Instructor for the Spanish Group of Pediatric and Neonatal CPR (GERCPPN)
- American Academy of Pediatrics and American College of Emergency Physicians
- Diploma in Nursing from the University of Alicante
- Master' Official in Nursing Sciences, University of Alicante

#### Dr. López Peña, Rafael

- Pediatrician and Neonatology Specialist
- Pediatrician, specialist in PICU and NICU
- Pediatrician. University and Polytechnic Hospital La Fe, Valencia
- Doctor of Medicine "Cum Laude" from the University of Valencia
- Degree in Medicine and Surgery from the University of Valencia
- Postgraduate Diploma in Neonatology

#### Dr. Rojas Otero, Lucila

- Pediatric Specialist in Valencia
- Pediatrician, specialist in PICU and NICU
- Specialist Pediatrics Medicine Consultation 9 de Octubre, Valencia, Spain
- Degree in Medicine and Surgery from the University of Zaragoza
- Postgraduate Diploma in Neonatology

#### Ms. Iranzo Cobo del Prado, Rosana

- Nurse of the Pediatric Hospitalization Service of the Hospital Universitario and Polytechnic la Fe of Valencia
- University Lecturer of the Nursing Degree at the Universidad Cardenal Herrera CEU
- Graduate in Nursing

#### Ms. Ribes Roldán, Sandra

- Nurse at the 9 Octubre Hospital
- Lecturer in postgraduate studies related to nursing
- Graduate in Nursing

#### Dr. Moreno Royo, Lucrecia

- Professor of Pharmacology at CEU Cardenal Herrera University
- Honorary Member of the Valencian Medical Institute
- British Medical Journal Case Reports Reviewer
- PhD in Pharmacy from the University of Valencia
- Degree in Pharmacy from the University of Valencia
- Honors: 21st Sandalio Miguel-María Aparicio Prize, awarded by the Domus Cultural Institution Foundation, 1st Prize in the Distribution section for the Neuroprotected Cities project, by the Go Health Awards, Prize of the Royal Academy of Medicine and Surgery of Valencia
- Member of the Scientific Committee of: Young Pharmaceutical Care Spain, Ars Pharmaceutica, Community Pharmacists, Pharmaceutical Care

#### Dr. Sanahuja Santafé, Maria Amparo

- Research expert in Cell Biology
- PhD Coordinator
- Assistant Professor in the Department from Pharmacy at the Faculty of Health Sciences
  of the CEU Cardenal Herrera University
- Co-author of several publications and of the work Medicinal Potential of our plants.
   Resources of the past, present and future, winner of the RÖEL award by the Valencian Medical Institute
- Doctor of Pharmacy

#### Dr. Silvestre Castelló, Dolores

- Specialist in Nutrition, Dietetics and Diet Therapy
- Associate Professor of Nutrition and Bromatology at CEU Cardenal Herrera University
- Regular collaborator of the Valencian School for Health, as a teacher in the postgraduate courses of Nutrition
- Chemical Sciences PhD from the University of Valencia
- Diploma in Food Technology from the Consejo Superior de Investigaciones Científicas (CSIC)
- Postgraduate degree in Nutrition, Dietetics and Diet Therapy by the University of Navarra

#### Ms. Juan Hidalgo, Alicia

- Clinical psychologist in private practice
- Teacher in university studies on Psychology
- Degree in Psychology from the University of Valencia

#### Dr. Bendala Tufanisco, Elena

- Specialized Researcher in Retina and Diabetes
- Teacher of Biomedical Sciences of the Faculty of Health Sciences at CEU Cardenal Herrera University
- Physician at the University of Kansas Medical Center
- Researcher at the Valencian Foundation for Advanced Studies
- Researcher at the Premios Rey Juan Carlos I Foundation
- Degree in Medicine and Surgery from the University of Valencia
- Degree in Biology from the University of Valencia
- D. in Biochemistry and Molecular Biology with Cum Laude from the University of Valencia

#### Dr. Julve Chover, Natalia

- Specialist in Pediatric Neurology
- Head of the Pediatrics, Neuropediatrics and Neonatal and Pediatric Intensive Care Units. IMED Valencia
- Attending Physician. Pediatrics and PICU-Neonatal Service, NISA
- Doctor of Medicine "Cum Laude" from the University of Valencia
- Degree in Medicine and Surgery from the University of Valencia
- Specialist in Child Neurology
- Postgraduate Diploma in Neonatology

#### Dr. Navarro Marí, Rosa María

- Specialist in Pediatrics at Vithas 9 de Octubre and and Valencia Consuelo
- Associate Physician, Pediatrics Service and PICU-Neonatal Unit, NISA
- Degree in Medicine and Surgery from the University of Valencia
- Postgraduate Diploma in Neonatology
- Medical Puericulture Diploma by the Departmental School of Puericulture of Valencia
- Medical Specialist Degree in Pediatrics and its specific areas by the Ministry of Education and Science
- Advanced Cardiopulmonary Resuscitation Diploma Accredited by the Spanish Group of Pediatric and Neonatal Cardiopulmonary Resuscitation
- University Expert in Neonatology by the Catholic University of Valencia
- Master's Degree in Neonatology from SENEO

#### Mr. Martínez Dolz, Jesús

- Nurse Expert in Neonatal Care and Pediatric Intensive Care
- Pediatric Nurse at Hospital Universitario y Politécnico La Fe
- Pediatric Nurse at Nisa 9 Hospital
- Pediatric Nurse at the Virgen del Consuelo Hospital
- Pediatric Nurse at Hospital Clínico Universitario de Valencia
- Degree in Nursing from the University of Valencia

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#### Dr. Sendra Más. Juan Amaro

- Assistant Physician of the Emergency Service at the Vega Baja Hospital. Alicante, Spain
- Emergency Physician in the Specialized Medical Unit (UME 1)
- Doctor in the Emergency Medical Attention Service (SAMU)
- Medical Helicopter Doctor
- Degree in Medicine and Surgery from the University of Alicante
- Specialist in Family and Community Medicine
- Accredited Professor of the Spanish Society of Emergency Medicine
- Member of the Spanish Society of Emergency Medicine

#### Ms. Martínez González, María del Carmen

- Psychologist at Fisioclinic Sonia del Río
- Psychologist and Researcher
- Training Consultant for the Valencian Health Agency
- Training Consultant at Systems Maintenance Services Europe
- Human Resources Consultant
- Degree in Psychology from Miguel Hernández University. Elche, Spain
- Master's Degree in Human Resources Management by FUNDESEM Business School

#### Ms. Mascarell Torres, Natalia

- School Nurse Expert in Functional Diversity
- School Nurse in Primary Education Centers
- Nurse at the Les Talaies Occupational Center and Residence
- Postgraduate Certificate in Nursing

