MINISTRY OF HEALTH OF UKRAINE ODESA NATIONAL MEDICAL UNIVERSITY

Department of pediatric dentistry

DIARY of Student's Internship in Prevention of Dental Diseases in Pediatric Dentistry

Student	
	(Full name)

Odesa ONMedU 2023

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Щоденник ϵ звітовим документом, який презенту ϵ обсяг та якість роботи студента в період проходження навчальної практики з профілактики стоматологічних захворювань у стоматології дитячого віку.

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The diary is a reporting document that reflects the volume and quality of student's work during the internship in prevention of dental diseases in pediatric dentistry.

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INTRODUCTION

Student's internship is an integral part of training aimed at improving the level of practical training of students, mastering modern methods of diagnosis, treatment and prevention of dental diseases, organization of work in dental institutions, the formation of professional skills for independent decision-making at seeing patients.

STUDENT'S RESPONSIBILITIES

During the internship the student **must:**

- 1. Complete the full range of tasks provided by the internship program.
- 2. Comply with the internal rules of procedure in the medical and preventive institutions.
- 3. Study and strictly observe the rules of labor protection, safety, industrial sanitation and internal regulations of the institution on the basis of which the practice is conducted.
 - 4. Participate in scientific and practical conferences.
- 5. Be responsible for the assigned work and its results on an equal level with full-time employees.
 - 6. Adhere to basic deontological principles.
 - 7. Systematically fill in the practice diary.
 - 8. Pass the student's internship test in time.

I am familiar with the student's duties,	
safety instructions, labor protection at	
the workplace	

STUDENT'S INTERNSHIP IN PREVENTION OF DENTAL DISEASES

The purpose of the internship — assimilation of preventive measures aimed at maintaining a high level of dental health and disease prevention.

Α	stud	lent	must	know:
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A student must know:
— methods of dental examination of the child's oral cavity;
— risk factors for the development of major dental diseases;
— the essence of the cariogenic situation in the oral cavity and the method of its detection;
— methods of assessing the hygienic condition of the oral cavity;
— mechanism of enamel demineralization, methods of detection of fo- cal demineralization of enamel and its prevention;
— methods for determining the caries resistance of enamel, methods for increasing the caries resistance of enamel at the period of secondary mineralization;
— methods of endogenous prevention of dental caries with fluoride preparations, individual determination of the dose of fluoride-containing preparations, the mechanism of action of fluoride in endogenous use;
— preparations of calcium, phosphorus, vitamin D for endogenous prevention of dental caries, methods of administration, mechanism of action;
— methods of sealing the fissures of permanent teeth in children, justification of the method, indications, characteristics of modern sealants, methods;
— measures of individual prevention of periodontal diseases, professional teeth cleaning: methods, tools;
— basic and auxiliary items for hygienic care of the oral cavity, tooth-brushes: types, criteria for individual selection;
— groups of toothpastes, their composition and properties, indications for use;
— the choice of hygienic products for oral care depending on age and dental status;

- methods of hygienic education and upbringing of children of different age in organized children's groups; — standard method of brushing teeth, methods of controlled brushing; — levels of implementation of dental prevention: state, group, individual, characteristics of the main measures applied at each level. Student must be able to: — to determine and assess caries severity in children of different age; — determine the Green-Vermillion index and provide an interpretation of its values: — determine the Silness–Loe index and provide an interpretation of its values: — determine the Fedorov–Volodkina index and provide an interpretation of its values: — determine the PMA index and provide an interpretation of its values; — determine the CPI index and provide an interpretation of its values; — determine the TER and give an interpretation of its values; — to seal the fissures: — cover the teeth with fluoride varnish; apply fluoride-containing gel; — perform deep fluoridation of enamel; — remove mineralized dental plaque
- appoint means for individual hygienic care of the oral cavity to children of preschool age;
- appoint means for individual hygienic care of the oral cavity at multiple caries of teeth;
 - appoint means for individual hygienic care of the oral cavity;
- demonstrate the standard method of brushing teeth, conduct training in the standard method of brushing teeth;
 - carry out controlled brushing of teeth;
- make the plan of conversation on prevention of dental diseases with children of different age in the organized collectives (kindergarten, school).

