



PRIMO SOCCORSO

12 CFU - 1° Semester

Teaching Staff

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ROSARIA TAVERNA - Module SCIENZE INFERMIERISTICHE OSTETRICHE GINECOLOGICHE - MED/47 - 2 CFU

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LEARNING OBJECTIVES

▪ Emergency Medicine

Provide the theoretical and practical tools to recognize the main pathologies typical of Emergency Medicine. Of each will be discussed pathophysiology, symptoms and the diagnostic and decision processes of their figure of majoring in obstetrics. The most common therapeutic protocols, both to deal with and manage autonomously will be presented and discussed, and those to be made on the recommendation / prescription and alongside with medical doctor

▪ Pharmacology

The first part of the present course will provide students to acquire knowledge about basic principles in Pharmacology, such as pharmacokinetics and pharmacodynamics, drugs mechanisms,

signal transduction pathways, adverse drug reactions. In the second part, an overview of major drug classes used in obstetrics and during pregnancy will be presented.

▪ **Occupational Medicine**

The aim of the course is to provide information and knowledge about workplace-related pathologies (accidents and illnesses) as well as to become familiar with prevention principles, with particular reference to risk assessment and preventive measure adoption.

Students will have to learn methods and techniques to collect work history, identify environmental and occupational risks and possible relationships with genetic, demographic, socio-economic, psychological and cultural factors, related to health or illness statuses, as well as to look into the possible non-specific effects of occupational risk factors, especially for degenerative chronic diseases.

The main etiologically diagnostic aspects of occupational medicine will be dealt with, and so will the epidemiology of con-causally work-related diseases. Also, the most frequent professional diseases and work accidents will be classified. The main analysis method and work risk assessment instruments will be provided, that is limit exposure levels, environmental/biological monitoring and healthcare surveillance. Also, occupational risk information, safety and health law guidelines in work places, primary and secondary prevention of occupational diseases, role and duties of the competent physician will be discussed.

DETAILED COURSE CONTENT

▪ **Emergency Medicine**

Gastroesophageal reflux

Blood chemistry indices of liver function

Jaundice

Role of insulin in glucose metabolism, lipid, protein

The beta-islet cells and insulin secretion

Insulin and its biological effect: the receptor and post-receptor events

Diagnosis of Diabetes Mellitus: blood glucose, oral glucose load curve, curve oral glucose, glycosylated hemoglobin, microalbuminuria

Classification of diabetes mellitus: type 1, type 2, gestational, being endocrinopathies

Genetics of Diabetes Mellitus

Vascular complications (micro- and macroangiopathy)

Diabetic comas: pathophysiology, clinical, treatment elements

Hypertension: classification, etiology, prevention, clinical, complications, pharmacological and non-pharmacological treatment elements; The hypertensive crisis

Vein thrombosis (TV): etiology, symptoms, complications, non-pharmacological therapy and drug therapy nodes

Classification, signs and symptoms of anemia

Chest pain

Dyspnea

Cardiopulmonary arrest (ACR):

- Elements of Basic Life Support (BLS)

- Management of the patient

Syncope

Cardiogenic shock

Hypovolemic shock

Anaphylactic shock

Septic shock

Systemic Inflammatory Response Syndrome (SIRS)

Multiple Organ Dysfunction Syndrome (MODS)

Hypertension

Pre-eclampsia and eclampsia

Hypertensive crisis

Acute pulmonary edema

Pulmonary embolism

Acute Respiratory Distress Syndrome (ARDS)

Bronchial asthma

The diabetes and its acute and chronic complications:

- The diabetic comas

- Hypoglycemia

Acute and chronic hepatitis and liver cirrhosis

Acute fatty liver of pregnancy

Hepatic involvement in eclampsia

▪ **Pharmacology**

General Pharmacology

- Foundations of Pharmacology;
- The Drug Development Process;
- Pharmacokinetics;
- Dose-response relationships;
- Pharmacodynamics;
- Factors affecting response to drugs;
- Adverse drug reactions;
- Fetal toxicity and teratogenesis.

Drug classes

- Drugs affecting autonomic nervous system;
- Drug therapy for depressions and anxiety disorders;
- Drugs affecting the cardiovascular system;
- Drugs regulating uterine motility;
- Gonadal hormones;
- Drugs used for diabetes mellitus;
- Anti-inflammatory drugs;
- General and Local Anesthetics;
- Antibiotics.

▪ **Occupational Medicine**

History and evolution of Occupational Medicine: prevention service legislation and organization; work accidents and professional diseases insurance practices. Risk assessment procedure; exposure times and limit levels/values.

Primary and secondary prevention principles. Healthcare surveillance and duties of competent physician. Biological monitoring procedures. General and individual preventive practices and first aid action organization. Biological risk and vaccinations. Physical risks: noise, vibrations, ionizing-non-ionizing radiations, microclimate and compressed atmosphere. Ergonomy principles: postures and work. Workstation, shift and night work risks. Assessment of risks in manual loads handling and in repetitive movements of upper limbs with associated pathologies. Organizational wellness and its associated work stress. Health promotion in working places.

Main dust/fibre and professional allergene exposure-related pathologies; indoor and outdoor pollutants. Exposure risks to chemical, mutagen and carcinogenic agents.

Principles of Industrial Hygiene and hints of Statistics. Risks in the main working cycles. Guidelines on safety and health in working places.

TEXTBOOK INFORMATION

▪ **Emergency Medicine**

Medicina di Emergenza e di Pronto soccorso

Mario G. Balzanelli – Antonino Gullo. CIC Edizioni Internazionali

Medicina Interna

Autore: Massini Renato; Izzi Donatello; Marchetti Patrizia; Passeretti Francesca; Recine Umberto,
Editore: McGraw-Hill Italia

▪ **Pharmacology**

1. ROSSI F., CUOMO V., RICCARDI C., Farmacologia per le professioni sanitarie, Ed. Minerva Medica
2. Hitner, Nagle, Principi di Farmacologia, Zanichelli

3. Furlanut, Farmacologia generale e clinica per le lauree sanitarie, III edizione, Piccin

▪ **Occupational Medicine**

- David Koh, Ken Takahashi. Textbook of Occupational Medicine Practice. 3rd Edition ISBN: 978-981-4329-57-6
 - Antonio Mutti, Massimo Corradi: "Lezioni di Medicina del Lavoro". Nuova Editrice Berti, 2014 (ISBN 978-88-7364-627-3)
 - Per Alberto Bertazzi: "Medicina del lavoro". Raffaello Cortina Editore, 2013 (ISBN 978-88-6030-633-3)
 - Enrico Pira, Canzio Romano, Paolo Carrer: "Manuale di medicina del lavoro". Minerva Medica, 2016 (9788877118431)
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