#### Dr. Barberán Valero, Sebastián

- Respiratory Obstruction and Cardiovascular Arrest Pediatrician
- Pediatrician at Pasarela Medical Center
- Pediatrician at Alzira Health Center
- Autonomous representative of the Spanish Group of Pediatric and Neonatal CPR
- Coordinator of the Journal of the Spanish Society of Pediatric Emergencies
- Secretary of the Valencian Pediatrics Society
- Member of the Spanish Society of Pediatric Emergencies

#### Dr. Martín Peñalver, Ricardo

- School Nurse Specialist
- Professional Master's Degree in School Nursing from the University of Barcelona
- Master's Degree in Chronic Patient Care in Primary Care from the University of Barcelona
- Postgraduate Specialist in Gerontology and Geriatric Nursing from the University of Alicante
- University Specialist in Nursing Research by the University of Alicante, Spain
- University Specialist in Nursing Management Services by the University of Alicante
- Diploma in Nursing
- Secretary of the Valencian Association of Diabetes Educators
- Member of the College of Nursing of Alicante

#### Ms. Marcos, Ángela

- School Nurse at Virgen de La Luz School
- Postgraduate Certificate in Nursing
- Master's Degree in School Nursing
- Higher Technician in Dietetics and Nutrition
- Volunteer at the Association for the Mentally Handicapped of Alicante (APSA)

#### Dr. Neipp López, María del Carmen

- Deputy Vice-Rector for Studies for the Accreditation of Degrees in Psychology
- Psychology Professor
- Vice-Dean of Psychology at the Faculty of Social and Health Sciences
- European Doctorate in Psychology from the Miguel Hernández University
- Psychology Degree from the Universidad Pontificia de Salamanca

#### Ms. Ferrer Calvo, María Aranzazu

- School nurse at Highlands El Encinar school Madrid
- University Diploma from Nursing at the Pontificia de Comillas University Madrid, Spain
- Postgraduate Diploma in School Nursing by San Pablo CEU University
- Basic Life Support provider course for health professionals within the SEMES-AHA
   Cardiovascular Care program
- Advanced Provider Course of the International Trauma Life Support given by the Illustrious Official College of Physicians of Madrid
- Postgraduate Course in Nursing in Primary and Specialized Care given by the the Foundation for the Development of Nursing (FUDEN)
- Postgraduate Course in Medical-Surgical Nursing by the Foundation for the Development of Nursing (FUDEN)
- Postgraduate Course in Maternal and Infant Nursing by the Foundation for Nursing Development (FUDEN)
- Primary School Teacher Degree with a major in English at the International University of La Rioja
- Training Course for Teachers of Spanish as a Foreign Language by the Fundación para la Investigación y the Foundation for the Research and Development of Spanish Culture (FIDESCU)

#### Dr. Manrique Martínez, Ignacio

- Director of the Valencian Paediatrics Institute (IVP)
- President of the Spanish Group of Pediatric and Neonatal CPR (GERCPPN)
- Head of the Pediatric Emergency Department at Vithas Valencia Hospital
- Head of the Short Stay and Pediatric Hospitalization Unit at the Hospital
- Head of the Pediatrics Service at IMED Hospital. Valencia, Spain
- Director of the Advanced Pediatric Life Support (APLS) Course, at the American Academy of Pediatrics
- Director of the Advanced Pediatric Life Support (APLS) Course, at the American Academy of Pediatrics and the American College of Emergency Physicians
- Pediatric and neonatal CPR instructor by the Spanish Group of Pediatric and Neonatal CPR
- Degree in Medicine and Surgery
- Specialist in Pediatrics and Specific Areas
- Accreditation as a Specialist in Pediatric Emergencies by the Spanish Association of Pediatrics (AEP)

#### Dr. Sáez Cárdenas, Salvador

- Nurse specialized in Health Pedagogy
- Co-author of Health Education. Techniques for working with small groups
- Professor in the Nursing Department in the University of Lleida
- Coordinator of the Master's Degree in Health Education at the University of Lleida
- Diploma in Nursing from the University of Lleida
- Degree in Pedagogy

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#### Dr. Pérez Losa, Rosa

- EMS Emergency Coordinator. Cataluña, España
- Responsible for Outreach Secretary at the Spanish Society of Urgent and Emergency Medicine (SEMES)
- Nurse Specialist in Health Education 2.0
- Editor and creator of audiovisual content of Health Education in Rosa's Blog
- Co-organizer of the Audiovisual Communication and Health Conference
- PhD in Audiovisual Language in Health Education
- Degree in Anthropology
- Postgraduate Certificate in Nursing
- Master's Degree in Health Education
- Postgraduate University Lecturer in Urgencies and Emergencies
- University Professor of Innovation, Technology and Health 2.0
- Member of the Innovation and Technology Group at the College of Nursing of Barcelona

#### Ms. Carmona Moreno, Alicia

- School Nurse at Mas Camarena Educational Complex. Bétera, Spain
- Provincial coordinator of the ENSE group. Valencia, Spain
- Master's Degree in Nursing School by the Catholic University of Valencia
- Member of the Spanish Society of School Nursing

#### Ms. Dobón García, Ana María

- Lawyer expert in Health Law and Family Law
- Professional lawyer in professional practice in Valencia
- Legal mediator in several law firms in Valencia
- Degree in Law from the University of Valencia

#### Ms. Cascales Pérez, María Luisa

- Nurse dedicated to Family and Community Care
- Nurse dedicated to Family and Community Care
- Supervisor of residents in the Specialty of Family and Community Nursing
- Graduate's Degree in Nurses from the Catholic University San Antonio Murcia
- Members of the Official College of Nursing of the region of Murcia

#### Ms. Trescastro López, Silvia

- Nurse in the General University Hospital of Alicante
- Nurse dedicated to School Nutrition and Dietetics
- Collaborator in School Nursing Projects in Centers of Primary and Secondary Education Schools
- Master's Degree in Nursing School by the Catholic University of Valencia

#### Ms. Vicente Ortiz, Anna

- School Nurse at the Miguel de Cervantes Special Education School Elda, España
- Master's Degree in Nursing School by the Catholic University of Valencia
- Professional Master's Degree in Nursing School by the University of Barcelona
- Diploma in Nursing from the University of Alicante

#### Dr. Antona Rodríguez, Alfonso

- Head of International Projects and Development Cooperation in the Madrid City Council
- Technical advisor to the General Directorate of Public Health of the Madrid City Council
- Nursing Degree in Social and Cultural Anthropology
- Master's Degree in Human Sexuality

#### Ms. Rodrigues Fernández, Erica

- Nurse Specialist in Pediatrics and Neonatology
- Neonatal Nurse the Fundación from Alcorcón University Hospital
- Pediatric Nurse at the Health Center La Rivota
- Radiology Nurse at Hospital Universitario Puerta de Hierro Majadahonda
- Intensive Care Nurse at the Hospital Puerta de Hierro Majadahonda
- Diploma in Nursing from the Autonomous University of Madrid

