Master's Degree

Infectious Diseases in the Emergency Department for Nursing

tech global university

tech global university

Master's Degree
Infectious Diseases in the Emergency Department for Nursing

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

Website: **www.techtitute.com/us/nursing/master-degree/master-infectious-diseases-emergency-department-nursing**

Index

01 Introduction p. 4

02 Objectives p. 8

03 Skills p. 16

04 Course Management p. 20

05 Structure and Content p. 24

06 Methodology p. 40

07 Certificate p. 48

01

Introduction

Nursing care in the Emergency Department requires a special qualification that allows professionals to intervene more quickly and efficiently. This training is essential in the case of infectious diseases that require rapid intervention to prevent spread and danger to professionals and other patients. Today, the emergence of COVID has made the protocols and ways of dealing with infectious diseases an essential priority in the healthcare system. This highly topical program has been created to provide nursing staff with the necessary tools to act with solvency in this type of situation.

An essential Master's Degree for Nursing staff that will train them intensively to act in case of infectious diseases, and especially in intervention in case of COVID 19"

In recent years, new infectious diseases have emerged in addition to those already known to specialists. Their care in the hospital emergency setting requires a high level of training on the part of nurses, professionals who are increasingly required to specialize. For this reason, TECH has designed this training of the highest academic level, developed by a team of professionals with extensive experience in both the health and teaching fields.

To this end, TECH has developed a program that includes the classic aspects in the management of infectious pathology by apparatus or organs, obviously taking into account any updates that may have occurred up to the time of the design of this program. In addition, it has incorporated new items, which are essential for the correct management of infectious diseases in the current scenario of health globalization. One of the main novelties of this Master's Degree is the specialization in COVID 19, totally new in this educational field and of great value for all professionals who are faced today with the care of patients in the Emergency Department.

The academic program is divided into two main groups: on the one hand, the actions of the healthcare professional in the emergency department in relation to infectious diseases from the point of view of early diagnosis and treatment; and, on the other hand, the concept of risk prevention, derived from the care of infectious diseases, both for healthcare personnel and the population, delving into the measures that can be adopted in the emergency department to minimize them.

In this way, this program is offered as a great value in the education of nurses who develop their work in the field of health emergencies, becoming a preparatory opportunity that should not be missed. In addition, being 100% online, the professional will have the ability to decide when and from where to study, without commitments or obligations, thus being able to combine their study time with the rest of their daily obligations.

This **Master's Degree in Infectious Diseases in the Emergency Department for Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of more than 75 clinical cases presented by experts in Infectious Diseases in the Emergency Department for Nursing
- The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional
- The latest developments in Infectious Diseases
- Practical exercises where to carry out the self-assessment process to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- 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

Seize the moment and gain up-to-date knowledge on the management of coronavirus infections"

Nursing intervention in the care of infectious diseases in the Emergency Department requires very intensive and up-to-date training for the professional. This Master's Degree is TECH's quality response to this need"

With this high-level program you will be able to explain epidemic outbreaks and common sources with punctual, continuous, propagative and mixed exposure.

Get to know all the latest information on COVID-19 Don't miss the opportunity to learn about advances in the treatment of infections and incorporate them into your healthcare practice.

Its teaching staff includes professionals belonging to the field of Infectious Diseases in the Emergency Department for Nursing, who contribute their work experience to this training, in addition to recognized specialists belonging to leading scientific societies.

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 training program designed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in the field of Infectious Diseases with extensive teaching experience.

02

Objectives

The program in Infectious Diseases in the Emergency Department for Nursing is aimed at facilitating the performance of the nurse dedicated to the treatment of urgent infectious pathology in all areas, but especially in the Emergency Department.
With a special focus on the specific ways of working in case of COVID 19, this Master's Degree will enable the student to act as an expert in this area.

Work with the assurance of the most comprehensive knowledge in the management of COVID 19 and other infectious diseases in the Emergency Department"

General Objectives

- Provide the theoretical knowledge necessary to understand the environment in which professional care is given to patients with infectious diseases
- Provide the appropriate treatment in the different cases of infectious diseases
- In-depth study of each of the areas in which professionals must be trained to be able to practice with knowledge in the care of infectious pathologies

Acquire the most up-to-date knowledge in this field of work and apply advanced protocols in this intervention in your day-to-day work"

Specific Objectives

Module 1. Up-to-date Information on Infectious Diseases

- Define virulence factors and toxins
- Identify the main human pathogens in our environment
- Explain the different current scenarios of infection in the Emergency Department
- Describe the etiopathogenic profiles of bacterial infections
- Describe the etiopathogenic profiles of viral infections
- Describe the etiopathogenic profiles of fungal infections
- Describe the etiopathogenic profiles of microbacterial infections
- Describe the etiopathogenic profiles of parasitic infections

Module 2. The Microbiology Laboratory in the Emergency Department

- Describe the process of collecting specimens
- Define which specimens are most commonly requested in the Emergency Department
- Explain the collection of specimens in patients with devices
- Describe the management of specimens in the laboratory
- Explain the clinical significance of bacterial resistance
- Define the techniques available for emergency diagnoses
- Describe the interpretation of preliminary results
- Explain the analytical interpretation of the different types of samples
- Define the procedures in hospitals without on-call microbiologists
- Explain the diagnostic techniques that can possibly be performed in the emergency department laboratory

Module 3. Public Health and Infectious Disease in the Emergency Department

- Describe the action protocols in cases of specific exposure
- Describe the established isolation protocols
- Explain the current indications of exclusion or isolation
- Describe notifiable diseases
- Explain the procedure for emergency declaration to Public Health
- Describe the action protocol for epidemiological outbreaks
- Describe imported pathology, as well as pathology with high contagious capacity
- Describe the seasonal epidemiological parameters in the most common infections in the community
- Explain epidemic outbreaks and common sources with punctual, continuous, propagative and mixed exposure
- Define the post-exposure prophylaxis that is initiated in the emergency department
- Describe the process to follow in the case of Bacterial Meningitis
- Describe the process to follow in the case of HIV Infection
- Describe the process to follow in the case of Sexual Assault
- Describe the process to follow in the case of Rabies

Module 4. Systemic Febrile Syndrome. Antimicrobials:

- Explain the biomarkers used in the clinical diagnosis of infectious disease
- Define the use of C-reactive protein and procalcitonin in the diagnosis of infectious diseases
- Define the practical use of non-specific tests for infectious evidence
- Explain the initial focus in Acute Fever Syndrome

- Define the action taken in cases of Bacteremia, Sepsis and Septic Shock
- Explain how to activate code sepsis
- Define the use of different antimicrobials in Fever Syndrome
- Describe the characteristics of the different types of antimicrobials
- Define the implications of antimicrobial resistance when selecting treatment
- Explain the basic steps in the selection of antimicrobials according to the type of host and other extrinsic or environmental factors
- Explain the concept of empirical antibiotic therapy
- Describe how to act in the case of beta-lactam allergy
- Describe the use of antimicrobials and renal function

Module 5. Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- Explain the relationship between fever and the presence of exanthema
- Explain the relationship between fever and the presence of adenopathies
- Fever and hematological alterations
- Explain the association of fever with altered level of consciousness
- Describe fever management in an elderly patient
- Describe fever management in a patient in a hemodialysis program
- Describe fever management in a patient with intravascular devices
- Describe fever management in a patient with a HIV infection
- Describe fever management in a patient with iatrogenic immunosuppression
- Describe fever management in a patient with oncohematological pathology
- Describe fever management in a patient with febrile neutropenia
- Describe fever management in a patient in the solid organ transplant patient
- Explain the implications of cytomegalovirus and BK virus infections in transplant recipients
- Describe fever management in a patient who has recently undergone surgery
- Describe the current management of infection of surgical wounds
- Explain the management of other infections in a patient who has recently undergone surgery
- Describe fever management in a pregnant patient
- Explain the use of antibiotic therapy in pregnancy

Module 6. Infections of Organs and Apparatus (I): ORL, Head and Neck, Ophthalmologic

- Explain the diagnosis and treatment of Pharyngodonsillitis in the Emergency Department
- Explain the diagnosis and treatment of Tracheitis, Laryngitis and Epiglottitis in the Emergency Department
- Explain the diagnosis and treatment of Otitis externa, Otitis media and Mastoiditis in the Emergency Department
- Explain the diagnosis and treatment of sinusitis in the Emergency Department
- Explain the diagnosis and treatment of a peritonsillar and para-retropharyngeal abscess in the Emergency Department
- Explain the diagnosis and treatment of Odontogenic Infections in the Emergency Department
- Explain the diagnosis and treatment of Mucositis and Stomatitis in the Emergency Department
- Explain the diagnosis and treatment of Salivary Gland Infections in the Emergency Department
- Explain the diagnosis and treatment of Cervical Adenitis in the Emergency Department. Embryonic Cyst infections. Suppurative Thyroiditis
- Explain the diagnosis and treatment of Conjunctivitis and Keratitis in the Emergency Department

