

# Postgraduate Diploma

## Nursing Care of the Pediatric Patient with Malignant Hematologic Pathology





## Postgraduate Diploma Nursing Care of the Pediatric Patient with Malignant Hematologic Pathology

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-nursing-care-pediatric-patient-malignant-hematologic-pathology](http://www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-nursing-care-pediatric-patient-malignant-hematologic-pathology)

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# 01

# Introduction

Children admitted to the pediatric intensive care unit due to a malignant hematological pathology are different from the rest because they have a more complex disease, in which they need to have a multidisciplinary team with more developed affective skills. The latter is what has differentiated modern pediatrics from that practiced years ago, so nursing professionals in this field must update their knowledge to provide the best treatment to the children they serve. Thus, the Nursing Care of the Pediatric Patient with Malignant Hematologic Pathology program will allow students to learn this and other concepts of interest for their professional development.





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*Recognizes and implements accompaniment as an essential part of the comprehensive care process for pediatric patients”*

Hematological diseases are made up of different pathologies with a large number of conditions with particular characteristics and different behavior among them. For this reason, in pediatrics, different aspects must be considered to ensure adequate patient care. Nowadays, the psycho-affective factors of the child, and not only the biological ones, are taken into account when developing treatment and providing care.

Thus, beyond providing the student with the theoretical aspects of this type of pathology, this Postgraduate Diploma in Nursing Care of the Pediatric Patient with Malignant Hematologic Pathology will help the student to understand and recognize the vulnerability of patients and their families, following an ethical principle for optimal and humane care. However, aspects related to the pathophysiology of hematological cancer and the morphology of leukemia will also be addressed.

An exclusive module will be dedicated to understand the knowledge about the different types of vascular accesses in hematological pediatrics and the best way to treat them. It will also describe the general principles that nurses should follow when administering drugs in pediatrics.

The teaching team assembled for this Postgraduate Diploma is of recognized prestige and has extensive experience in national and international reference units in the treatment and care of newborns, children and adolescents with hematological disease. The program is 100% online, making it easy for the student to take it comfortably, wherever and whenever they want. All you need is a device with internet access to take your career one step further. A modality according to the current times with all the guarantees to position the nurse in a highly demanded sector.

This **Postgraduate Diploma in Nursing Care of the Pediatric Patient with-Malignant Hematologic Pathology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Pediatric Hematology for Nurses
- ♦ 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
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Attains the knowledge and skills necessary to develop the personal and professional attitudes required to care for pediatric patients with hematological diseases"*

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*Acquires the necessary skills to carry out the administration of drugs and the necessary care of patients with hematological diseases"*

The program includes in its teaching staff professionals from the sector who bring to this training the experience of their work, as well as recognized specialists from leading societies and prestigious universities.

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

The design of this Program focuses on Problem-Based Learning, by means of which the professional will have to try to solve the different situations of Professional Practice, which will be posed throughout the Program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Understands the importance of a comprehensive and ongoing assessment of the needs of the child with hematologic disease and his or her family.*

*You will be able to access all the information at any time of the day and no matter where you are, thanks to the 100% Online mode.*



# 02 Objectives

The knowledge acquired in this Postgraduate Diploma allows the student to acquire the necessary skills to update his profession, understanding at all times the pathophysiology of hematologic cancer in childhood and adolescence. In this way, you will be able to develop your full capabilities in a field of medicine that continues to advance. It will also be able to recognize and implement accompaniment as an essential part of the comprehensive care process. For this reason, TECH establishes a series of general and specific objectives to improve the satisfaction of the future graduate. These are the following.