#### Ms. Anula Morales, Irene

- Specialist Nurse in the Mental Health Unit of the Puerta de Hierro Majadahonda University Hospital
- Specialist Nurse in Mental Health in the Foundation for the Development of Nursing
- Nurse Specialist at the Mid-Stay Unit for Adolescents with Severe Mental Disorder at Casta Salud
- Specialist Nurse in the Acute Psychiatric Unit at the Fundación Jiménez Díaz University Hospital
- Short-stay Nurse at the Short-stay Hospitalization Unit for Children and Adolescents at the Puerta de Hierro University Hospital
- Diploma in Nursing from the Autonomous University of Madrid



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#### Module 1. Basics and Fundamentals of Nursing in Child and Adolescent Care

- 1.1. Legislation
- 1.2. Professional Secrecy
- 1.3. Pediatric Nurse Practitioner Profile
- 1.4. Pediatric Nursing Care Methodology
- 1.5. NANDA-NIC-NOC Nursing Process
- 1.6. Childhood Care
- 1.7. Adolescent Care
- 1.8. Child Abuse
- 1.9. Master Class Session

#### Module 2. Maternal and Infant Follow-up and Delivery Care

- 2.1. Preconception consultation. Pregnancy through Assisted Reproductive Techniques
- 2.2. Physical Activity during Pregnancy
- 2.3. Healthy Lifestyle Habits during Pregnancy
- 2.4. Stages of Pregnancy
- 2.5. Birth
- 2.6. Postpartum Recovery
- 2.7. Normal Newborn
- 2.8. Pathological Newborn
- 2.9. Puerperium
- 2.10. Mental Health in Pregnancy
- 2.11. Master Class Session

#### Module 3. Newborn Nursing Care

- 3.1. General Concepts of Perinatology
- 3.2. Physical Examination of Newborns
- 3.3. Health Problems in Newborns
- 3.4. Immediate nursing care after birth
- 3.5. Newborn care and hygiene
- 3.6. Nursing care of the premature newborn
- 3.7. Breastfeeding
- 3.8. Post-Term Newborn
- 3.9. Identification and custody of the newborn
- 3.10. Umbilical Cord Blood Donation

#### Module 4. Caring for Healthy Children

- 4.1. Health Examinations
- 4.2. Scientific evidence on the contents of health checkups
- 4.3. Child Development
- 4.4. Breastfeeding and artificial feeding
- 4.5. Infant and Preschool Feeding
- 4.6. School and Adolescent Nutrition
- 4.7. Vaccines
- 4.8. Four key ideas health, promotion, prevention and education
- 4.9. School Health
  - 4.9.1. Health as Cross-Cutting Issue at School
  - 4.9.2. Nurse School Role
  - 4.9.3. School Nurse: An Interdisciplinary Reality
- 4.10. Physical activity as a source of health in children

#### Module 5. Care for Children with Health Problems

- 5.1. Dermatological Care at Pediatric Age
- 5.2. Nutritional, metabolic and endocrine disorders
- 5.3. Pediatric Care for Problems Related to the Digestive Tract
  - 5.3.1. Pediatric Care for Problems Related to the Digestive Tract: Gastroesophageal Reflux
  - 5.3.2. Pediatric Care for Problems Related to the Digestive Tract: Coeliac Disease
  - 5.3.3. Pediatric Care for Problems Related to the Digestive Tract: Constipation
- 5.4. Psychosocial Approach Pediatric Age. ASD AND ADHD
- 5.5. Pediatric Care for Problems Related to the Cardiovascular Tract. Congenital Heart Disease
- 5.6. Pediatric Care for Problems Related to the Respiratory Tract
  - 5.6.1. Pediatric Care for Problems Related to the Respiratory Tract: Managing a Child with a Persistent Cough Chronic cough
  - 5.6.2. Pediatric Care for Problems Related to the Respiratory Tract: Caring for Asthmatic Children
- 5.7. Acute headache in childhood
- 5.8. Palpebral and Lacrimal Pathology in Children
- 5.9. Pediatric Care for Problems Related to the Urinary Tract: UTI
- 5.10. Child Limping

#### Module 6. Research Methodology in Pediatric Nursing

- 6.1. Recovery of Quality Information Specializing in Health Sciences
  - 6.1.1. Development of a Bibliographic Search
  - 6.1.2. Knowledge of Different Information Sources: General Search Engines (Google Scholar, Scopus). Databases (PubMed, Embase, Cinahl) and Clearinghouse Clinical Practice Guidelines
  - 6.1.3. Designing Complex Search Strategies
  - 6.1.4. Refinement of Search Results
  - 6.1.5. Creating Bibliographic Alerts
- 6.2. Bibliographic Reference Management
  - 6.2.1. Introduction to Bibliographic Reference Managers
  - 6.2.2. Importing References into the Zotero Reference Manager
  - 6.2.3. Extracting Metadata from .pdf Files
  - 6.2.4. Use of Tags or Metatags to Classify the Bibliography
  - 6.2.5. Including References in the Text (Word). Vancouver Style
  - 6.2.6. Social Web and Group Work

- 6.3. Critical Reading on Outcomes Research
  - 6.3.1. Introduction. Critical Reading
  - 6.3.2. Some Basic Concepts in Epidemiology
  - 6.3.3. Qualitative Research Designs
  - 6.3.4. Quantitative Research Designs
  - 6.3.5. Instruments for Critical Reading
- 6.4. How to Prepare a Research Protocol
  - 6.4.1. Headings that Make Up the Protocol of a Research Project
  - 6.4.2. Editorial Staff articles with Scientific Structure
  - 6.4.3. Writing a Case Report, Review, Qualitative Research Article, and a Thesis or Dissertation
  - 6.4.4. Style in Scientific Communication

#### Module 7. Health Care Organization for Common Pediatric Emergencies

- 7.1. Equipment in the Pediatric Emergency Department (PED)
  - 7.1.1. Differential Characteristics of PEDs
  - 7.1.2. Infrastructure, Staffing
  - 7.1.3. Material
- 7.2. Triage in Pediatrics
  - 7.2.1. Definition
  - 7.2.2. Classification Systems
- 7.3. Transport of Critical Pediatric Patient. In-hospital Transfer, Out-of-Hospital Transfer and ISOBAR
- 7.4. Neonatal and Pediatric Transportation

#### Module 8. Common Advanced Pediatric and Neonatal Cardiovascular Support

- 8.1. Apparently Lethal Syndromes
  - 8.1.1. Sudden Infant Death
  - 8.1.2. Treatment
  - 8.1.3. Home Monitoring
- 3.2. Recognition and Management of Critically III Children
  - 8.2.1. Epidemiology, Etiology and Prevention of CRP in Childhood
  - 8.2.2. Pediatric Assessment Triangle (PAT) and its Utility
  - 8.2.3. Pediatric ABCDE Evaluation

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- 8.3. Basic Pediatric Cardiopulmonary Resuscitation
- 8.4. Advanced Pediatric Cardiopulmonary Resuscitation Advanced Airway Management
- 8.5. Basic Concepts of Mechanical Ventilation
- 8.6. Infusion Routes and Drugs
- 8.7. Pediatric AVS Algorithms and Treatment of Arrhythmias
- 8.8. Neonatal Resuscitation
- 8.9. Stabilization, Post-Resuscitation and Neonatal Transportation