- Explain the diagnosis and treatment of Uveitis, Endophthalmitis, and Retinitis in the Emergency Department
- Explain the diagnosis and treatment of Periocular Infections in the Emergency Department
- Explain the diagnosis and treatment of Eyelids Infections in the Emergency Department
- Explain the diagnosis and treatment of lacrimal apparatus in the Emergency Department
- Explain the diagnosis and treatment of Orbital Cellulitis in the Emergency Department

Module 7. Infections of Organs and Apparatus (II): Skin, Soft and Osteoarticular

- Explain the diagnosis and treatment of cellulitis and superficial infections in the Emergency Department
- Explain the diagnosis and treatment of myositis in the Emergency Department
- Explain the diagnosis and treatment of plantar fasciitis in the Emergency Department
- Explain the diagnosis and treatment of gangrene in the Emergency Department
- Explain the diagnosis and treatment of diabetic foot in the Emergency Department
- Explain the diagnosis and treatment of pressure ulcers in the Emergency Department
- Explain the diagnosis and treatment of septic arthritis in the Emergency Department
- Explain the diagnosis and treatment of osteomyelitis in the Emergency Department
- Explain the diagnosis and treatment of spondylodiscitis in the Emergency Department
- Explain the diagnosis and treatment of infection of joint prostheses and osteosynthesis material in the Emergency Department

Module 8. Infections of Organs and Apparatus (III): Lower Airway, Intra-abdominal

- Explain the diagnosis and treatment of acute bronchitis in the Emergency Department
- Explain the diagnosis and treatment of Acute Chronic Obstructive Pulmonary Disease (AECOPD) in the Emergency Department
- Explain the diagnosis and treatment of Community-acquired pneumonia (CAP) in the Emergency Department
- Explain the diagnosis and treatment of Healthcare-associated pneumonia (HAP) in the Emergency Department
- Explain the diagnosis and treatment of Empyema in the Emergency Department
- Explain the diagnosis and treatment of a Pulmonary Abscess in the Emergency Department
- Explain the diagnosis and treatment of Pulmonary Tuberculosis in the Emergency Department
- Explain the diagnosis and treatment of Gastroenteritis in the Emergency Department
- Explain the diagnosis and treatment of Liver and Biliary Tract infections in the Emergency Department
- Explain the diagnosis and treatment of Cholecystitis and Cholangitis in the Emergency Department
- Explain the diagnosis and treatment of a Liver Abscess in the Emergency Department
- Explain the diagnosis and treatment of Acute Hepatitis in the Emergency Department
- Explain the diagnosis and treatment of Pancreatitis in the Emergency Department
- Explain the diagnosis and treatment of Appendicitis in the Emergency Department

- Explain the diagnosis and treatment of Diverticulitis and Perirectal abscess in the Emergency Department
- Explain the diagnosis and treatment of Typhlitis in the Emergency Department
- Explain the diagnosis and treatment of Peritonitis in the Emergency Department
- Explain the diagnosis and treatment of an Intraperitoneal Abscess in the Emergency Department

Module 9. Infections of Organs and Apparatus (IV): Cardiovascular, CNS

- Explain the diagnosis and treatment of Endocarditis and Intravascular Infections in the emergency department
- Explain the diagnosis and treatment of septic thrombophlebitis in the emergency department
- Explain the diagnosis and treatment of intravascular devices infections in the Emergency Department
- Explain the diagnosis and treatment of tunneled and non-tunneled catheter infection in the emergency department
- Explain the diagnosis and treatment of pacemaker infections in the Emergency Department
- Explain the emergency department diagnosis and treatment of infection of other devices
- Explain the diagnosis and treatment of pericarditis and myocarditis in the Emergency Department
- Explain the diagnosis and treatment of mediastinitis in the Emergency Department
- Explain the diagnosis and treatment of meningitis in the Emergency Department
- Explain the diagnosis and treatment of encephalitis in the Emergency Department
- Explain the diagnosis and treatment of myelitis in the Emergency Department
- Explain the diagnosis and treatment of brain abscess in the emergency department
- Explain the diagnosis and treatment of subdural empyema, epidural abscess and intracranial thrombophlebitis in the Emergency Department
- Explain the diagnosis and treatment of CSF shunt infections in the Emergency Department

Module 10. Infections of Urinary Tract, Genitals and Sexual Transmission

- Explain the diagnosis and treatment of cystitis in the Emergency Department
- Explain the diagnosis and treatment of asymptomatic bacteriuria in the Emergency Department
- Explain the diagnosis and treatment of a UTI in patients with bladder catheterization in the Emergency Department
- Explain the diagnosis and treatment of prostatitis in the Emergency Department
- Explain the diagnosis and treatment of pyelonephritis in the Emergency Department
- Explain the diagnosis and treatment of a perinephritic abscess in the Emergency Department
- Explain the diagnosis and treatment of orchiepididymitis in the Emergency Department
- Explain the diagnosis and treatment of vulvovagitis and cervicitis in the Emergency Department
- Explain the diagnosis and treatment of pelvic infections in the Emergency Department
- Explain the diagnosis and treatment of intrapartum, postpartum and postabortive infections in the Emergency Department
- Explain the diagnosis and treatment of inflammatory pelvic disease in the Emergency Department
- Explain the diagnosis and treatment of urethritis in the Emergency Department
- Explain the diagnosis and treatment of infections and which cause skin and genital mucosa lesions

Module 11. Infectious Diseases in Pediatric Patients in the Emergency Department

- Describe the management of fever syndrome and exanthems in a pediatric patient in the Emergency Department
- Explain the emergency diagnosis and treatment of skin, soft tissue and skeletal system infections in pediatric patients
- Explain the emergency diagnosis and treatment of ENT and respiratory infections in pediatric patients
- Explain the emergency diagnosis and treatment of gastrointestinal, genitourinary and STI infections in pediatric patients
- Explain the diagnosis and treatment of CNS and CV infections in a pediatric patient in the Emergency Department
- Explain the treatment in pediatric infectious diseases

Module 12. Imported Infectious Diseases in the Emergency Department

- Define the concept of globalization and emerging pathology
- Define the geography of the tropical infectious diseases
- Explain the epidemiology of tropical infectious diseases in travelers, immigrants and VFRs
- Explain the anamnesis of a traveler with fever in the emergency department
- Explain the possible causes of fever after staying in a tropical or subtropical area
- Perform syndrome classification of imported infectious pathology
- Define imported tropical infectious diseases of special interest

Module 13. Update on Coronavirus Infections

- Know the microbiological characteristics of coronaviruses
- Know how to assess the morbidity and mortality of coronavirus infections
- Identify the main risk groups and mechanisms of coronaviruses
- Be able to perform the necessary tests for diagnosing Coronavirus
- Know how to apply the necessary preventive measures, as well as the most accurate treatments according to the type of patient

Improve your patient care by taking advantage of the training offered by the Master´s Degree in Infectious Diseases in the Emergency Department"

03

Skills

After passing the assessments of the Master's Degree in Infectious Diseases in the Emergency Department for Nursing, the professional will have acquired the necessary professional skills to act safely and competently in the areas of intervention required in the care of patients with infectious diseases and, specifically, on COVID 19, in the Emergency Department.

With this program you will be able to master new diagnostic and therapeutic procedures in Infectious Diseases in the Emergency Department"

At the end of this program, the professional will be able to:

General Skills

- Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to infectious diseases
- Create a personalized care plan for patients with infectious diseases who visit the Emergency Department
- Care for patients, whether adult or pediatric, with different types of infections

Don't miss the opportunity and update your knowledge by taking the Master's Degree in Infectious Diseases in the Emergency Department"

Specific Skills

- Describe in depth the handling of microbiological samples, their processing and the interpretation and clinical application of identification and sensitivity results
- Explain the scope of application of an antibiotic treatment, its pharmacological and pharmacodynamic characteristics and its indications
- Assess the severity of the infection
- Explain the management of severe sepsis and the relevance of the existence of the Code Sepsis
- Characterize the clinical syndromes of community-acquired, nosocomial-acquired or healthcare-associated infections
- Deepen the knowledge of HIV infection from its epidemiology and history to its multiple manifestations, its diagnostic and therapeutic management and prevention
- Characterize clinical syndromes of infection in immunocompromised non-HIV patients, characteristics of chronic HCV infection and emerging, imported and traveler's infectious pathology
- Define the antibiotic prescription support teams and their practical application
- Describe the utilities of bedside clinical ultrasound in the diagnostic support of frequent infectious pathology
- Define the concepts of Electronic Clinical Decision Support as applied to infectious pathology
- Work with patients that have been diagnosed with or present symptoms of Coronavirus, complying with all safety measures
- Perform diagnostic tests to detect possible cases of Coronavirus

04

Course Management

The program's teaching staff includes leading specialists in Infectious Diseases in the Emergency Department and other related areas, who bring their years of work experience to this training program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.