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*Understanding the importance of active observation in nursing for the detection of physical and emotional complications in children will help you enhance your professional profile"*



## General objectives

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- ♦ Optimize the quality and care of pediatric patients with hematological pathology, providing more qualified healthcare professionals
- ♦ Acquire the essential skills to comprehensively care for children and adolescents with hematological pathology and their families
- ♦ Recognize and assess the physical, psychological, social and spiritual needs of the child and adolescent with hematologic pathology and their family
- ♦ Achieve sufficient knowledge and skills to be able to develop the personal and professional attitudes necessary to treat children and adolescents with hematologic pathology
- ♦ Develop a comprehensive vision of care for children and adolescents with hematological pathologies and their families, in order to promote their well-being, autonomy and dignity at all times
- ♦ Develop problem solving and evidence generation capabilities in the field of Pediatric Hematology to correct knowledge deficiencies and establish standards of excellence in practice



*Analyze the different specific treatment modalities to address hematological pathologies in childhood and adolescence*





## Specific objectives

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### Module 1. Hematological Malignant Pathology in Children

- ♦ Situate epidemiologically the incidence and survival of hematologic cancer in childhood and adolescence
- ♦ Know the pathophysiology of hematologic cancer in childhood and adolescence
- ♦ Acquire knowledge about the most common childhood cancer, intermediate or standard risk B-ALL in pediatrics, its clinical manifestations, treatment and diagnosis
- ♦ Acquire knowledge on fundamental aspects of etiopathogenesis, clinical, diagnosis and treatment of high-risk B-ALL and T-ALL in pediatrics
- ♦ Differentiate infant-specific leukemia, its chromosomal alterations, clinical features, therapeutic approaches and survival
- ♦ Know the most relevant aspects and classification of childhood acute myeloid leukemias
- ♦ Describe the morphology, translocations, characteristic coagulopathy, treatment and controls of acute promyelocytic leukemia (APL or AML L3) in pediatrics
- ♦ Know the clinical course and treatment of other leukemias (CML and JMML) and myelodysplastic syndromes in children and adolescents
- ♦ Acquire knowledge of the clinical, diagnostic and staging, treatment and prognosis of lymphomas in infancy and childhood
- ♦ Know the most relevant aspects and the classification of malignant histiocytosis in pediatrics

### Module 2. Pharmacological Treatment and Nursing Care of Children and Adolescents with Severe Hematological Pathology

- ♦ Update knowledge that will allow the student to distinguish the different types of vascular accesses in pediatric hematology and to know the management and care of each one of them
- ♦ Describe and update on the general principles of drug administration in pediatrics

- ♦ Analyze the different specific treatment modalities to treat hematological pathologies in childhood and adolescence
- ♦ Know and acquire competence to carry out the administration and care of chemotherapy support in children and adolescents

### Module 3. Nursing care of the child/adolescent with severe hematologic disease and his or her family

- ♦ Recognize and implement accompaniment as an essential part of the comprehensive care process
- ♦ Recognize the vulnerability of patients and their families and be aware of the ethical principles governing their care
- ♦ Update the necessary knowledge in the nursing care of pediatric patients, in order to increase the quality and safety of nursing practice in the Pediatric Hematology unit
- ♦ Attain the knowledge and skills necessary to develop the personal and professional attitudes required to care for children and adolescents with severe hematological disease and their families at the onset of the disease
- ♦ Analyze the importance of active nursing observation for the detection of possible physical and/or emotional complications in the care of children and adolescents with severe hematologic disease and their families
- ♦ Establish the importance of comprehensive and continuous assessment of the needs of the child and family and identify the most frequent nursing diagnoses during the course of the disease
- ♦ Update knowledge in the control and management of symptoms in pediatric patients with hematologic disease
- ♦ Explain the importance of nutrition and skin care during the treatment of pediatric patients with oncohematological disease
- ♦ Update research knowledge in the care of children and adolescents with severe hematological disease and their families

03

# Course Management

In order to provide a quality education, it is necessary to have a teaching staff that can provide all the theoretical and practical information that will help students to develop optimally in any work environment. Thus, TECH has a large team specialized in the care of pediatric patients with-malignant hematological pathologies. In this way, students have the best tools to develop all their theoretical and practical skills in their profession. This is the best way to execute in a real environment all the knowledge acquired in this program.