#### Module 9. Invasive Techniques in Common Critically III Pediatric Patients

- 9.1. Peripheral and Central Vein Access
  - 9.1.1. Peripheral Route
  - 9.1.2. Central Route
- 9.2. Intraosseous Puncture
- 9.3. Capnography. Pulse Oximetry
- 9.4. Oxygen Therapy
- 9.5. Analgesia and Sedation
  - 9.5.1. Approaching Pain
  - 9.5.2. Procedure
  - 9.5.3. Reference Drugs in Analgesia and Sedation
- 9.6. Protocol for Child Death
- 9.7. Rapid Intubation Sequence

#### Module 10. Cardiologic Emergencies

- 10.1. Arrhythmias and Syncope
  - 10.1.1. Bradyarrhythmias Diagnosis and Treatment
  - 10.1.2. Tachyarrhythmias Diagnosis and Treatment
- 10.2. Congenital Heart Disease
  - 10.2.1. Cyanotic Congenital Heart Disease
  - 10.2.2. Non-Cyanotic Congenital Heart Disease
  - 10.2.3. Diagnostic Approach
  - 10.2.4. Treatment
- 10.3. Hypertensive Crisis
  - 10.3.1. Diagnostic Guidance for Hypertension in Children and Adolescents
  - 10.3.2. Therapeutic Guidance for Hypertension in Children and Adolescents

- 10.4. Heart Failure
  - 10.4.1. Etiology
  - 10.4.2. Diagnosis
  - 10.4.3. Treatment. Mechanical Ventricular Assistance Techniques Extracorporeal Membrane Oxygenation (ECMO)
- 10.5. Quick Reading of an ECG
- 10.6. Management of Tachyarrhythmias and Bradyarrhythmias: Electrical Cardioversion and Transcutaneous Pacing
- 10.7. Management of Defibrillable Arrhythmias: Defibrillation

#### Module 11. Respiratory Emergencies

- 11.1. Respiratory Pathology in Recent Newborns
  - 11.1.1. Incomplete Pulmonary Fluid Reabsorption Syndrome
  - 11.1.2. Meconium Aspiration Syndrome
  - 11.1.3. Hyaline Membrane Disease
  - 11.1.4. Pneumothorax
  - 11.1.5. Pneumonia
  - 11.1.6. Apnea in Newborns
- 11.2. Airway Diseases
  - 11.2.1. Acute Pharyngotonsillitis
  - 11.2.2. Laryngitis or Croup
  - 11.2.3. Spasmodic Croup
  - 11.2.4. Otitis
  - 11.2.5. Sinusitis
- 11.3. Community-Acquired Pneumonia (CAP)
  - 11.3.1. Diagnosis
  - 11.3.2. Hospital Admission Criteria
  - 11.3.3. Latest Advances in Treatment
- 11.4. Managing a Child with a Persistent Cough Chronic cough
  - 11.4.1. Etiology
    - 11.4.1.1. Persistent Bacterial Bronchitis
    - 11.4.1.2. Asthma
    - 11.4.1.3. Gastroesophageal Reflux, etc
  - 11.4.2. Treatment

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- 11.5. Caring for Asthmatic Children
  - 11.5.1. Clinical Diagnosis. Functional Diagnosis
  - 11.5.2. Pharmacological Treatment. Non-Pharmacological Treatment
  - 11.5.3. Health Education
- 11.6. Inhalation Techniques Oxygen Therapy
- 11.7. Thoracentesis and Chest Tube Placement
- 11.8. Forced Spirometry Bronchodynamic Tests FEM

#### Module 12. Pediatric Trauma and Osteoarticular Injuries

- 12.1. Initial Pediatric Trauma Care
  - 12.1.1. Types and Patterns of Injury in Pediatrics
  - 12.1.2. Primary and Secondary Assessment
  - 12.1.3. Spinal Cord Injuries
- 12.2. Head Trauma in Children
- 12.3. Lower Extremity Trauma
- 12.4. Upper Limb Trauma
- 12.5. Thoracic Trauma. Rib Fractures and Contusions
- 12.6. Limping
  - 12.6.1. Types of Lameness
  - 12.6.2. Treatment
  - 12.6.3. Referral Criteria
- 12.7. Classification of Pediatric Fractures
- 12.8. Mobilization and Immobilization Workshop
- 12.9. Active Mobilization Stimulation
- 12.10. Hyperpronation
- 12.11. Supination-Flexion
- 12.12. Radial Head Subluxation

#### Module 13. Unintentional Injuries Child Accidents

- 13.1. Injuries
- 13.2. Burns
- 13.3. Drowning
- 13.4. Stings and Bites
- 13.5. Drug and Non-drug Intoxications

- 13.6. Anaphylaxis
  - 13.6.1. Classification of Severity
  - 13.6.2. Diagnostic Procedures
  - 13.6.3. Treatment and Discharge Recommendations
- 13.7. Extraction of Foreign Body from the Ear
- 13.8. Extraction of Foreign Bodies from the Nose
- 13.9. Freeing of Trapped Penis or Scrotum
- 13.10. Incarcerated Inguinal Hernia Reduction
- 13.11. Reduction of Paraphimosis

#### Module 14. Neurological Emergencies

- 14.1. Acute Ataxia
- 14.2. Alterations of Consciousness
- 14.3. Acute Headache
  - 14.3.1. Migraine
  - 14.3.2. Tension Headache
  - 14.3.3. Periodic Syndromes of Childhood
- 14.4. Epilepsies and Non-Epileptic Seizure Disorders in Childhood
  - 14.4.1. Epileptic Syndromes in Childhood and Adolescence
  - 14.4.2. General Treatment of Epilepsies
- 14.5. Bacterial and Viral Meningitis
- 14.6. Febrile Seizures
- 14.7. Puncture of the Ventriculoperitoneal Shunt Reservoir
- 14.8. Lumbar Puncture

#### Module 15. Digestive Emergencies

- 15.1. The Infant with Food Refusal
- 15.2. Acute Abdominal Pain
- 15.3. Gastrointestinal Disorders
- 15.4. Acute Dehydration
  - 15.4.1. Isonatremic Dehydration
  - 15.4.2. Hyponatremic Dehydration
  - 15.4.3. Hypernatremic Dehydration

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- 15.5. Acid-base Balance Disorders
  - 15.5.1. Metabolic Acidosis Respiratory Acidosis
  - 15.5.2. Metabolic Alkalosis Respiratory Alkalosis
- 15.6. Coeliac Disease
  - 15.6.1. Diagnostic Algorithm
  - 15.6.2. Treatment
- 15.7. Gastroesophageal Reflux (GER)
- 15.8. Constipation
- 15.9. Hepatitis
  - 15.9.1. HAV, HBV, HCV, HDV, HEV
  - 15.9.2. Autoimmune hepatitis
- 15.10. Gastrointestinal Bleeding
- 15.11. Jaundice
- 15.12. Techniques and Procedures Inquinal Hernia Reduction