Learn from reference professionals, the latest advances in procedures in the field of Infectious Diseases in the Emergency Department for Nursing"

Management

Dr. García del Toro, Miguel

- Specialist in Internal Medicine. PhD in Medicine in the Microbiology department from the University of Valencia
- Head of the Infectious Diseases Service at the General University Hospital Consortium of Valencia.
- Associate Professor at the University of Valencia, as well as multiple courses, diplomas and masters in infectious diseases.
- About 100 national and international publications in journals and books, almost all of them indexed in Pubmed and/or Scopus, and about one third published in journals of first quartile specialty and good impact factors.
- Over 300 communications to National and International Congresses, mostly in the specialty of Infectious Diseases, HIV and Viral Hepatitis, a good part of them in the most prestigious International ones (CROI, AASLD, ECCMID, etc).
- Main Investigator of around thirty Clinical Trials and/or Research Projects and a hundred as collaborating researcher. Several public (FIS) and private research grants. Director of several Master's theses and doctoral dissertations. Member CEIm Valencia Community
- Member of several national expert panels and elaboration of management guidelines on HIV and Hepatitis.
- President Congress of the National Group for the Study of Hepatitis of the Society for Infectious Diseases and Clinical Microbiology 2017. Member and Secretary of its Board of Directors. Member of several scientific societies of infectious diseases.

Ms. García Rodríguez, Magdalena

- Degree in Medicine and Surgery
- Specialist in Internal Medicine
- Attending Physician in the Infectious Diseases Unit and the Consorcio General University Hospital, Valencia
- Head of the International Health and Travel Advice Section
- Author of several publication and research projects
- Founding member and advisor of the Chagas Disease Association of the Valencian Community
- Member of a vaccine study group for the Spanish Society of Infectious Diseases and Clinical Microbiology.
- Member of a Malaria study group for the Spanish Society of Infectious Diseases and Clinical Microbiology.

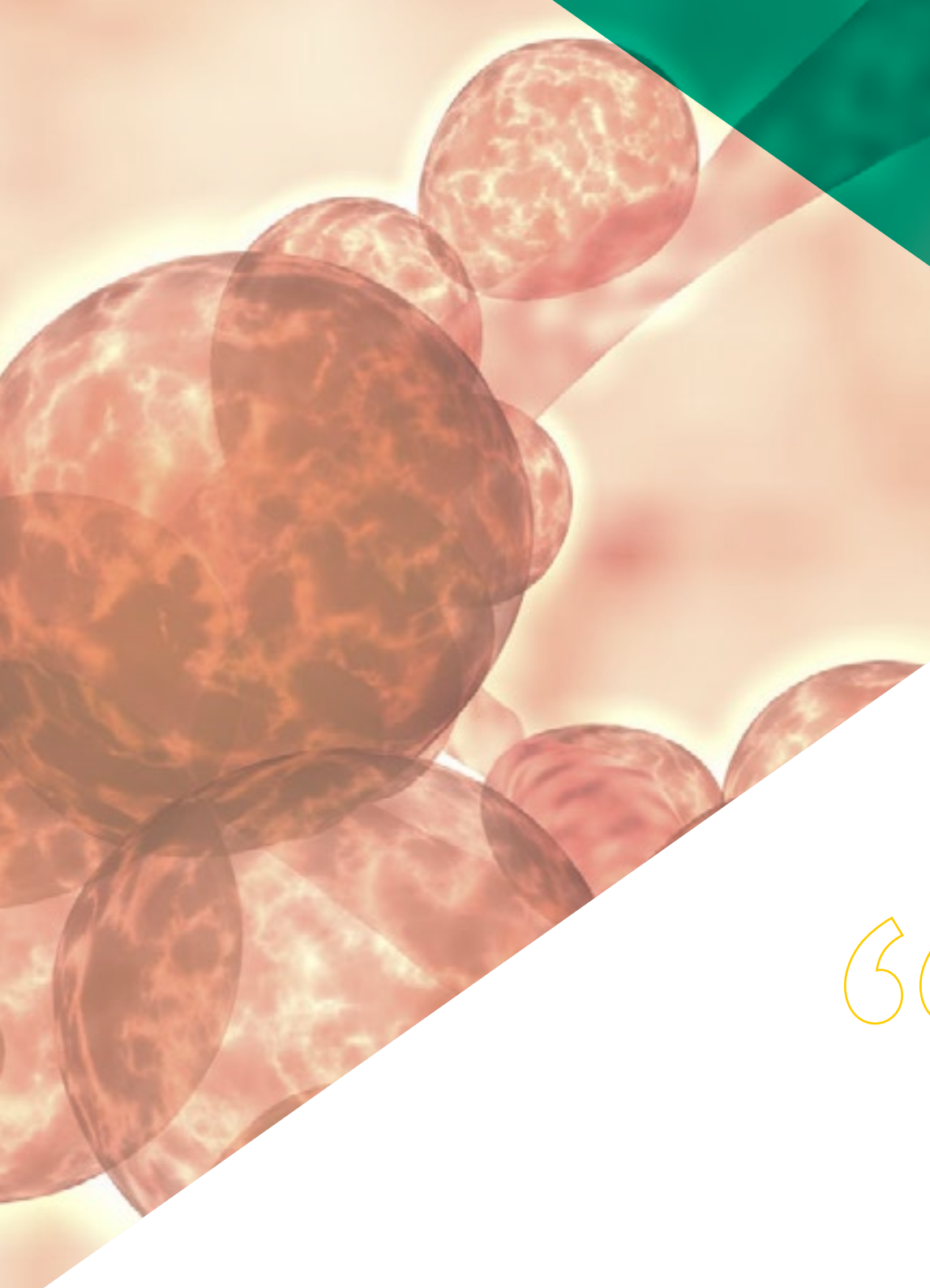
Ms. Ricart Olmos, María del Carmen

- Degree in Medicine and Surgery
- Specialist in Internal Medicine
- Attending Physician in the Infectious Diseases Unit and the Consorcio General University Hospital, Valencia
- Author of several publication and research projects
- Editor of the Consensus Document on Age and Human Immunodeficiency Virus Infection Expert Group of the Secretariat of the National AIDS Plan (SPNS), Spanish Society of Geriatrics and Gerontology (SEGG)
- Master's Degree in Infectious Diseases in Intensive Care

05

Structure and Content

The structure of the contents has been designed by a team of professionals from the best hospitals and universities, aware of the relevance of this specialization in order to intervene in the diagnosis, treatment and monitoring of urgent infectious diseases, and committed to quality teaching through new educational technologies.



