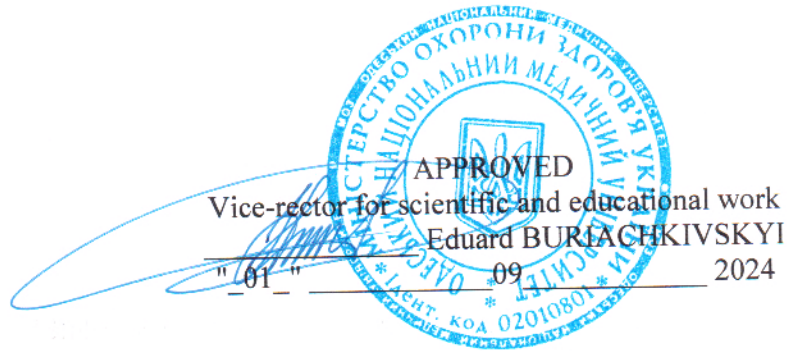


MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY

Faculty: international
(*faculty name*)

Department of Pediatrics
(*name of department*)



METHODICAL RECOMMENDATION
FOR PRACTICAL LESSON
FROM THE EDUCATIONAL COMPONENT

Faculty international, course 6

Educational component "PEDIATRICS"

Approved:

Meeting of the Department of Pediatrics _____

Odesa national medical university

Protocol № 1 of " 29 " 08 2024

Head of the department _____

(*signature*)

(Mykola ARYAYEV)
(*name, surname*)

Перезатверджено:

Засідання кафедри педіатрії

Одеський національний медичний університет

Протокол № 1 від 26 08 2025 р.

Завідувач кафедри  Микола АРЯЄВ

Developers: Prof. Mykola ARYAYEV, associate professor Victor BIRYUKOV, associate professor Larysa KAPLINA, associate professor Lyudmila SENKIVSKA, associate professor Roman PAPINKO, associate professor Maxim FEDIN, associate professor Daria Kolomiets, assistant PhD Vera Koropets, assistant Liubov BRATKOVA

Note. In the case of publication of methodical developments as a self-published work, the academic council of the faculty provides a recommendation for publication in the presence of two reviews, one of which is external — from a reviewer of another institution of higher education.

Content module 5. "Differential diagnosis of the most common diseases of the urinary system in children. Emergency care for major emergencies".

Practical lesson № 53-56

Topic 16: Differential diagnosis of infectious-inflammatory and hereditary diseases of the urinary system in children.

Practical lesson № 57-59

Topic 17: Differential diagnosis of glomerulonephritis in children. Chronic kidney disease in children. Emergency care for acute kidney injury in children.

Purpose: Acquisition by the applicant of higher education of knowledge and formation of elements of professional competences in the field of pediatrics from the section of nephrology:

Practical lesson № 53-56

Topic №16 - Differential diagnosis of infectious-inflammatory and hereditary diseases of the urinary system in children.

Practical lesson № 57-59

Topic №17 - Differential diagnosis of glomerulonephritis in children. Chronic kidney disease in children. Emergency care for acute kidney injury in children.

Basic concepts:

Practical lesson № 53-56

Topic 16. Differential diagnosis of infectious-inflammatory and hereditary diseases of the urinary system in children.

Leading clinical symptoms and syndromes in urinary system infection in children. Clinical variants of the course of infection of the urinary system. Differential diagnosis of the most common infections of the urinary system in children. Management tactics for urinary system infection in children. Emergency care for acute urinary retention in children. Dispensary observation.

Differential diagnosis of hereditary diseases of the urinary system in children.

Leading clinical symptoms and syndromes in dysmetabolic nephropathies and hereditary tubulopathies (phosphate-diabetes, Debré-de-Tony-Fanconi syndrome, renal diabetes insipidus, renal tubular acidosis) in children. Clinical variants of the course in dysmetabolic nephropathies and hereditary tubulopathies. Data of laboratory and instrumental studies in dysmetabolic nephropathies and hereditary tubulopathies. Differential diagnosis of dysmetabolic nephropathies and hereditary tubulopathies in children. Management tactics for dysmetabolic nephropathies and hereditary tubulopathies in children. Principles of treatment of chronic renal failure in children.

Practical lesson № 57-59

Topic 17. Differential diagnosis of glomerulonephritis in children. Chronic kidney disease in children. Emergency care for acute kidney injury in children.

Conditions associated with hematuria in children. Differential diagnosis of acute poststreptococcal glomerulonephritis in children. Conditions associated with proteinuria in children. Differential diagnosis of nephrotic syndrome in children. Conservative treatment of acute kidney injury (AKI) in children and indications for dialysis.

Equipment: a child's mannequin, a patient according to the topic of the lesson.

The duration of each lesson is 2 hours.

Plan:

1. Organizational measures (greetings, checking those present, announcing the topic, the purpose of the lesson, motivating students to study the topic).
2. Control of the reference level of knowledge:

Practical lesson № 53-56

Topic 16. Differential diagnosis of infectious-inflammatory and hereditary diseases of the urinary system in children.

Leading clinical symptoms and syndromes in urinary system infection in children. Clinical variants of the course of infection of the urinary system. Differential diagnosis of the most common infections of the urinary system in children. Management tactics for urinary system infection in children. Emergency care for acute urinary retention in children. Dispensary observation.

Differential diagnosis of hereditary diseases of the urinary system in children.

Leading clinical symptoms and syndromes in dysmetabolic nephropathies and hereditary tubulopathies (phosphate-diabetes, Debré-de-Tony-Fanconi syndrome, renal diabetes insipidus, renal tubular acidosis) in children. Clinical variants of the course in dysmetabolic nephropathies and hereditary tubulopathies. Data of laboratory and instrumental studies in dysmetabolic nephropathies and hereditary tubulopathies. Differential diagnosis of dysmetabolic nephropathies and hereditary tubulopathies in children. Management tactics for dysmetabolic nephropathies and hereditary tubulopathies in children. Principles of treatment of chronic renal failure in children.