#### Module 16. Endocrinometabolic Emergencies

- 16.1. Emergencies in the Diabetic Patient
- 16.2. Hydroelectrolytic Alterations
- 16.3. Adrenal Insufficiency

#### Module 17. Infectious Emergencies

- 17.1. Exanthematous Diseases
- 17.2. Whooping Cough and Pertussis Syndrome
  - 17.2.1. Medical treatment
  - 17.2.2. Control Measures
- 17.3. Febrile Syndrome without Focus
- 17.4. Sepsis. Septic Shock
- 17.5. Osteoarticular Infections
- 17.6. Fever and Neutropenia

#### Module 18. Ophthalmologic and Otorhinolaryngologic Emergencies

- 18.1. Conjunctivitis and Blepharitis Pink Eye
  - 18.1.1. Most Frequent Infectious Pathology
  - 18.1.2. Non-Infectious Pathology
  - 18.1.3. Protocol for Pediatric Ophthalmologic Emergencies
- 18.2. Eyelids and Lacrimal System
  - 18.2.1. Palpebral Alterations and Malformations
  - 18.2.2. Inflammatory Pathology
  - 18.2.3. Cysts and Tumors
  - 18.2.4. Lacrimal Pathology in Children
  - 18.2.5. Palpebral Traumatology in Infancy
- 18.3. Acute Pharyngotonsillitis Acute Otitis Media Sinusitis
- 18.4. Extraction of Foreign Bodies from the Eye
- 18.5. Ophthalmologic Examination with Fluorescein
- 18.6. Eversion of the Upper Eyelid

#### Module 19. Pediatric Skin Emergencies

- 19.1. Bacterial Infections in Pediatrics
  - 19.1.1. Impetigo Contagiosa
  - 19.1.2. Folliculitis, Furunculosis and Carbuncles
  - 19.1.3. Perianal Streptococcal Dermatitis
- 19.2. Viral Infections in Pediatrics
  - 19.2.1. Human Papillomavirus
  - 19.2.2. Contagious Molusco
  - 19.2.3. Simple Herpes
  - 19.2.4. Shingles
- 19.3. Mycotic Infections in Pediatric Dermatology
  - 19.3.1. Tinea
  - 19.3.2. Candidiasis
  - 19.3.3. Pityriasis Versicolor

19.4. Infestations in Pediatric Dermatology

19.4.1. Pediculosis

19.4.2. Scabies

19.5. Eczema Atopic Dermatitis

#### Module 20. Nephrourological Emergencies

20.1. Urinary Infections

20.1.1. Diagnostic Criteria

20.1.2. Referral Indications

20.2. Hematuria

20.3. Renal Lithiasis and Renal Colic

20.4. Acute Scrotum

20.4.1. Frequency in the Pediatric Age Group

20.5. Suprapubic Puncture

20.6. Bladder Catheterisation

20.7. Reduction of Paraphimosis

#### Module 21. Special Situations in Pediatric Emergencies

21.1. Children with Special Needs

21.1.1. Tracheostomy and Home Mechanical Ventilation

21.1.2. Gastrostomies and Feeding Tubes

21.1.3. Peritoneal Ventriculo-Peritoneal Shunt Valves

21.1.4. Central Catheters and Prosthetic Vascular Accesses

21.2. Medication in Pediatrics

21.3. Psychiatry in the Emergency Department

21.3.1. Assessment and Initial Treatment

21.3.2. Psychomotor Agitation and Violence

21.3.3. Suicidal Behavior

21.3.4. Psychotic Disorders

21.4. Child Abuse

21.4.1. Attitude in the Emergency Room

21.4.2. Assistance in the Case of Abuse

21.5. Techniques and Procedures Mechanical Restraint of the Agitated or Aggressive Child

#### Module 22. Admission of a Newborn in the Neonatal Ward or in the NICU

22.1. Arrival of the Newborn (NB) in the Neonatal

22.1.1. Admission Criteria

22.1.2. Admission Objectives

22.1.3. Nursing Interventions

22.1.4. Physical Examination of the Newborn

22.2. Arrival of the Newborn (NB) in the NICU

22.2.1. Admission Criteria

22.2.2. Admission Objectives

22.2.3. Nursing Interventions

22.2.4. Physical Examination of the Newborn

22.3. Neonatal Transport

22.3.1. Transfer of the Pregnant Woman

22.3.2. Neonatal Transfer

22.3.3. Neonatal Transport Team

22.3.4. Neonatal Transport Equipment

#### Module 23. Neonatal Resuscitation

23.1. Neonatal Resuscitation

23.1.1. Cardiovascular Risk Factors

23.1.2. General Procedures in the Moments Prior to Delivery

23.2. Resuscitation Team

23.3. Neonatal Resuscitation Equipment

23.4. Resuscitation Procedures

23.5. Respiratory Assistance Methods

23.6. Cardiac Massage

23.7. Administration of Medication: Drugs and Fluids

23.8. Neonatal Cardiorespiratory Arrest Care

23.9. Special Situations for Resuscitation

23.10. Basic Principals for a Successful Resuscitation and Possible Complications that Could Arise During the Resuscitation

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# **Module 24.** Principles of Drug Administration and Vascular Access in Neonatology

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Z4. I.	Principles	ot Drua	Administration	in the NICU

- 24.1.1. Enteral Route
- 24.1.2. Rectal Route
- 24.1.3. Intramuscular Route
- 24.1.4. Subcutaneous Route
- 24.1.5. Intravenous Route
- 24.2. Specific Ways to Administer Drugs I: Rapid Intravenous Route
- 24.3. Specific Ways to Administer Drugs II: Intravenous Route with a Specific Infusion
- 24.4. Specific Ways to Administer Drugs III: Continuous Intravenous Route
- 24.5. Specific Ways to Administer Drugs IV: Peripheral Venous Route
  - 24.5.1. Necessary Equipment
  - 24.5.2. Procedure
  - 24.5.3. Maintaining the Line
  - 24.5.4. Removing the Line
  - 24.5.5. Possible Complications that Could Arise
- 24.6. Specific Ways of Administering Drugs V: Percutaneous Venous Route
  - 24.6.1. Indications
  - 24.6.2. Necessary Equipment
  - 24.6.3. Procedure
  - 24.6.4. Precautions
  - 24.6.5. Contraindications
  - 24.6.6. Complications
- 24.7. Specific Ways to Administer Drugs VI: Cannulation of the Umbilical Artery and Vein
  - 24.7.1. Indications
  - 24.7.2. Necessary Equipment
  - 24.7.3. Preparation
  - 24.7.4. Common Procedure for the Umbilical Artery and Umbilical Vein
  - 24.7.5. Contraindications
  - 24.7.6. Complications