This Master's Degree in Infectious Diseases in the Emergency Department for Nursing contains the most complete and up-to-date scientific program on the market"

Module 1. Update on Infectious Diseases

1.1. Principles of Infection
- 1.1.1. Virulence Factors and Toxins
- 1.1.2. Defensive Mechanisms of the Host

1.2. Main Human Pathogens in our Environment
- 1.2.1. Current Epidemiology of the Infection
- 1.2.2. Data on a Worldwide Level
- 1.2.3. Data in our Environment
- 1.2.4. Microbial Resistance

1.3. Current Scenarios of Infection in the Emergency Department
- 1.3.1. Elderly Patients
- 1.3.2. Oncology Patients
- 1.3.3. Chronic Renal Patients on Dialysis
- 1.3.4. Transplant Recipient
- 1.3.5. HIV Infection
- 1.3.6. Travelers and Immigrants

1.4. Etiopathogenic Profiles of Infection
- 1.4.1. Bacterial Infections
- 1.4.2. Viral Infections
- 1.4.3. Fungal Infections
- 1.4.4. Microbacterial Infections
- 1.4.5. Parasitic Infections

Module 2. The Microbiology Laboratory in the Emergency Department

2.1. Process of Sample Collection
- 2.1.1. General Considerations for Taking, Conserving and Transporting the Samples for Microbiological Study
- 2.1.2. Material for Sample Collection

2.2. Management of Samples in the Laboratory
- 2.2.1. Receiving Samples
- 2.2.2. Processing
- 2.2.3. Methods and Techniques used for Microbiological Diagnosis According to the Main Infectious Syndromes

2.3. Techniques Available for Emergency Diagnoses
- 2.3.1. Bacteria
- 2.3.2. Virus
- 2.3.3. Fungi
- 2.3.4. Mycobacteria
- 2.3.5. Parasites

2.4. Interpretation of Preliminary Results
- 2.4.1. Interpretation of Microbiological Diagnostic Tests

2.5. Procedures in Hospitals Without On-call Microbiologists
- 2.5.1. Disadvantages of Not Having an On-call Microbiologist
- 2.5.2. Advantages of Having an On-call Microbiologist
- 2.5.3. On-call Care without a Microbiologist

Module 3. Public Health and Infectious Disease in the Emergency Department

3.1. Emergency Department Personnel
- 3.1.1. Initial Assessment
- 3.1.2. Vaccines
- 3.1.3. Action Protocols in Cases of Specific Exposure

3.2. Established Protocols of Isolation
- 3.2.1. Types of Transmission and Methods of Isolation
- 3.2.2. Special Situations

3.3. Notifiable Diseases and Urgent Declaration to Public Health
- 3.3.1. Concept of Notifiable Diseases
- 3.3.2. Surveillance of Notifiable Diseases

3.4. Special Situations
- 3.4.1. Annual Flu
- 3.4.2. Epidemiological Outbreaks
- 3.4.3. Imported Pathology Possibility of Pathology with High Contagious Capacity

3.5. Updates Epidemiological Outbreaks
- 3.5.1. Seasonal Epidemiological Parameters in the Most Common Infections in the Community
- 3.5.2. Epidemic Outbreak and Types of Source

3.6. Post-exposure Prophylaxis that is Initiated in the Emergency Department
- 3.6.1. Bacterial Meningitis
- 3.6.2. HIV Infection
- 3.6.3. Sexual Assault
- 3.6.4. Rabies

Module 4. Systemic Febrile Syndrome. Antimicrobials:

4.1. Biomarkers in Sepsis
- 4.1.1. Lactate
- 4.1.2. Procalcitonin
- 4.1.3. Proadrenomedulin
- 4.1.4. Combinations

4.2. Initial Focus in Acute Fever Syndrome
- 4.2.1. Initial Management of a Patient with a Fever in the Emergency Department
- 4.2.2. Treatment
- 4.2.3. Special Categories
- 4.2.4. Fever of Unknown Origin
- 4.2.5. Attitude and Destiny of the Patient

4.3. Bacteremia, Sepsis and Septic Shock
- 4.3.1. Definitions According to Consensus Conferences
- 4.3.2. How to Identify a Patient with Sepsis?
- 4.3.3. Controversies and Limitations of the New Definitions
- 4.3.4. Managing Sepsis

4.4. Antimicrobials:
- 4.4.1. Concept: What is an Antimicrobial?
- 4.4.2. Antibacterials
- 4.4.3. Pregnancy and Breastfeeding
- 4.4.4. Antifungal

Module 5. Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

5.1. Fever in Emergencies
- 5.1.1. General Concepts
- 5.1.2. Action Protocol
- 5.1.3. Patient Orientation

5.2. Fever in an Elderly Patient
- 5.2.1. General Concepts
- 5.2.2. Characteristics of the Specific Clinical Framework
- 5.2.3. Points to Remember

5.3. Fever in a Hemodialysis Patient
- 5.3.1. Infections Related to Vascular Access in Hemodialysis
- 5.3.2. Other Considerations in the Infectious Pathology of a Patient on Dialysis

5.4. Fever in the Patient with Intravascular Catheters
- 5.4.1. Clinical manifestations
- 5.4.2. Etiology
- 5.4.3. Diagnosis
- 5.4.4. Treatment
- 5.4.5. Prevention

5.5. Patient with HIV Infection
- 5.5.1. Pulmonary Syndromes
- 5.5.2. Neurological syndromes
- 5.5.3. Other Fever Syndromes
- 5.5.4. Immune Reconstitution Syndrome

5.6. Patient with Iatrogenic Immunosuppression
- 5.6.1. Etiology
- 5.6.2. Diagnostic Approach
- 5.6.3. Treatment

5.7. Patient with Onco-hematologic Pathology
- 5.7.1. Diagnosis and Therapeutic Management of an Onco-hematologic Patient with a Fever

5.8. Transplant Recipient of a Solid Organ
- 5.8.1. Infections in the First Month Post-Transplant
- 5.8.2. Infections Between the First- and Sixth-Month Post-Transplant
- 5.8.3. Infections After the Sixth Month Post-Transplant
- 5.8.4. Diagnostic Strategy
- 5.8.5. Empirical Treatment

5.9. Patient who has Recently Undergone Surgery
- 5.9.1. Infection of Surgical Wounds Current Management
- 5.9.2. Other Infections in a Patient who has Recently Undergone Surgery

5.10. Pregnant Patient
- 5.10.1. Special Characteristics of a Pregnant Woman
- 5.10.2. Diagnostic Orientation in the Emergency Department
- 5.10.3. Treatment and Management in Special Situations
- 5.10.4. Indications of Admission for Observation and Inpatient Treatment

Module 6. Infections of Organs and Apparatus (I): ORL, Head and Neck, Ophthalmological

6.1. Pharyngotonsillitis
- 6.1.1. General Concept and Classification

6.2. Oral Cavity, Head and Neck Infections
- 6.2.1. Plaque Gingivitis
- 6.2.2. GUNA
- 6.2.3. Oral TB
- 6.2.4. Oral Syphilis
- 6.2.5. Oral Mycosis
- 6.2.6. Viral Infections

6.3. Otitis Externa, Media and Mastoiditis
- 6.3.1. Diffuse Otitis Externa and Circumscribed Otitis Externa (boils)
- 6.3.2. Otomycosis
- 6.3.3. Malignant Otitis Externa
- 6.3.4. Optic Herpes
- 6.3.5. Bullous Myringitis
- 6.3.6. Acute Otitis Media
- 6.3.7. Mastoiditis

6.4. Sinusitis
- 6.4.1. Pathophysiology
- 6.4.2. Classification According to Etiology and Severity
- 6.4.3. Symptoms
- 6.4.4. Diagnosis
- 6.4.5. Complementary Tests
- 6.4.6. Treatment
- 6.4.7. Complications

6.5. Peritonsillar, Parapharyngeal and Retropharyngeal Abscesses
- 6.5.1. Peritonsillar Abscess
- 6.5.2. Parapharyngeal Space Infection
- 6.5.3. Retropharyngeal Space Infection

6.6. Dental Infections
- 6.6.1. Etiological Factors
- 6.6.2. Aetiopathogenesis.
- 6.6.3. Clinical Symptoms
- 6.6.4. Diagnosis
- 6.6.5. Treatment

6.7. Mucositis and Stomatitis
- 6.7.1. Trauma Lesions
- 6.7.2. Lesions Caused by Chemical Agents
- 6.7.3. Allergic Stomatitis
- 6.7.4. Oral Drug Ulcers by Unknown Mechanisms
- 6.7.5. Gingival Alterations Caused by Drugs
- 6.7.6. Facial Reaction to Esthetic Fillers
- 6.7.7. Oral Lesions Caused by Cocaine
- 6.7.8. Oral Mucosal Dyschromias due to Exogenous Pigmentation
- 6.7.9. Injuries Caused by Physical Agents
- 6.7.10. Recurrent Aphthous Stomatitis
- 6.7.11. Erythema Multiform

6.8. Infection of Salivary Glands
- 6.8.1. General Aspects. Anamnesis and Examination Complementary Methods
- 6.8.2. Viral Infection
- 6.8.3. Bacterial Infections
- 6.8.4. Sialodochitis or Obstructive Pathology of the Salivary Glands

6.9. Acute Laryngitis and Epiglottitis
- 6.9.1. Acute Laryngitis
- 6.9.2. Tuberculous Laryngitis
- 6.9.3. Epiglottitis

6.10. Conjunctivitis and Keratitis
- 6.10.1. Infectious Conjunctivitis
- 6.10.2. Concept and General Considerations
- 6.10.3. Bacterial Conjunctivitis
- 6.10.4. Viral Conjunctivitis
- 6.10.5. Mycotic or Parasitic Conjunctivitis
- 6.10.6. Infectious Keratitis
- 6.10.7. Concept and General Considerations
- 6.10.8. Bacterial Keratitis
- 6.10.9. Viral Keratitis
- 6.10.10. Mycotic Keratitis
- 6.10.11. Acanthamoeba Keratitis