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*Learn about the most relevant aspects and classification of malignant histiocytosis in pediatrics with an excellent group of experts”*

## Management



### Ms. Coronado Robles, Raquel

- ◆ Specialist Nurse in Pediatric Nursing
- ◆ Pediatric Oncohematologic unit, Vall d'Hebron Hospital, Barcelona
- ◆ Associate Professor and coordinator of the Childhood Mention of the Nursing Degree at the Autonomous University of Barcelona (UAB)

## Professors

### Ms. Ariño Ariño, Ingrid

- ◆ Neonatology Unit. Vall d'Hebron Barcelona Hospital Campus

### Ms. Bonfill Ralló, Marina

- ◆ Psycho-oncologist Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus

### Ms. Bustelo Almeida, Eugenia

- ◆ Psycho-oncologist Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus

### Ms. Congil Ortega, Jordana

- ◆ Neonatology Unit. Vall d'Hebron Barcelona Hospital Campus

### Ms. Cuevas González, Cristina

- ◆ Specialist Nurse in Pediatric Nursing. Vall d'Hebron Barcelona Hospital Campus

### D. Díaz Martín, Gonzalo

- ◆ Specialist Nurse in Pediatric Nursing. Vall d'Hebron Barcelona Hospital Campus

### Ms. Fernández Angulo, Verónica

- ◆ Day Hospital Pediatric Oncohematological Unit Vall d'Hebron Hospital in Barcelona

### Ms. Hladun Álvaro, Raquel

- ◆ Medical specialist and head of Clinical Trials at the Pediatric Oncohematologic Unit of Vall d'Hebron Barcelona Hospital Campus

**Ms. Martínez González, Ester**

- ♦ Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus

**Ms. Muñoz White, M<sup>a</sup> José**

- ♦ Supervisor of the pediatric intensive care unit (PICU). Vall d'Hebron Barcelona Hospital Campus

**Ms. Nogales Torres, Elena**

- ♦ Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus

**Dr. Ortegón Delgadillo, Ramiro**

- ♦ Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus. Co-director of SEER (Emotional Health and Educational)

**Ms. Pérez Cainzos, Laura**

- ♦ Pediatrics unit. Vall d'Hebron Barcelona Hospital Campus

**Ms. Pérez Correa, Sónia**

- ♦ Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus

**Ms. Ridaó Manonellas, Saida**

- ♦ Specialist Nurse in Pediatric Nursing. Immunodeficiency nursing consultation

**Ms. Rodríguez Gil, Raquel**

- ♦ Specialist Nurse in Pediatric Nursing. Neonatology unit supervisor. Vall d'Hebron Barcelona Hospital Campus

**Ms. Salt Rovira, Anna**

- ♦ Psycho-oncologist Pediatric Oncohematologic Unit Vall d'Hebron Barcelona Hospital Campus

**Dr. Toro Guzmán, Antonio**

- ♦ Pediatric Oncohematologic unit, Vall d'Hebron Hospital, Barcelona. Associate Professor of the Degree in Nursing at the Autonomous University of Barcelona (UAB)

**Ms. Vidal Laliena, Miriam**

- ♦ Ph.D cell biology, immunology and neuroscience at IDIBAPS- UB. Clinical Data Manager-study coordinator Pediatric Oncohematologic unit Vall d'Hebron Barcelona Hospital Campus (2016-2017). Currently: at CatSalut. Catalan Health Service

# 04

## Structure and Content

Ensure that students meet the requirements of nursing applied to pediatric patients with hematological malignancies, a syllabus has been developed whose modules offer a broad perspective of this field of action, allowing the student to learn the most relevant aspects and the classification of the different acute myeloid leukemias in childhood. From module 1, students will see their knowledge broadened, which will enable them to develop professionally, knowing that they can count on the support of a team of experts.