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24.8.	Specific Wa	vs to Administer	Drugs VII: (	Cannulation	of the Peri	pheral Artery
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- 24.8.1. Indications
- 24.8.2. Necessary Equipment
- 24.8.3. Procedure
- 24.8.4. Extraction of a Catheter
- 24.8.5. Precautions
- 24.8.6. Contraindications
- 24.8.7. Complications

#### Module 25. Thermal Management, Pain Control and Sedation of the Newborn

#### 25.1. Thermal Management in a Newborn

- 25.1.1. Introduction of Thermoregulation
- 25.1.2. Neutral Thermal Environment
- 25.1.3. First Hours of Life
- 25.1.4. Effects of Thermal Environment on a Newborn
- 25.1.5. Guidelines for Assessing the Temperature of a Newborn
- 25.1.6. Hypothermia in a Newborn with Hypoxic-ischemic Encephalopathy as a Neuroprotective
  - 25.1.6.1. Mechanisms of Action for Hypothermia
  - $25.1.6.2. \ \mbox{Neuroprotection}$  with Cerebral Hypothermia After Hypoxic-ischemic occurs
  - 25.1.6.3. Indications of Hypothermia
  - 25.1.6.4. Contraindications of Hypothermia
  - 25.1.6.5. Exit Criteria Once Hypothermia has Begun

#### 25.2. Pain Management in a Newborn

- 25.2.1. Physiology of Pain in a Newborn
- 25.2.2. Short and Long-Term Consequences of Pain
- 25.2.3. Measurement of Pain in a Newborn
- 25.2.4. Treatment of Pain in a Newborn
- 25.2.5. Pain Management in Some Common Procedures in the NICU

#### 25.3. Sedation of a Newborn

- 25.3.1. Anesthetic Drugs
- 25.3.2. Hypnotic/ Sedative Drugs
- 25.3.3. Withdrawal Syndrome in a Newborn

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## **Module 26.** Nursing Interventions: Family Care, Perinatal Death and Neonatal Development

- 26.1. Family-Centred Care: Ways to Promote and Rebuild Family
- 26.2. The Family in the Neonatal Unit and NICU Setting
- 26.3. Nursing Interventions in the Neonatal Unit and NICU Setting
- 26.4. Perinatal Death: the Pain and the Grieving Process
- 26.5. The Intervention of Professionals in the NICU in Perinatal Death
- 26.6. Impact of the NICU Environment on Development
- 26.7. Neonatal Care Focused on Development
- 26.8. Interventions on the Macroenvironment of the Newborn
- 26.9. Interventions on the Microenvironment of the Newborn
- 26.10. Involvement of Nurses in Hospital Discharge

#### Module 27. Clinical Nutrition and Hospital Dietetics

- 27.1. Management of Hospital Nutrition Units
  - 27.1.1. Nutrition in the Hospital Setting
  - 27.1.2. Food Safety in Hospitals
  - 27.1.3. Planning and Managing Hospital Diets. Dietary Code
- 27.2. Hospital Basal Diets
  - 27.2.1. Pediatric Basal Diet
  - 27.2.2. Ovo-Lacto-Vegetarian and Vegan Diet
  - 27.2.3. Diet Adapted to Cultural
- 27.3. Therapeutic Hospital Diets
  - 27.3.1. Uniting Diets
  - 27.3.2. Personalised Menu's
- 27.4. Bidirectional Drug-Nutrient Interaction

#### Module 28. Physiology of Infant Nutrition

- 28.1. Influence of Nutrition on Growth and Development
- 28.2. Nutritional Requirements in the Different Periods of Childhood
- 28.3. Nutritional Assessment in Children
- 28.4. Physical Activity Evaluation and Recommendations
- 28.5. Nutrition During Pregnancy and its Impact on the New-born
- 28.6. Current Trends in the Premature New-born Nutrition
- 28.7. Nutrition in Lactating Women and its Impact on the Infant
- 28.8. Nutrition of New-borns with Intrauterine Growth Delay
- 28.9. Breastfeeding
  - 28.9.1. Human Milk as a Functional Food
  - 28.9.2. Process of Milk Synthesis and Secretion
  - 28.9.3. Reasons for it to be Encouraged
- 28.10. Human Milk Banks
  - 28.10.1. Milk Bank Operation and Indications
- 28.11. Concept and Characteristics of the Formulas Used in Infant Feeding
- 28.12. The Move to a Diversified Diet. Complementary Feeding During the First Year of Life
- 28.13. Feeding 1-3-Year-Old Children
- 28.14. Feeding During the Stable Growth Phase. Schoolchild Nutrition
- 28.15. Adolescent Nutrition. Nutritional Risk Factors
- 28.16 Child and Adolescent Athlete Nutrition
- 28.17. Other Dietary Patterns for Children and Adolescents. Cultural, Social, and Religious Influences on Childhood Nutrition
- 28.18. Prevention of Childhood Nutritional Diseases Objectives and Guidelines

#### Module 29. Artificial Nutrition in Pediatrics

- 29.1. Concept of Nutritional Therapy in Pediatrics
  - 29.1.1. Evaluation of Patients in Need of Nutritional Support
  - 29.1.2. Indications
- 29.2. General Information about Enteral and Parenteral Nutrition
  - 29.2.1. Enteral Paediatric Nutrition
  - 29.2.2. Parenteral Paediatric Nutrition
- 29.3. Dietary Products Used for Sick Children or Children with Special Needs
- 29.4. Implementing and Monitoring Patients with Nutritional Support
  - 29.4.1. Critical Patients
  - 29.4.2. Patients with Neurological Pathologies
- 29.5. Artificial Nutrition at Home
- 29.6. Nutritional Supplements to Support the Conventional Diet
- 29.7. Probiotics and Prebiotics in Infant Feeding

#### Module 30. Infant Malnutrition

- 30.1. Childhood Malnutrition and Undernutrition
  - 30.1.1. Psychosocial Aspects
  - 30.1.2. Pediatric Assessment
  - 30.1.3. Treatment and Monitoring
- 30.2. Nutritional Anemias
  - 30.2.1. Other Nutritional Anemias in Childhood
- 30.3. Vitamin and Trace Element Deficiencies
  - 30.3.1. Vitamins
  - 30.3.2. Trace Elements
  - 30.3.3. Detection and Treatment
- 30.4. Fats in Infant Diets
  - 30.4.1. Essential Fatty Acids
- 30.5. Childhood Obesity
  - 30.5.1 Prevention
  - 30.5.2. Impact of Childhood Obesity
  - 30.5.3. Nutritional Treatment