6.11. Uveitis, Endophthalmitis and Retinitis
- 6.11.1. Uveitis: Concepts and Classification
- 6.11.2. Parasitic Uveitis
- 6.11.3. Viral Uveitis
- 6.11.4. Fungal Uveitis
- 6.11.5. Bacterial Uveitis

6.12. Periocular Infections
- 6.12.1. Stye
- 6.12.2. Chronic Canaliculitis
- 6.12.3. Acute Dacryocystitis
- 6.12.4. Preseptal Cellulitis
- 6.12.5. Postseptal (orbital) Celulitis
- 6.12.6. Acute Dacryoadenitis: Inflammation of the Lacrimal Gland
- 6.12.7. Viral Infections
- 6.12.8. Other Periocular Infections

Module 7. Infections of Organs and Apparatus (II): Skin, Soft and Osteoarticular

7.1. Cellulitis and Superficial Infections
- 7.1.1. Clinical symptoms
- 7.1.2. Diagnosis
- 7.1.3. Treatment

7.2. Deep Infections
- 7.2.1. Necrotizing Fasciitis
- 7.2.2. Fournier's Gangrene
- 7.2.3. Infectious Myositis

7.3. Diabetic Foot
- 7.3.1. Aetiopathogenesis.
- 7.3.2. Clinical Symptoms
- 7.3.3. Staging Classification of Ulcers of Infected Diabetic Foot
- 7.3.4. Etiology
- 7.3.5. Diagnosis. Complementary Explorations
- 7.3.6. Treatment

7.4. Pressure Ulcers
- 7.4.1. Aetiopathogenesis.
- 7.4.2. Risk factors
- 7.4.3. Clinical Assessment
- 7.4.4. Complications
- 7.4.5. Treatment
- 7.4.6. Infection of Pressure Lesions

7.5. Septic Arthritis
- 7.5.1. Epidemiology
- 7.5.2. Pathophysiology
- 7.5.3. Etiology
- 7.5.4. Clinical Symptoms
- 7.5.5. Diagnosis
- 7.5.6. Differential Diagnosis
- 7.5.7. Treatment
- 7.5.8. Prognosis

7.6. Osteomyelitis
- 7.6.1. Classification
- 7.6.2. Etiology and Clinical Characteristics
- 7.6.3. Diagnosis
- 7.6.4. Treatment

7.7. Spondylodiscitis
- 7.7.1. Etiopathogenesis and Microbiology
- 7.7.2. Clinical Manifestations
- 7.7.3. Diagnosis
- 7.7.4. Treatment
- 7.7.5. Prognosis

7.8. Infection of Joint Prostheses and Osteosynthesis Material
- 7.8.1. Aetiopathogenesis.
- 7.8.2. Diagnostic Approximation
- 7.8.3. Treatment Management

Module 8. Infections of Organs and Apparatus (III): Lower Airway, Intra-abdominal

8.1. Acute Bronchitis
- 8.1.1. Definition
- 8.1.2. Clinical Manifestations
- 8.1.3. Diagnosis
- 8.1.4. Treatment

8.2. Acute Chronic Obstructive Pulmonary Disease (ACOPD)
- 8.2.1. Definition
- 8.2.2. Diagnosis
- 8.2.3. Treatment
- 8.2.4. Attitude to Clinical Failure
- 8.2.5. Key Concepts

8.3. Community-Acquired Pneumonia (CAP)
- 8.3.1. Concept
- 8.3.2. Pathophysiology
- 8.3.3. Epidemiology
- 8.3.4. Etiology
- 8.3.5. Clinical manifestations
- 8.3.6. Diagnostic Attitude
- 8.3.7. Antibiotic Treatment

8.4. Healthcare-Associated Pneumonia (HAP)
- 8.4.1. Concept
- 8.4.2. Healthcare-Associated Pneumonia Versus Community-Acquired Pneumonia due to Resistant Pathogens (CAP-RP)
- 8.4.3. Etiology
- 8.4.4. Microbiological Diagnosis
- 8.4.5. Empirical Treatment
- 8.4.6. Prognosis

8.5. Pneumonic Pleural Effusion and Empyema
- 8.5.1. Clinical Symptoms
- 8.5.2. Staging
- 8.5.3. Imaging Tests
- 8.5.4. Laboratory Studies: Pleural Fluid Analysis
- 8.5.5. Pathophysiology Staging
- 8.5.6. Bacteriology
- 8.5.7. Prognosis
- 8.5.8. Treatment

8.6. Pulmonary Abscess
- 8.6.1. Definition
- 8.6.2. Etiology
- 8.6.3. Pathophysiology
- 8.6.4. Clinical Manifestations
- 8.6.5. Diagnosis
- 8.6.6. Treatment

8.7. Pulmonary Tuberculosis
- 8.7.1. Etiology
- 8.7.2. Clinical Manifestations
- 8.7.3. Diagnosis
- 8.7.4. Treatment

8.8. Gastroenteritis
- 8.8.1. Etiology
- 8.8.2. Clinical Manifestations and Physical Examination
- 8.8.3. Laboratory Data and Imaging Tests.
- 8.8.4. Diagnosis
- 8.8.5. Treatment

8.9. Liver and Biliary Tract Infections
- 8.9.1. Bacterial Infections which Affect the Liver
- 8.9.2. Viral Infections which Affect the Liver
- 8.9.3. Parasitic Infections which Affect the Liver
- 8.9.4. Fungal Infections which Affect the Liver

8.10. Cholecystitis and Cholangitis
- 8.10.1. Acute Cholecystitis
- 8.10.2. Acute Cholangitis

8.11. Liver Abscesses
- 8.11.1. Concept and General Characteristics
- 8.11.2. Classification and Etiopathogenesis
- 8.11.3. Pyogenic Hepatic Abscesses
- 8.11.4. Amoebic Liver Abscesses

8.12. Acute Hepatitis
- 8.12.1. Definition
- 8.12.2. Etiology
- 8.12.3. Clinical Manifestations and Physical Examination
- 8.12.4. Laboratory Data
- 8.12.5. Diagnosis
- 8.12.6. Severe Acute Hepatitis
- 8.12.7. Severe Acute Liver Failure
- 8.12.8. Treatment

8.13. Pancreatitis
- 8.13.1. Etiology
- 8.13.2. Diagnosis
- 8.13.3. Classification
- 8.13.4. Severity Prediction and Prognostic
- 8.13.5. Treatment
- 8.13.6. Infectious Complications

8.14. Appendicitis
- 8.14.1. Epidemiology
- 8.14.2. Aetiopathogenesis.
- 8.14.3. Microbiology
- 8.14.4. Diagnosis
- 8.14.5. Differential Diagnosis
- 8.14.6. Treatment
- 8.14.7. Preoperative Antibiotic Prophylaxis
- 8.14.8. Postoperative Antibiotic Treatment
- 8.14.9. Post-surgery Complications

8.15. Diverticulitis and Perirectal Abscess
- 8.15.1. Definition of Diverticulitis
- 8.15.2. Pathogenesis.
- 8.15.3. Risk Factors
- 8.15.4. Diverticulitis Diagnosis
- 8.15.5. Diverticulitis Classification
- 8.15.6. Treatment for Diverticulitis
- 8.15.7. Perirectal Abscess

8.16. Typhlitis
- 8.16.1. Epidemiology
- 8.16.2. Etiology
- 8.16.3. Pathogenesis.
- 8.16.4. Clinical Manifestations
- 8.16.5. Diagnosis
- 8.16.6. Differential Diagnosis
- 8.16.7. Treatment

8.17. Peritonitis
- 8.17.1. Classification
- 8.17.2. Pathogenesis.
- 8.17.3. Diagnosis
- 8.17.4. Assess the Severity of the Infection
- 8.17.5. Treatment

8.18. Spontaneous Bacterial Peritonitis
- 8.18.1. Concept
- 8.18.2. Epidemiology
- 8.18.3. Pathogenesis.
- 8.18.4. Clinical Manifestations
- 8.18.5. Diagnosis
- 8.18.6. Prognosis
- 8.18.7. Treatment
- 8.18.8. Prophylaxis