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*Understands the importance of nutrition and skin care during the treatment of pediatric patients with oncohematologic disease"*

## Module 1. Malignant Hematologic Pathology in Pediatrics

- 1.1. Epidemiology and Pathophysiology of Hematologic Cancer in Pediatrics
  - 1.1.1. Epidemiology of Hematologic Cancer in Pediatrics
    - 1.1.1.1. General aspects
    - 1.1.1.2. Acute Lymphoblastic Leukemia
    - 1.1.1.3. Hodgkin's Lymphomas
    - 1.1.1.4. Non-Hodgkin's Lymphoma
  - 1.1.2. Pathophysiology of Cancer in Pediatrics
    - 1.1.2.1. Unlimited Replication Potential
    - 1.1.2.2. Clonal Expansion
    - 1.1.2.3. Aberrant Differentiation
    - 1.1.2.4. Avoidance by Apoptosis
- 1.2. Standard or Intermediate-Risk B-Cell Acute Lymphoblastic Leukemia (B-ALL) in Pediatrics
  - 1.2.1. Introduction
  - 1.2.2. Clinical symptoms
  - 1.2.3. Diagnosis
  - 1.2.4. Treatment
- 1.3. High-Risk B-ALL and T-ALL in Pediatrics
  - 1.3.1. High-Risk B-ALL
    - 1.3.1.1. Introduction
    - 1.3.1.2. Clinical symptoms
    - 1.3.1.3. Diagnosis
    - 1.3.1.4. Treatment
  - 1.3.2. LLA-T
    - 1.3.2.1. Introduction
    - 1.3.2.2. Clinical Symptoms
    - 1.3.2.3. Diagnosis
    - 1.3.2.4. Treatment
- 1.4. Leukemia in Infants (Infantile Leukemia)
  - 1.4.1. Introduction
  - 1.4.2. Chromosomal Alterations
    - 1.4.3. Clinical Characteristics
    - 1.4.4. Therapeutic Approaches
    - 1.4.5. Survival
- 1.5. Childhood Acute Myeloid Leukemia
  - 1.5.1. Acute Myeloid Leukemias in Pediatrics
    - 1.5.1.1. Association to Syndromes
    - 1.5.1.2. Stratification by Risk Groups
  - 1.5.2. Acute Promyelocytic Leukemia in Pediatrics (ALL or AML L3)
    - 1.5.2.1. Morphological
    - 1.5.2.2. Translocations
    - 1.5.2.3. Characteristic Coagulopathy
    - 1.5.2.4. Treatment
    - 1.5.2.5. Controls
- 1.6. Others Leukemias and Myelodysplastic Syndromes in Pediatrics
  - 1.6.1. Chronic Myeloid Leukemia
    - 1.6.1.1. Clinical symptoms
    - 1.6.1.2. Treatment
  - 1.6.2. Juvenile Myelomonocytic Leukemia (JMML)
    - 1.6.2.1. Definition
    - 1.6.2.2. Clinical Symptoms
    - 1.6.2.3. Treatment
    - 1.6.2.4. New Therapies
  - 1.6.3. Myelodysplastic Syndromes
- 1.7. Hodgkin's Lymphoma in Pediatrics
  - 1.7.1. Introduction
  - 1.7.2. Clinical symptoms
  - 1.7.3. Diagnosis and Staging
  - 1.7.4. Treatment
  - 1.7.5. Prognosis
- 1.8. Non-Hodgkin's Lymphoma in Pediatrics
  - 1.8.1. Introduction
  - 1.8.2. Classification

- 1.8.3. Clinical symptoms
- 1.8.4. Diagnosis and Staging
- 1.8.5. Treatment
- 1.9. Burkitt Lymphoma
  - 1.9.1. Specific Characteristics
  - 1.9.2. Forms of Presentation
  - 1.9.3. Clinical Symptoms
  - 1.9.4. Diagnosis
  - 1.9.5. Treatment
- 1.10. Malignant Histiocytosis
  - 1.10.1. Langerhans Cell Histiocytosis (LCH)
    - 1.10.1.1. Clinical Symptoms
    - 1.10.1.2. Diagnosis
    - 1.10.1.3. Treatment
  - 1.10.2. Hemophagocytic Lymphohistiocytosis
    - 1.10.2.1. Diagnosis
    - 1.10.2.2. Treatment