Practical lesson № 57-59

Topic 17. Differential diagnosis of glomerulonephritis in children. Chronic kidney disease in children. Emergency care for acute kidney injury in children.

Conditions associated with hematuria in children. Differential diagnosis of acute poststreptococcal glomerulonephritis in children. Conditions associated with proteinuria in children. Differential diagnosis of nephrotic syndrome in children. Conservative treatment of acute kidney injury (AKI) in children and indications for dialysis.

3. Formation of professional skills, skills (mastery of communication skills, clinical examination, determination of a treatment scheme, laboratory research, etc.) mastery of skills:

Survey, examination and clinical examination of a sick child.

1. Survey, examination and clinical examination of a child with UTI.
2. Emergency care for acute urinary retention in children.
3. Survey, examination and clinical examination of a child with dysmetabolic nephropathies and hereditary tubulopathies (phosphate-diabetes, Debré-de-Thony-Fanconi syndrome, renal diabetes insipidus, renal tubular acidosis) in children.
4. Principles of treatment of chronic renal failure in children.
5. Survey, examination and clinical examination of a child with acute poststreptococcal glomerulonephritis.
6. Conservative treatment of acute kidney injury (AKI) in children and indications for dialysis.
7. Evaluation of laboratory and instrumental research data necessary for diagnosis and differential diagnosis of UTI, hereditary diseases of the urinary system, glomerulonephritis in children, chronic kidney disease in children and acute kidney injury in children.
8. Resolving clinical situational tasks, practicing patient examination skills, demonstration and practice of skills in performing manipulations according to the list of 5, instruction and practice of skills on simulation models, training exercises on the diagnosis of the most common diseases of urinary system in children.

4. Summing up: testing, structured exam (at the end of the module).

5. List of recommended literature (basic, additional, electronic information resources):

Basic:

1. Nelson Textbook of Pediatrics, 2-Volume Set, 22nd Edition, 2024. Robert M. Kliegman, Joseph W. St. Geme III, Nathan J. Blum, et al.
2. Nelson Textbook of Pediatrics, 2-Volume Set, 22nd Edition, 2024. Robert M. Kliegman, Joseph W. St. Geme III, Nathan J. Blum, et al.
3. Nelson Textbook of Pediatrics / R. M. Kliegman [et al.] ; ed. R. E. Behrman. - 21th ed. - Edinburgh [etc.]: Elsevier, 2020. - Vol. 1. – LXXV.
4. Nelson Textbook of Pediatrics [Text] / R. M. Kliegman [et al.] ; ed. R. E. Behrman. - 21th ed. - Edinburgh [etc.]: Elsevier, 2020. - Vol. 2. - LXXV.
5. Nelson textbook of pediatrics, 2 volume set. Edition: 21st, PDF format. <http://pediacalls.com/e-books/nelson-textbook-of-pediatrics-21st-edition/> - 2019.
6. Pediatrics. Differential diagnosis. Urgent conditions edited by Aryaev M.L, Kotova N.V, electronic edition on CD. – ONMedU. – 2017.
7. Pediatrics. Differential diagnosis. Emergencies. M.L.Aryaev, N.V.Kotova, O.O.Zelinsky [etc.]; edited by Aryaev ML, Kotova NV Odessa: ONMedU. - 2017. - 280 p.

Additional:

1. EMERGENCY MEDICAL CARE: NEW CLINICAL PROTOCOL (ORDER OF THE MOH OF UKRAINE OF 05.06.2019, №1269).
2. Urinary Tract Infection in Children (South Australian Paediatric Clinical Practice Guidelines) - 2021. https://www.sahealth.sa.gov.au/wps/wcm/connect/ebd4e56e-7ae1408db3b120c75f9f12de/Urinary+Tract+Infection+in+Children_Paed_v1_0.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-ebd4e56e-7ae1-408d-b3b1-20c75f9f12de-oc-W96p

Electronic information resources:

1. <http://moz.gov.ua>– Міністерство охорони здоров'я України
2. www.ama-assn.org – Американська медична асоціація / American Medical Association
3. www.oapn.od.ua- ГО "Одеська Асоціація лікарів-педіатрів та неонатологів"
4. www.who.int – Всесвітня організація охорони здоров'я
5. www.dec.gov.ua/mtd/home/ - Державний експертний центр МОЗ України
6. <http://bma.org.uk>– Британська медична асоціація
7. www.gmc-uk.org- General Medical Council (GMC)
8. www.bundesaerztekammer.de – Німецька медична асоціація
9. https://www.who.int/workforcealliance/members_partners/member_list/ipa/en/ - Міжнародна асоціація педіатрів / International Pediatric Association (IPA).
10. https://ginasthma.org/wp-content/uploads/2024/05/GINA-2024-Strategy-Report-24_05_22_WMS.pdf GINA Global Initiative For Asthma. 2024
11. <https://kdigo.org/wp-content/uploads/2017/02/KDIGO-2021-Glomerular-Diseases-Guideline-English-LN-2024-Update.pdf> KDIGO 2021 Clinical Practice Guideline for the Management of Glomerular Diseases
12. <https://aamsmedacademy.com/> American Academy of Medical Sciences (AAMS)
13. <https://nam.edu/> The National Academy of Medicine (NAM)
14. <https://cutt.ly/utqqt71> Підручник Нельсона з педіатрії - електронна книга Elsevier на VitalSource, 21-ше видання
15. <https://www.amazon.com/Averys-Neonatology-Pathophysiology-Management-Pathophysiology/dp/1451192681>

