



MEDICAL UNIVERSITY - PLEVEN

ИМЕ НА ОСНОВНО ЗВЕНО

DISTANCE LEARNING CENTRE

DEPARTMENT OF PEDIATRICS

PRACTICAL EXERCISES – THESES

FOR E- LEARNING IN PEDIATRICS

ENGLISH MEDIUM COURSE OF TRAINING

SPECIALTY OF MEDICINE

ACADEMIC DEGREE: MASTER

PROFESSIONAL QUALIFICATION: DOCTOR OF MEDICINE

PREPARED BY DR. STANIMIRA ELKINA, PHD

PLEVEN, 2020

PRACTICAL EXERCISES – THESES

PRACTICAL EXERCISES – TOPIC

GENERAL ASPECTS OF ANTIMICROBIAL THERAPY

PRACTICAL EXERCISES – THESES

Considerations when prescribing antimicrobial therapy:

1. An accurate diagnosis of infection;
2. Understanding the difference between empiric and etiological therapy;
3. Understanding the pharmacodynamics, pharmacokinetics characteristics and efficacy of antimicrobial agents;
4. Choosing the appropriate agent according to host characteristics that influence antimicrobial activity (age, host defense, resistance etc.);
5. Recognizing the adverse effects of antimicrobial agents on the host.

PRACTICAL EXERCISES – TASKS

I. Students to be familiarized with the antimicrobial agents' classifications:

1. Classification based on type of action - bacteriostatic and bactericidal
2. Classification based on source of antibacterial agents - naturally obtained from fungal sources, semi-synthetic or synthetic.
3. Function-based classification - cell wall synthesis inhibitors; inhibitors of membrane function; protein synthesis inhibitors; inhibition of nucleic acid synthesis
4. Classification based on chemical structure
 - β -Lactams - penicillin derivatives, cephalosporins, monobactams, and carbapenems
 - Aminoglycoside
 - Macrolides
 - Quinolones and fluoroquinolones
 - Sulphonamides
 - Tetracyclines
 - Nitroimidazoles

II. Students to be trained in age- and dose-related antibacterial prescribing in childhood

PRACTICAL EXERCISES – VENUE AND MATERIALS

- Department of Pediatrics, UMHAT - Pleven
- Pediatric lectures
- Clinical task and MCQs