## Module 2. Pharmacological Treatment and Nursing Care of the Child with Hematologic Pathology

- 2.1. Central and Peripheral Venous Catheters. Nursing care
  - 2.1.1. Introduction
  - 2.1.2. Choice of Catheter
  - 2.1.3. Peripheral Venous Accesses
  - 2.1.4. Central Venous Access
- 2.2. The Great Ally: Subcutaneous Reservoir. Most Important Aspects of Care
  - 2.2.1. Introduction
  - 2.2.2. Placement Indications
  - 2.2.3. Advantages and Disadvantages
  - 2.2.4. Implementation.
  - 2.2.5. Withdrawal
- 2.3. General Principles of Drug Administration in Pediatrics
  - 2.3.1. Safety in the Administration of Drugs in Hematologic Pediatrics
  - 2.3.2. Routes of Administration and Care
  - 2.3.3. Recording of Drug Administration
  - 2.3.4. Main Drugs to Support Treatment
- 2.4. Most relevant Treatments in Patients with Immunodeficiencies
  - 2.4.1. General Measures
  - 2.4.2. Prophylactic and/or Symptomatic Treatment
  - 2.4.3. Substitution Treatment
  - 2.4.4. Curative Treatment
- 2.5. Antineoplastic Treatment (I)
  - 2.5.1. Chemotherapy Fundamentals
  - 2.5.2. Erythropoietin Indications
  - 2.5.3. Treatment Response Criteria
  - 2.5.4. Drug Resistance
  - 2.5.5. Forms of Chemotherapy Administration
  - 2.5.6. Interaction of Chemotherapy with Other Drugs.
  - 2.5.7. Chemotherapy Regimens
  - 2.5.8. Dose Intensity
- 2.6. Antineoplastic Treatment (II)
  - 2.6.1. Most Commonly Used Antineoplastic Agents in Pediatric Hematology
  - 2.6.2. Chemoprotective Agents
  - 2.6.3. Short- and Medium-Term Side Effects
- 2.7. Administration of Antineoplastic Drugs. Most Important Care
  - 2.7.1. General Measures in the Administration of Cytostatics
  - 2.7.2. Risk Prevention in the Administration of Cytostatic Drugs
    - 2.7.2.1. Safety Circuit
    - 2.7.2.2. Drug Reception and Storage
    - 2.7.2.3. Dual Validation of Pharmacological and Non-Pharmacological Measures Prior to Drug Infusion
    - 2.7.2.4. Dual Validation of the Antineoplastic Drug

- 2.7.2.5. Personal Protective Equipment (EPI)
- 2.7.2.6. Drug Corroboration at the Bedside
- 2.7.3. Nursing Care by Route of Administration
  - 2.7.3.1. Nursing Care in Oral Administration
  - 2.7.3.2. Intramuscular Administration Nursing Care
  - 2.7.3.3. Intrathecal Administration Nursing Care
  - 2.7.3.4. Intra-Arterial Administration Nursing Care
- 2.7.4. Nursing Action in the Event of a Cytostatic Spill
- 2.8. Administration of Antineoplastic Drugs. Most Important Care
  - 2.8.1. Agents Irritant Capacity and Toxicity of Antineoplastic Agents
  - 2.8.2. Pre-, During- and Post-Administration Care
  - 2.8.3. Action in Case of Complications
- 2.9. Hemotherapy Support in Pediatrics. Most Relevant Care
  - 2.9.1. Blood Products
    - 2.9.1.1. Whole Blood
    - 2.9.1.2. Red blood Cell Concentrates
    - 2.9.1.3. Platelet Concentrate
    - 2.9.1.4. Fresh Plasma
  - 2.9.2. Irradiation and Washing of Products
  - 2.9.3. Transfusion Indications and Dosage
  - 2.9.4. Request
    - 2.9.4.1. Documentation
    - 2.9.4.2. Crossmatch Sample
  - 2.9.5. Administration of Blood Derivatives
  - 2.9.6. Adverse Reactions
  - 2.9.7. Transfusion Safety