8.19. Secondary Peritonitis
- 8.19.1. Definition and Classification
- 8.19.2. Microbiology
- 8.19.3. Evaluation of Severity
- 8.19.4. General Principles for the Management

8.20. Intraperitoneal Abscess
- 8.20.1. Definition
- 8.20.2. Epidemiology
- 8.20.3. Etiology and Pathophysiology
- 8.20.4. Diagnosis
- 8.20.5. Treatment

Module 9. Infections of Organs and Apparatus (IV): Cardiovascular, CNS

9.1. Infectious Endocarditis
- 9.1.1. Epidemiology
- 9.1.2. Etiology
- 9.1.3. Clinical Symptoms
- 9.1.4. Diagnosis
- 9.1.5. Treatment
- 9.1.6. Prevention

9.2. Infection of Intravascular Devices
- 9.2.1. Infections Associated with Intravascular Catheter
- 9.2.2. Infections Related to Implantable Electronic Cardiovascular Implantable Cardiovascular Devices

9.3. Acute Pericarditis
- 9.3.1. Definition
- 9.3.2. Incessant and Chronic Pericarditis
- 9.3.3. Recurrent Pericarditis
- 9.3.4. Myopericarditis

9.4. Mediastinitis
- 9.4.1. Acute Mediastinitis
- 9.4.2. Sclerosing Mediastinitis

9.5. Meningitis
- 9.5.1. Epidemiology and Etiopathogenesis
- 9.5.2. Diagnosis of Meningitis: Clinical and Laboratory
- 9.5.3. Antimicrobial Treatment

9.6. Encephalitis
- 9.6.1. Epidemiology and Etiopathogenesis
- 9.6.2. Diagnosis of Encephalitis: Clinical and Complementary Evaluations
- 9.6.3. Antimicrobial Treatment

9.7. Myelitis
- 9.7.1. Epidemiology and Etiopathogenesis
- 9.7.2. Clinical symptoms
- 9.7.3. Diagnosis
- 9.7.4. Treatment

9.8. Cerebral Abscess
- 9.8.1. Aetiopathogenesis.
- 9.8.2. Clinical Manifestations and Diagnosis
- 9.8.3. Treatment

9.9. Subdural Empyema, Epidural Abscess and Intracranial Thrombophlebitis
- 9.9.1. Subdural Empyema: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment
- 9.9.2. Epidural Abscess: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment
- 9.9.3. Septic Thrombophlebitis: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment

9.10. CSF Shunt Infections
- 9.10.1. Aetiopathogenesis.
- 9.10.2. Clinical manifestations
- 9.10.3. Diagnosis
- 9.10.4. Treatment

Module 10. Infections of Urinary Tract, Genitals and Sexual Transmission

10.1. Cystitis
- 10.1.1. Symptoms
- 10.1.2. Etiology
- 10.1.3. Diagnosis
- 10.1.4. Differential Diagnosis
- 10.1.5. Treatment

10.2. Asymptomatic Bacteriuria
- 10.2.1. Epidemiology
- 10.2.2. Pathophysiology
- 10.2.3. Assessment and Treatment

10.3. UTI in Patients with Bladder Catheterization
- 10.3.1. Etiology
- 10.3.2. Clinical manifestations
- 10.3.3. Diagnosis
- 10.3.4. Prevention
- 10.3.5. Treatment

10.4. Prostatitis
- 10.4.1. Aetiopathogenesis.
- 10.4.2. Diagnosis
- 10.4.3. Clinical symptoms
- 10.4.4. Treatment
- 10.4.5. Complications

10.5. Chronic Nonbacterial or Chronic Idiopathic Prostatitis or Chronic Pelvic Pain Syndrome
- 10.5.1. Pyelonephritis
  - 10.5.1.1. Etiology
  - 10.5.1.2. Clinical manifestations
  - 10.5.1.3. Complementary Tests
  - 10.5.1.4. Treatment
  - 10.5.1.5. Admission Criteria

10.5.2. Perinephritic Abscess
10.5.2.1. Pathophysiology
10.5.2.2. Clinical Symptoms
10.5.2.3. Etiology
10.5.2.4. Diagnosis
10.5.2.5. Assessment and Treatment
10.5.3. Infections which Cause Skin and Genital Mucosal Lesions
10.5.3.1. Bacterial Infections
10.5.3.2. Fungal Infections
10.5.3.3. Viral Infections

Module 11. Infectious Diseases in Pediatric Patients in the Emergency Department

11.1. Fever Without Focus
11.1.1. Child With a Fever Without Focus and Poor Appearance
11.1.2. Fever Without Focus and Good General Appearance
11.1.3. Children from 3-36 Months Old With a Fever Without Focus and Good General Appearance
11.1.4. Breastfeeding Infant less than 3 Months Old With a Fever Without Focus and Good General Appearance
11.2. Sepsis and Septic Shock
11.2.1. Concept
11.2.2. Current Definition of Shock and Septic Shock.
11.2.3. Etiology and Epidemiology
11.2.4. Pathophysiology
11.2.5. Risk factors
11.2.6. Differential Diagnosis
11.2.7. Clinical symptoms
11.2.8. Complementary Tests
11.2.9. Treatment
11.3. Fever in a Traveling Child
11.3.1. Medical History
11.3.2. Physical Exploration
11.3.3. Complementary Tests
11.3.4. Treatment
11.3.5. Malaria
11.3.6. Dengue.
11.4. Exanthem
11.4.1. Etiology
11.4.2. Diagnosis
11.4.3. Differential Diagnosis
11.5. Skin and Soft Tissue Infections
11.5.1. Aetiopathogenesis.
11.5.2. Diagnosis
11.5.3. Main Clinical Framework
11.5.4. Treatment
11.5.5. Community-acquired Methicillin-Resistant S. Aureus
11.6. Cervical Adenitis
11.6.1. Etiology
11.6.2. Clinical Evaluation
11.6.3. Diagnosis and Treatment
11.6.4. Differential Diagnosis
11.7. Osteoarticular Infections: Acute Osteomyelitis and Septic Arthritis
11.7.1. Epidemiology
11.7.2. Aetiopathogenesis.
11.7.3. Clinical Symptoms
11.7.4. Diagnosis
11.7.5. Differential Diagnosis
11.7.6. Treatment
11.8. Pharyngotonsillitis and Its Complications
11.8.1. Concept
11.8.2. Epidemiology and Etiology
11.8.3. Clinical symptoms
11.8.4. Diagnosis
11.8.5. Treatment

11.9. Otitis Media and External Sinusitis
- 11.9.1. Concept of Otitis Media and External
  - 11.9.1.1. Epidemiology and Etiology
  - 11.9.1.2. Clinical symptoms
  - 11.9.1.3. Complications
  - 11.9.1.4. Diagnosis
  - 11.9.1.5. Treatment
- 11.9.2. Concept of Acute Sinusitis
  - 11.9.2.1. Epidemiology and Etiology
  - 11.9.2.2. Clinical symptoms
  - 11.9.2.3. Diagnosis
  - 11.9.2.4. Treatment

11.10. Acute Mumps
- 11.10.1. Epidemic Mumps
- 11.10.2. Vaccines
- 11.10.3. Prevention of Epidemic Outbreaks

11.11. Laryngitis and Epiglottitis
- 11.11.1. Concept
- 11.11.2. Epidemiology and Etiology
- 11.11.3. Clinical Symptoms
- 11.11.4. Diagnosis
- 11.11.5. Treatment
- 11.11.6. Admission Criteria

11.12. Pertussis Syndrome
- 11.12.1. Concept
- 11.12.2. Epidemiology and Etiology
- 11.12.3. Clinical symptoms
- 11.12.4. Complications
- 11.12.5. Diagnosis
- 11.12.6. Treatment
- 11.12.7. Prevention

11.13. Bronchiolitis and Recurrent Wheezing Episodes
- 11.13.1. Acute Bronchiolitis
- 11.13.2. Recurrent Wheezing

11.14. Pneumonia and Complications
- 11.14.1. Epidemiology
- 11.14.2. Etiology
- 11.14.3. Clinical Characteristics
- 11.14.4. Diagnosis
- 11.14.5. Treatment
- 11.14.6. Prevention
- 11.14.7. Complications

11.15. TB
- 11.15.1. Manifestations
- 11.15.2. Diagnosis
- 11.15.3. Treatment

11.16. Acute Gastroenteritis.
- 11.16.1. Aetiopathogenesis.
- 11.16.2. Clinical Symptoms
- 11.16.3. Diagnosis
- 11.16.4. Treatment