#### Module 31. Childhood Nutrition and Pathologies

- 31.1. Feeding Difficulties and Disorders in Children
  - 31.1.1. Physiological Aspects
  - 31.1.2. Psychological Aspects
- 31.2. Eating Disorders
  - 31.2.1. Anorexia
  - 31.2.2. Bulimia
  - 31.2.3. Others
- 31.3. Inborn Errors of Metabolism
  - 31.3.1. Principles for Dietary Treatment
- 31.4. Nutrition in Dyslipidemias
  - 31.4.1. Nutritional Mechanisms to Prevent Dyslipidemias
  - 31.4.2. Nutritional Approaches for Treating Dyslipidemias
- 31.5. Nutrition in Diabetic Children
  - 31.5.1. Repercussions of Diabetes on the Child's Nutrition
  - 31.5.2. Mechanisms to Avoid Related Malnutrition
- 31.6 Nutrition in Autistic Children
  - 31.6.1. Repercussions of These Alterations on the Child's Nutrition
  - 31.6.2 Mechanisms to Avoid Related Malnutrition
- 31.7. Nutrition in Children with Cancer
  - 31.7.1. Repercussions of Disease and Treatments in the Child's Nutrition
  - 31.7.2. Mechanisms to Avoid Related Malnutrition
- 31.8. Nutrition in Children with Chronic Pulmonary Pathology
  - 31.8.1. Repercussions of These Alterations on the Child's Nutrition
  - 31.8.2. Mechanisms to Avoid Related Malnutrition
- 31.9. Nutrition in Children with Nephropathy
  - 31.9.1. Repercussions of These Alterations on the Child's Nutrition
  - 31.9.2. Mechanisms to Avoid Related Malnutrition
  - 31.9.3. Special Diets
- 31.10. Nutrition in Children with Food Allergies and/or Intolerances
  - 31.10.1. Special Diets
- 31.11. Childhood and Bone Pathology Nutrition
  - 31.11.1. Mechanisms for Good Bone Health in Childhood

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# **Module 32.** Newborn Feeding: Breastfeeding/Formula Feeding and Feeding of the Hospitalized Infant

- 32.1. General Aspects of a Newborn's diet
- 32.2. Requirements and Feeding Objectives of the Breastfeeding Infant
- 32.3. Breastfeeding
- 32.4. Enteral Nutrition
  - 32.4.1. Indications for Enteral Feeding
  - 32.4.2. Contraindications for Enteral Feeding
  - 32.4.3. Enteral Feeding Methods
- 32.5. Parenteral Nutrition
  - 32.5.1. Indications for Parenteral Feeding
  - 32.5.2. Contraindications for Parenteral Feeding
  - 32.5.3. Vein Administration Routes
  - 32.5.4. Recommendations for the Monitoring of Administration Routes
  - 32.5.5. Components of Parenteral Nutrition
  - 32.5.6. Preparation and Administration of Parenteral Nutrition
  - 32.5.7. Controls
  - 32.5.8. Complications
  - 32.5.9. Withdrawal of Parenteral Nutrition

#### Module 33. Health Promotion in Schools Integration of the School Nurse

- 33.1. Four Key Ideas: Health, Health Promotion, Prevention and Health Education
- 33.2. The Health Promoting School Movement
- 33.3. Health as a Cross-Cutting Issue at School
- 33.4. School Nursing: An Interdisciplinary Reality

#### Module 34. Prevention of Drug Addiction and Other Addictive Behaviors

- 34.1. Smoking and Young People
- 34.2. Consumption of Alcohol and Its Consequences
- 34.3. Illegal Drugs
- 34.4. Drug Addiction Prevention in the School Environment
- 34.5. Non-Substance Addictions

#### Module 35. School Hygiene and Ergonomics in the School Environment

- 35.1. Body Hygiene
- 35.2. Ergonomics Applied in the Classroom

# **Module 36.** Prevention and Attention to Risk Situations and the Most Frequent Diseases in School-Age Children

- 36.1. Supervision Program for School Health
- 36.2. Vaccines
- 36.3. Caring for Asthmatic Children
- 36.4. Care for Diabetic Children
- 36.5. Care for Epileptic Children
- 36.6. Care for Children with Allergies
- 36.7. Supplementary Documentation
- 36.8. Transmittable Disease Control at School
- 36.9. Prevention and Action in the Face of Mental Health Problems in the School Setting

#### Module 37. Nursing in Special Education Schools

- 37.1. The Role of the Nurse in Special Education Schools
- 37.2. Most Common Syndromes of EWC Students
- 37.3. Multi-Disability, Ensuring Physical and Mental Well-Being
- 37.4. Pervasive Developmental Disorders, Addressing Behavioral Issues
- 37.5. Health Education in Special Education Schools
- 37.6. TICs in Children With Special Needs
- 37.7. Nutrition and Healthy Habits

#### Module 38. Action in the Case of an Emergency in the School Environment

- 38.1. Reference documents of the latest AHA guidelines for CPR and ECC 2015
- 38.2. Recognition and Management of III Children
- 38.3. Basic Life Support and AED in Children
- 38.4. Basic Life Support and AED in Adults
- 38.5. Injury Emergencies: Wounds and Burns
- 38.6. Environmental Emergencies: Bites and Stings, Poisoning and Temperature Related Emergencies

#### Module 39. Nursing Methodology in Vaccines

- 39.1. History of Nursing in Immunization
- 39.2. The Nursing Care Process
  - 39.2.1. Stages Within the Nursing Care Process
- 39.3. Vaccination Within the Eap
- 39.4. Most Commonly Used Nursing Diagnoses in Vaccination
  - 39.4.1. Diagnósticos de Enfermería Más Utilizados en la Vacunación
- 39.5. Nursing Interventions in the Vaccination Process
  - 39.5.1. Most Frequent CINs Used in the Vaccination Process
- 39.6. Existing Types of Prevention and Application in the Vaccination Process
  - 39.6.1. Primary Prevention in the Vaccination Process
  - 39.6.2. Secondary Prevention in the Vaccination Process
  - 39.6.3. Tertiary Prevention in the Vaccination Process
  - 39.6.4. Quaternary Prevention in the Vaccination Process
- 39.7. Immunization in Nursing Specialization
- 39.8. Nursing News on Immunization

#### Module 40. Child Vaccination

- 40.1. Global Immunization Vision and Strategy (GIVS)
- 40.2. Pediatric Vaccine Schedules
  - 40.2.1. Characteristics of a Vaccination Schedule
  - 40.2.2. Vaccination Schedules in the Paediatric Population
- 40.3. Vaccination Between 0-12 Months
  - 40.3.1. Recommended Vaccines in the Paediatric Population Between 0-12 Months
- 40.4. Vaccination Between 12 Months 4 Years Old
  - 40.4.1. Recommended Vaccines in Paediatric Population Between 12 months and 4 Years Old
- 40.5. Vaccination Between 4-14 Years Old
  - 40.5.1. Recommended Vaccines in the Paediatric Population Between 4-14 Years Old
- 40.6. Adolescent Vaccination
  - 40.6.1. Recommended Vaccines in Adolescent Pediatric Population
- 40.7. Vaccination of the Premature Infant
  - 40.7.1. Characteristics Specific to Vaccination of the Preterm Infant
  - 40.7.2. Recommended Vaccines in Pre-term Pediatric Population

- 40.8. Non-pharmacological Methods in Pain Control
  - 40.8.1. Breastfeeding as a Nonpharmacologic Method for Vaccination Pain
- 40.9. Vaccine Adaptation in Children
  - 40.9.1. Calendar Correction in Children
  - 40.9.2. Calendar Correction in Immigrant Children
- 40.10. Myths and False Beliefs in Childhood Immunization