### Module 3. Nursing Care of the Child and Adolescent with Severe Hematologic Disease and Their Families

- 3.1. "Caring with Care" for the Child/Adolescent and His or Her Family
  - 3.1.1. Fragility and Vulnerability
    - 3.1.1.1. Of the People We Care For
    - 3.1.1.2. From Nursing Professionals
  - 3.1.2. Sympathy, Empathy and Compassion
    - 3.1.2.1. Of the People We Care For
    - 3.1.2.2. From Nursing Professionals
  - 3.1.3. Bioethics and Pediatrics
    - 3.1.3.1. Paternalism in Pediatrics
    - 3.1.3.2. The Problem of Autonomy in Minors
    - 3.1.3.3. Assent and Informed Consent for Minors
    - 3.1.3.4. Autonomy in Adolescence and the Mature Child
    - 3.1.3.5. Legal Capacity of the Minor
    - 3.1.3.6. Parental Access to Medical Records
    - 3.1.3.7. The Health Care Ethics Committee (CEA)
    - 3.1.3.8. Nursing As An Ethical Guarantee
- 3.2. Safety as a Priority in Paediatric
  - 3.2.1. Why and What For?
  - 3.2.2. Professionals Involved
  - 3.2.3. Safety Priorities
  - 3.2.4. Care Based on Scientific Evidence
  - 3.2.5. Safety in the Pediatric Hematology Unit
- 3.3. Child/Adolescent and Family Reception at the Onset of Severe Hematologic Disease
  - 3.3.1. The Debut of the Child and Adolescent with Severe Hematologic Disease
  - 3.3.2. Care in the Pediatric Emergency Unit
  - 3.3.3. Care in the Hospitalization Unit



- 3.4. Observation and Active Listening in Pediatric Hematology
  - 3.4.1. Differences between Seeing, Looking and Observing
  - 3.4.2. Objectives of Active Observation
  - 3.4.3. Moments of Observation in Pediatric Hematology
    - 3.4.3.1. Observation of the Child
    - 3.4.3.2. Family Observation
  - 3.4.4. Obstacles and Difficulties
- 3.5. Assessment and Nursing Diagnosis in Pediatric Hematology
  - 3.5.1. Basis of Nursing Assessment
    - 3.5.1.1. Process, Planned, Systematic, Continuous, Deliberate
    - 3.5.1.2. Valuation Objectives
    - 3.5.1.3. Types of Valuation According to Objectives
    - 3.5.1.4. Overall Appraisal
    - 3.5.1.5. Focused Assessment
  - 3.5.2. Stages of the Nursing Assessment Process
    - 3.5.2.1. Obtaining Results
    - 3.5.2.2. Evaluation of Information
    - 3.5.2.3. Standardized Assessment in Pediatric Hematology
  - 3.5.3. Detection of Problems in Pediatric Hematology
  - 3.5.4. Interdependent Problems in Pediatric Hematology
  - 3.5.5. Most Frequent Nursing Diagnoses in Pediatric Hematology According to the Situation.
- 3.6. Nursing Care in Symptom Management in Pediatric Hematology
  - 3.6.1. General Principles of Symptom
  - 3.6.2. Symptom Assessment
  - 3.6.3. Variable Emotional Attitude
  - 3.6.4. Irritability
  - 3.6.5. Physical Pain
  - 3.6.6. Myelosuppression Derivatives
  - 3.6.7. Anorexia
  - 3.6.8. Nausea and Vomiting
  - 3.6.9. Digestive System

- 3.6.10. Alopecia
- 3.6.11. Cushing's Syndrome
- 3.6.12. Hemorrhagic Cystitis
- 3.6.13. Pneumonitis
- 3.6.14. Ocular and Other Sensory Organ Disorders
- 3.6.15. Neurological Alterations:
- 3.7. Skin Care in Pediatric Patients with Severe Hematologic Disease
  - 3.7.1. Introduction
  - 3.7.2. General Skin Care
    - 3.7.2.1. Sun Exposure
    - 3.7.2.2. Clothing
    - 3.7.2.3. Hygiene and Hydration
    - 3.7.2.4. Nails
    - 3.7.2.5. Postural Changes
  - 3.7.3. Most Common Alterations. Prevention, Assessment, Treatment
    - 3.7.3.1. Alopecia
    - 3.7.3.2. Hirsutism
    - 3.7.3.3. Exfoliative Dermatitis or Palmoplantar Erythrodysesthesia
    - 3.7.3.4. Pruritus
    - 3.7.3.5. Stretch Marks
    - 3.7.3.6. Ulcerations
    - 3.7.3.7. Perianal and Genital Dermatoses
    - 3.7.3.8. Mucositis
    - 3.7.3.9. Related to Therapeutic Devices
- 3.8. Feeding in Children with Hematologic Malignancies
  - 3.8.1. Importance of Nutrition in Childhood
  - 3.8.2. Special Needs of the Child with Severe Hematologic Pathology
  - 3.8.3. Side Effects of Treatment in Children With Severe Hematologic Pathology
  - 3.8.4. Adaptation of Diet in Children with Severe Hematologic Pathology
  - 3.8.5. Nutritional Support