11.17. Viral Hepatitis
- 11.17.1. Assessment and Initial Management of Hepatitis in the Emergency Department
- 11.17.2. Classic Viral Hepatitis

11.18. Appendicitis (Need for Antibiotic or Not) and Perirectal Abscesses
- 11.18.1. Acute Appendicitis
- 11.18.2. Perirectal Abscess

11.19. Urinary Infection
- 11.19.1. Definition
- 11.19.2. Aetiopathogenesis.
- 11.19.3. Clinical. When to Suspect a Urinary Tract Infection in the Pediatric Age?
- 11.19.4. Diagnosis
- 11.19.5. Management

11.20. CNS Infections in Pediatrics: Acute Meningitis
- 11.20.1. Etiology
- 11.20.2. Clinical symptoms
- 11.20.3. Diagnosis
- 11.20.4. Treatment
- 11.20.5. Chemoprophylaxis
- 11.20.6. Complications and Prognosis

11.21. Endocarditis, Myocarditis and Pericarditis
- 11.21.1. Infectious Endocarditis
- 11.21.2. Myocarditis
- 11.21.3. Pericarditis

11.22. Treatment in Pediatric Infectious Diseases
- 11.22.1. Bacterial Infections in the Pediatric Emergency Department: Diagnosis and Antibiotic Treatment of Choice, Depending on the Resistance of the Pathogens Responsible for the Disease
- 11.22.2. Delayed Antibiotic Prescribing Strategy
- 11.22.3. When is the Association of Amoxicillin with Clavulanic Acid and Macrolides Indicated in Pediatrics?
- 11.22.4. Do I Also Have to be Careful with Topical Antibiotherapy to Avoid Bacterial Resistance?

Module 12. Imported Infectious Diseases in the Emergency Department

12.1. Introduction to Imported Pathology
- 12.1.1 Imported Pathology of Special Interest:
  - 12.1.1.1. Chagas Disease
  - 12.1.1.2. Dengue.
  - 12.1.1.3. Chikungunya
  - 12.1.1.4. Malaria

12.2. Globalization and Emerging Pathology
- 12.2.1. Emerging and Re-emerging Diseases
- 12.2.2. Main Causes of Emergency in Infectious Diseases
- 12.2.3. Transmission
- 12.2.4. Zoonotic
- 12.2.5. Future Previsions

12.3. Geography of Tropical Infectious Diseases
- 12.3.1. Subspecialties of Medical Geography
- 12.3.2. Relevance and Relationship to Tropical Diseases
- 12.3.3. Main Infectious Diseases According to Area

12.4. Epidemiology of Tropical Infectious Diseases in Travelers, Immigrants and VFRs.
- 12.4.1. Importance
- 12.4.2. Epidemiological Characteristics of Immigrants
- 12.4.3. Epidemiological Characteristics of People Traveling to the Tropics
- 12.4.4. Epidemiological Characteristics of VFRs
- 12.4.5. Data on Imported Pathology in Spain

12.5. Anamnesis of a Traveler with Fever in the Emergency Department
- 12.5.1. Initial Approximation of a Traveler with Fever
- 12.5.2. Differential Diagnosis
- 12.5.3. Treatment of a Traveler with Fever

12.6. Fever After Staying in a Tropical and / or Subtropical Area
- 12.6.1. Importancce of Good Anamnesis
- 12.6.2. Investigation of Possible Vectors
- 12.6.3. Fever of Parasitic Origin
- 12.6.4. Fever of Viral Origin
- 12.6.5. Fever of Bacterial Origin
- 12.6.6. Other Causes of Fever

12.7. Imported Infectious Pathology Syndrome Classification
- 12.7.1. Fever and Cutaneous Lesion
- 12.7.2. Fever and Altered Level of Consciousness
- 12.7.3. Fever and Liver Problems
- 12.7.4. Fever and Respiratory Semiology
- 12.7.5. Fever and Digestive Semiology

12.8. Imported Tropical Infectious Diseases of Special Interest
- 12.8.1. Malaria
- 12.8.2. Arbovirus: Dengue, Zika, Chikungunya
- 12.8.3. MERS Coronavirus (MERS CoV)
- 12.8.4. Schistosomiasis

12.8.5. Invasive Enteritis (Salmonella, Shigella, E.coli, Campylobacter)
12.8.6. Hemorrhagic Fevers (Ebola, Lassa, Marburg, Yellow Fever, Crimean-Congo)

Module 13. Update on Coronavirus Infections

13.1. Discovery and Evolution of Coronaviruses.
13.1.1. Discovery of Coronaviruses.
13.1.2. Global Trends in Coronavirus Infections.
13.2. Main Microbiological characteristics and Members of the Coronavirus Family.
13.2.1. General Microbiological Characteristics of Coronaviruses.
13.2.2. Viral Genome.
13.2.3. Principal Virulence Factors.
13.3. Epidemiological Changes in Coronavirus Infections from its Discovery to the Present.
13.3.1. Morbidity and Mortality of Coronavirus Infections from their Emergence to the Present.
13.4. The Immune System and Coronavirus Infections.
13.4.1. Immunological Mechanisms Involved in the Immune Response to Coronaviruses.
13.4.2. Cytokine Storm in Coronavirus Infections and Immunopathology.
13.4.3. Modulation of the Immune System in Coronavirus Infections.
13.5. Pathogenesis and Pathophysiology of Coronavirus Infections.
13.5.1. Pathophysiological and Pathogenic Alterations in Coronavirus Infections.
13.5.2. Clinical Implications of the Main Pathophysiological Alterations
13.6. Risk Groups and Transmission Mechanisms of Coronaviruses.
13.6.1. Main Sociodemographic and Epidemiological Characteristics of Risk Groups Affected by Coronavirus
13.6.2. Coronavirus Mechanisms of Transmission.
13.7. Natural History of Coronavirus Infections.
13.7.1. Stages of Coronavirus Infection.
13.8. Latest Information on Microbiological Diagnosis of Coronavirus Infections.
13.8.1. Sample Collection and Shipment.
13.8.2. PCR and Sequencing.
13.8.3. Serology Testing.
13.8.4. Virus Isolation.
13.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling.
13.9.1. Biosafety Measures for Coronavirus Sample Handling.
13.10. Up-to-Date Management of Coronavirus Infections.
13.10.1. Prevention Measures.
13.10.2. Symptomatic Treatment.
13.10.3. Antiviral and Antimicrobial Treatment in Coronavirus Infections.
13.10.4. Treatment of Severe Clinical Forms.
13.11. Future Challenges in the Prevention, Diagnosis, and Treatment of Coronavirus.
13.11.1. Global Challenges for the Development of Prevention, Diagnostic, and Treatment Strategies for Coronavirus Infections.

A unique, key and decisive training experience to boost your professional development"

06

Methodology

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

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

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

At TECH 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:

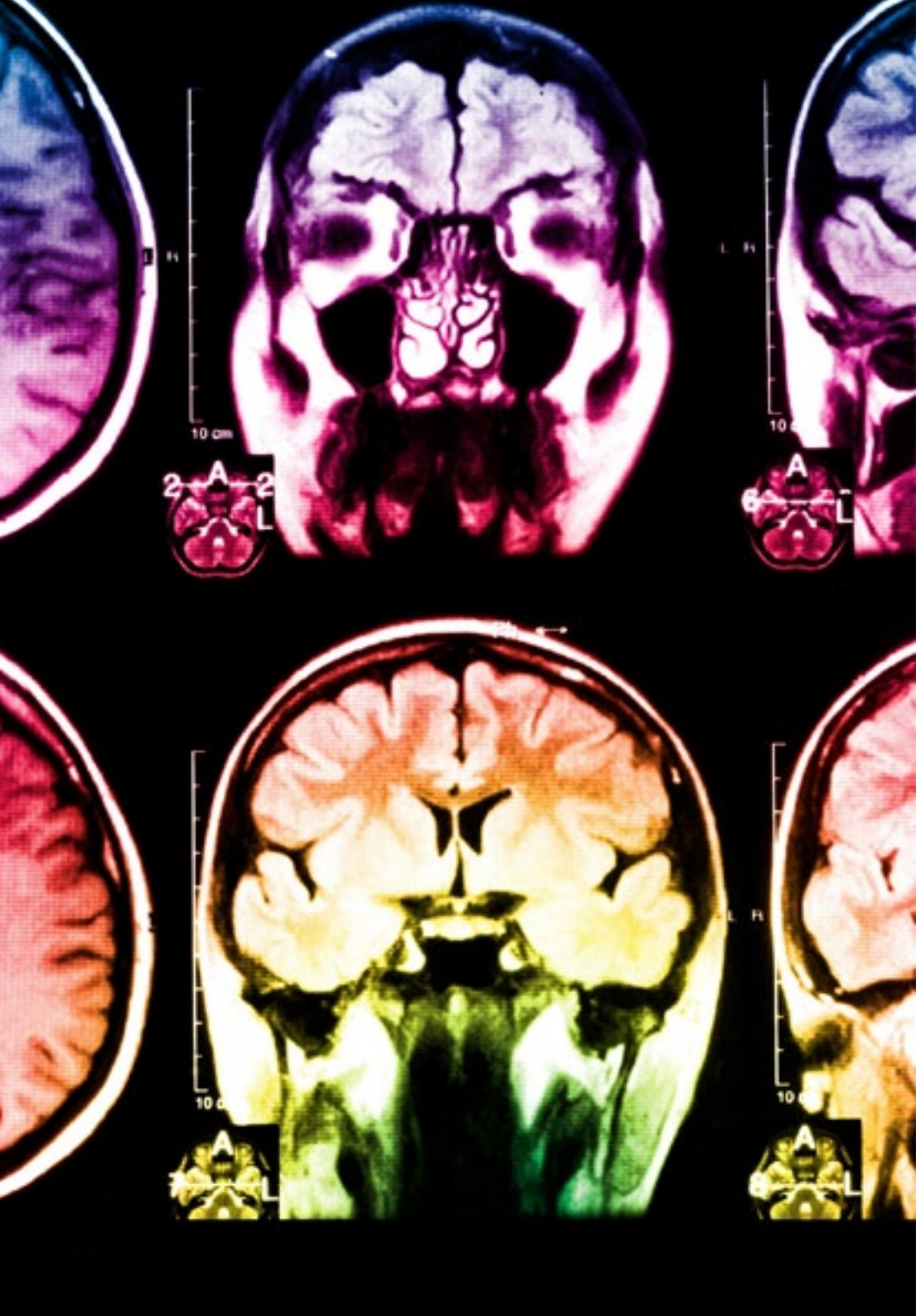
1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into 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 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 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.

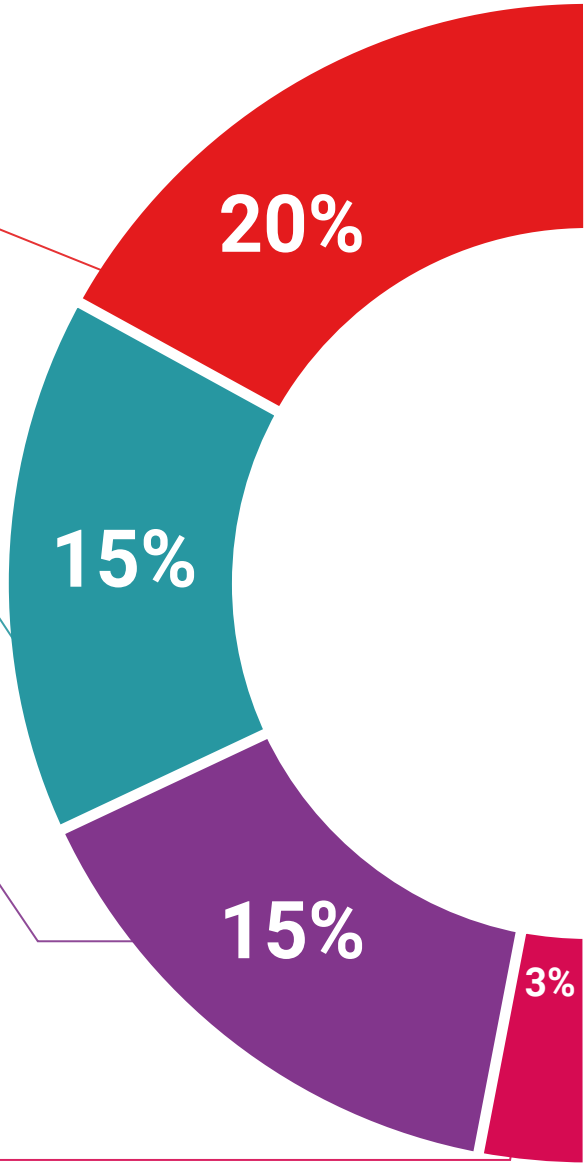
Interactive Summaries

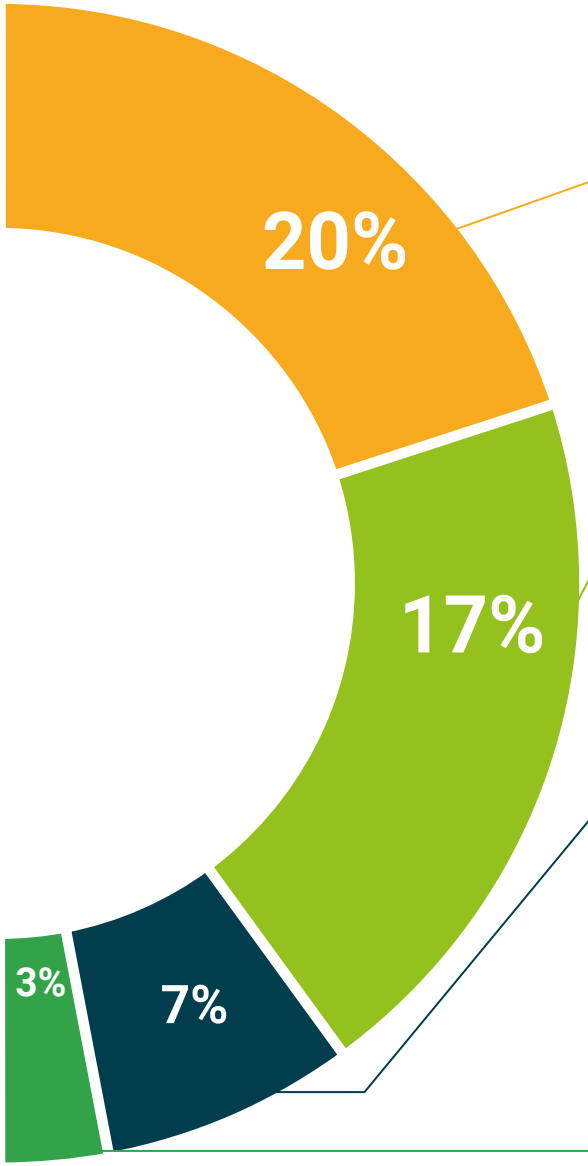
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.





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

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.

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.

07

Certificate

The Master's Degree in Infectious Diseases in the Emergency Department for Nursing guarantees, in addition to the most rigorous and up-to-date training, access to a certificate issued by TECH Global University.

Successfully complete this training program and receive your university certificate without travel or laborious paperwork"

This private qualification will allow you to obtain a **Master's Degree diploma in Infectious Diseases in the Emergency Department for 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** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Infectious Diseases in the Emergency Department for Nursing**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**

tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Master's Degree in Infectious Diseases in the Emergency Department for Nursing

This is a private qualification of 1,800 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

Master's Degree in Infectious Diseases in the Emergency Department for Nursing

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 60

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Update on Infectious Diseases	6	CO
1º	The Microbiology Laboratory in the Emergency Department	6	CO
1º	Public Health and Infectious Disease in the Emergency Department	6	CO
1º	Systemic Febrile Syndrome. Antimicrobials:	6	CO
1º	Emergency Diagnostic and Therapeutic Management of Fever in Special Situations	6	CO
1º	Infections of Organs and Apparatus (I): ORL, Head and Neck, Ophthalmological	6	CO
1º	Infections of Organs and Apparatus (II): Skin, Soft and Osteoarticular	6	CO
1º	Infections of Organs and Apparatus (III): Lower Airway, Intra-abdominal	6	CO
1º	Infections of Organs and Apparatus (IV): Cardiovascular, CNS	6	CO
1º	Infections of Urinary Tract, Genitals and Sexual Transmission	6	CO
1º	Infectious Diseases in Pediatric Patients in the Emergency Department	6	CO
1º	Imported Infectious Diseases in the Emergency Department	6	CO
1º	Update on Coronavirus Infections	6	CO

Dr. Pedro Navarro Illana
Rector

tech global university

*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.

tech global university

Master's Degree

Infectious Diseases in the Emergency Department for Nursing

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

Master's Degree

Infectious Diseases in the Emergency Department for Nursing

tech global university