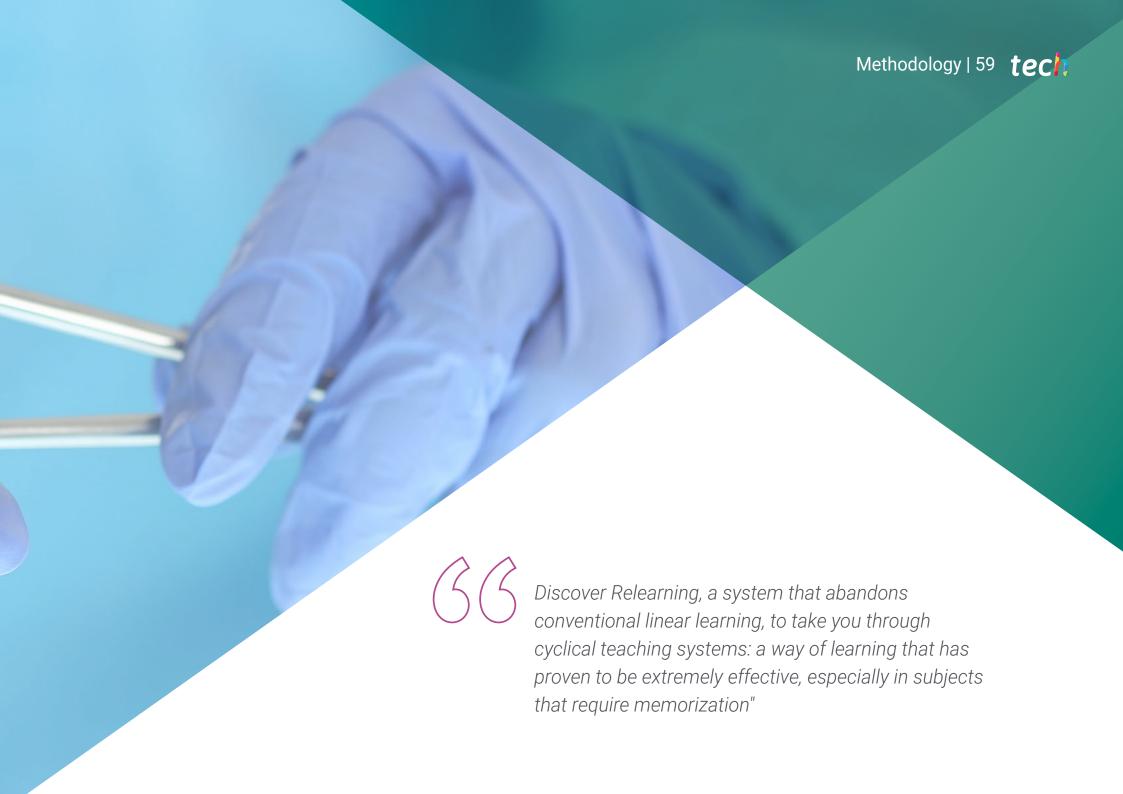
#### Module 41. The Future of Vaccines

- 41.1. Vaccines in Development
  - 40.1.1. Different Vaccines Currently in Development
- 41.2. Vaccines and the Media
- 41.3. Reverse Vaccinology: Genome
  - 41.3.1. What Is the Genome
  - 41.3.2. Concept of Reverse Vaccinology
- 41.4. Global Vaccination Strategy
- 41.5. Anti-vaccine Movements Situation and Approach
- 41.6. Vaccines and COVID-19
  - 41.6.1. Vaccines and COVID 19
- 41.7. Vaccine Safety Network
- 41.8. Vaccine Web Query
- 41.9. Vaccine Website Credibility
  - 41.9.1. Tips for Checking the Reliability of a Vaccine Website
- 41.10. Tips for Finding Reliable Information Online
  - 41.10.1. Practical Tips for Finding Reliable Online Health Information



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.

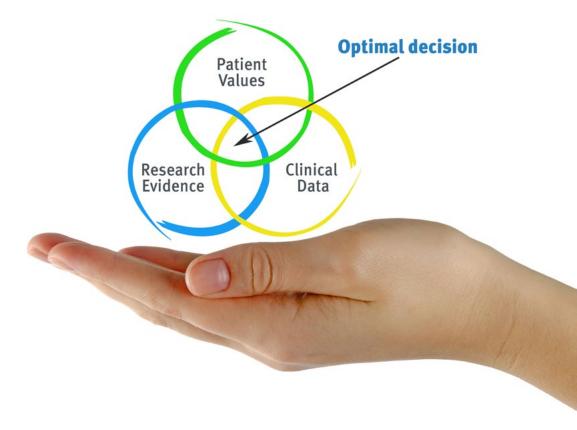


### tech 60 | Methodology

#### At TECH Nursing School 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. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, 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, in an attempt to recreate the real conditions in professional nursing practice.



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:

- Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- **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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse 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.



### Methodology | 63 tech

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 175,000 nurses with unprecedented success in all specialities regardless of practical 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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 really 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.



#### **Nursing Techniques and Procedures on Video**

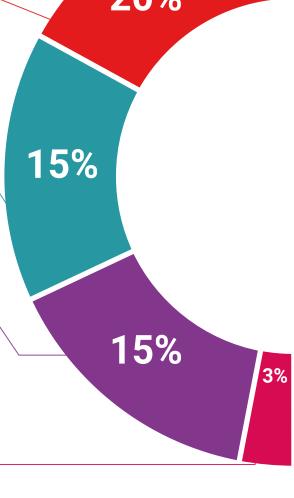
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.



# and direct way to achieve the highest degree of understanding.



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.





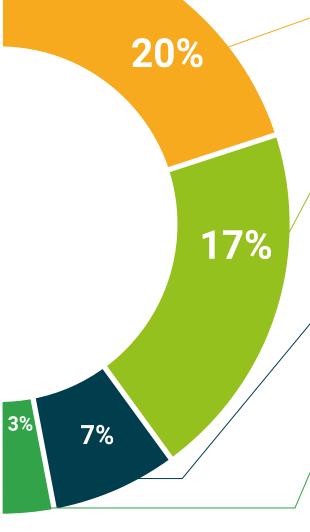
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

#### **Quick Action Guides**



TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.







### tech 68 | Certificate

This program will allow you to obtain your **Advanced Master's Degree diploma in Comprehensive Pediatric Nursing** 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: Advanced Master's Degree in Comprehensive Pediatric Nursing

Modality: online

Duration: 2 years

Accreditation: 120 ECTS





<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

health confidence people

education information tutors
guarantee accreditation teaching
institutions technology learning



### Advanced Master's Degree Comprehensive Pediatric Nursing

- » Modality: online
- » Duration: 15 months
- » Certificate: TECH Global University
- » Credits: 120 ECTS
- » Schedule: at your own pace
- » Exams: online