- 3.8.6. Adaptation of the Diet in Complications
- 3.8.7. Other Combinational Nutritional Therapies
- 3.8.8. Adapted Recipes/Tips to Make the Meal More Appetizing
- 3.9. Performance of Diagnostic Tests. Nursing care
  - 3.9.1. Patient and Family Information
  - 3.9.2. Coordination of Professionals
  - 3.9.3. Patient Preparation
  - 3.9.4. Care During the Test
  - 3.9.5. Patient Reception
  - 3.9.6. Specific Care During the Following Hours
- 3.10. Nursing Consultation of the Pediatric Patient with Non-malignant Hematologic Disease. Specific Care
  - 3.10.1. Introduction
  - 3.10.2. Diagnostic Support
  - 3.10.3. Socio-Family Assessment and Quality of Life
  - 3.10.4. Education Preventive Measures
  - 3.10.5. Adherence to Treatment
  - 3.10.6. Transition to the Adult Unit
- 3.11. Research in Pediatric Hematology Care
  - 3.11.1. Evidence-Based Nursing (EBN)
    - 3.11.1.1. Pillars of EBE
    - 3.11.1.2. EBE Phases and Models
    - 3.11.1.3. Formulation of Questions
    - 3.11.1.4. Search for Evidence
    - 3.11.1.5. Critical Reading
    - 3.11.1.6. Implementation and Evaluation
  - 3.11.2. Research Methodology
  - 3.11.3. Innovation in Care
  - 3.11.4. Where Are We Headed?

05

# Methodology

This training program offers 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.





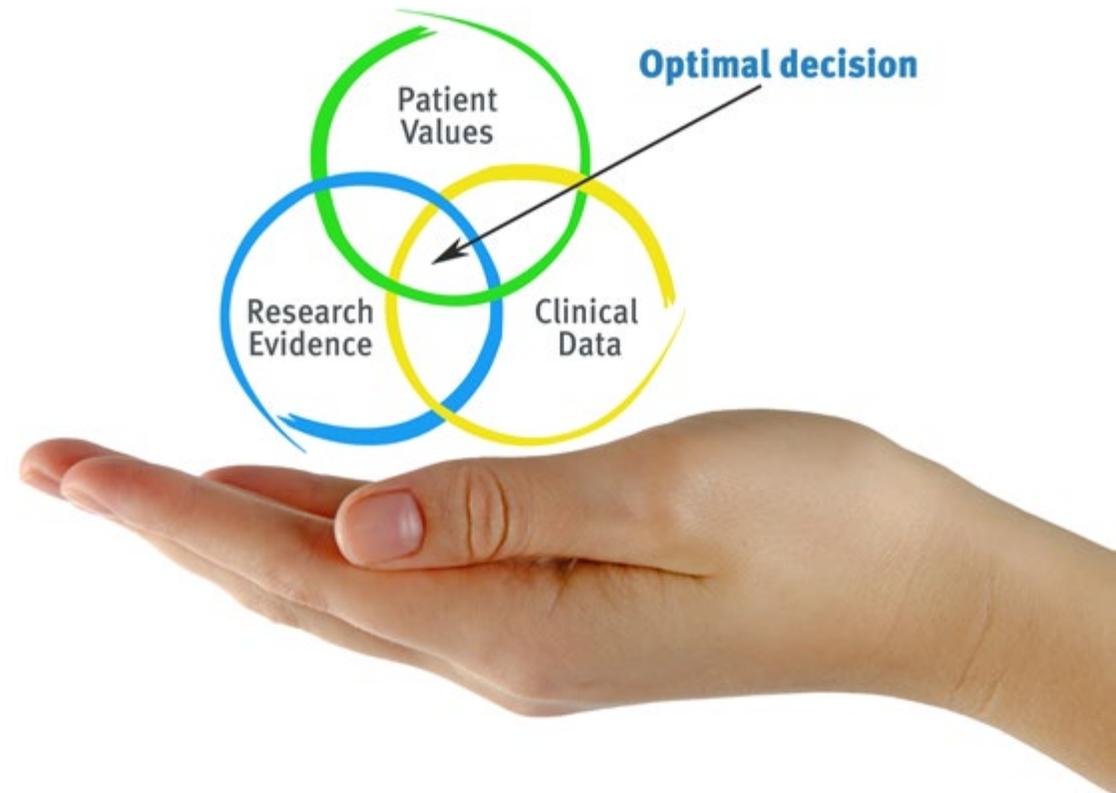
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

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

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

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

1. 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 Harvard 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.*



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 high 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 multimedia content presentation training Exclusive system 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.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their goals.



#### Classes

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.



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# Certificate

The Postgraduate Diploma in Nursing Care of the Pediatric Patient with-Malignant Hematological Pathology guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Technological University.



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

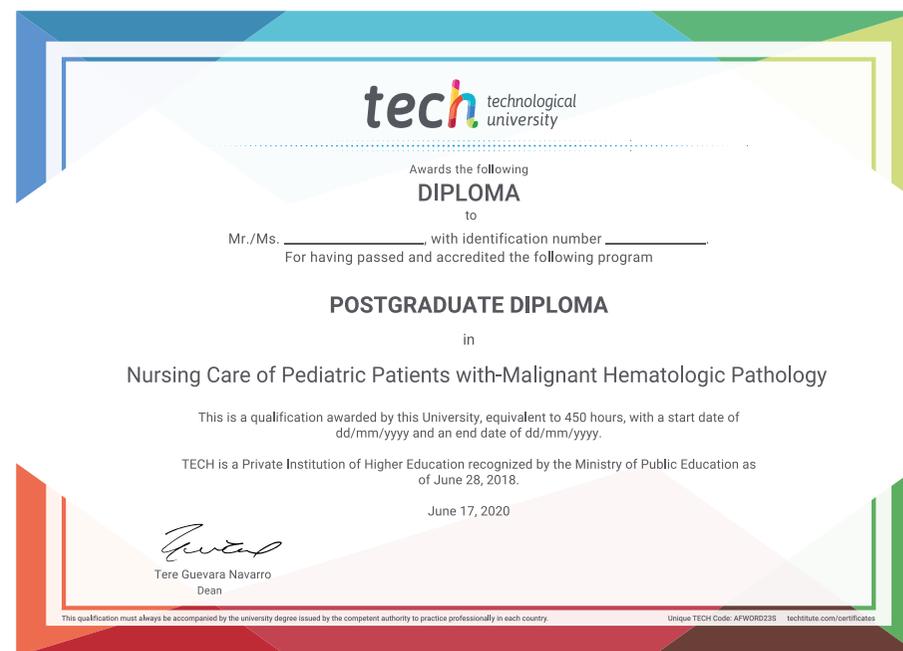
This **Postgraduate Diploma in Nursing Care of the Pediatric Patient with-Malignant Hematologic Pathology** contains the most complete and updated scientific program on the market.

After the student has passed the evaluations, they will receive their corresponding **Postgraduate Diploma**, issued by **TECH Technological University** by tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Nursing Care of Pediatric Patients with-Malignant Hematologic Pathology**

Official N° of hours: **450 h.**



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

health future  
confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
online training  
development languages  
virtual classroom



## Postgraduate Diploma Nursing Care of the Pediatric Patient with Malignant Hematologic Pathology

- » Modality: **online**
- » Duration: **6 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

# Postgraduate Diploma

## Nursing Care of the Pediatric Patient with Malignant Hematologic Pathology