Curriculum of the internship in prevention of dental diseases

№	Topic	Hours
1	Methods of preventive examination of the patient. Registration of dental status according to WHO recommendations. Epidemiology of the main dental diseases: caries, non-carious lesions, periodontal diseases and mucous membranes. Statistical methods of processing epidemiological indicators	2
2	Methods and means of detecting non-mineralized and mineralized dental layers. Their influence on the development of carious process and periodontal diseases	2
3	Technique of consistent professional oral hygiene. A set of tools for chemical and mechanical (manual and hardware) methods of removing dental plaque	2
4	Substantiation and practical implementation of non-invasive and invasive method of sealing fissures. Indications, contraindications, duration, choice of material. Methods for determining the depth of fissures	4
5	Technique of remineralizing therapy with the use of solutions, varnishes, gels, pastes. Electrophoresis technique	4
6	Practical application of different methods of brushing teeth (standard method, method of Leonard, Bass, Fones, Reite, Smith–Bell, Charter, Stillman, brush rotation). Demonstrations on dental phantoms	2
7	Complex system of caries prevention. The main elements of the program. Criteria for evaluating the effectiveness of the program for the prevention of caries and periodontal disease	2
8	Differentiated test	2

Independent work

Topic	Hours
1. Preparation for practical, seminar classes (theoretical, working out practical skills, abilities), topic numbers: 1–7	
2. Independent study of topics that are not included in the class-room plan, topics: 1–4.	
2.1. E. M. Kuzmina oral hygiene index, modified Rustogi index.	4.0
2.2. Modern devices for professional oral hygiene <i>PROPHY-MAX</i> , <i>AIR-MAX BOOSSTER</i> , Mini-Piezon, Cavitron, Aer-Flow C1 and others.	4.0
2.3. Modern materials for sealing the fissures of permanent teeth in children (sealants, glass ionomer, compomers, liquid composites, ormokers).	4.0
2.4. New ways and methods of exogenous prevention of dental caries.	4.0
2.5. Preparation for the differentiated test	10.0

List of practical skills in the prevention of dental diseases

- 1. Be able to conduct surveys according to the algorithm. Recording of dental formula.
- 2. Determine the indices of caries (DMF of teeth, df of surfaces, df of teeth, DMF + df of teeth) and the degree of caries activity.
 - 3. Determine the indices of caries intensity increase and caries reduction.
 - 4. Fill in the WHO epidemiological survey card.
 - 5. Organization of health education (conversation, health bulletin, etc.).
- 6. Determine the indices of oral hygiene (Fedorov–Volodkina, Green–Vermillion, Silness–Loe, Stallard).
- 7. Determine the indices of the state of periodontal tissues (PMA, CPI, CPITN).
- 8. Have oral hygiene methods (individual hygiene, controlled cleaning, professional oral hygiene).
 - 9. Prescribe oral hygiene products depending on dental status.
- 10. Determine the cariogenic situation in the oral cavity (TER, CESRE and other methods).

- 11. Teach a child hygienic care of the oral cavity with the use of toothpicks, dental floss, stimulants, etc. funds.
 - 12. Remove dental plaque using dental instruments, ultrasound.
 - 13. Conduct a hygiene lesson in kindergarten and school.
- 14. Plan and conduct group prevention in preschool and school age children.
- 15. Make a plan and determine the effectiveness of exogenous and endogenous prevention of dental caries.
 - 16. Treat teeth with remineralizing agents, fluoride varnish, ESL, DSL.
 - 17. Seal molar fissures in children.
- 18. Make a plan and determine the effectiveness of prevention of periodontal disease.
- 19. Make a plan and determine the effectiveness of comprehensive prevention of dental diseases.
- 20. Teach a child hygienic care of the oral cavity with the use of toothpicks, dental floss, stimulants, etc.
- 21. Form dispensary groups of children with diseases of teeth and periodontal tissues.

Student's report on the internship

Practical skills and manipulations	Planned	Completed
1. Writing a dental formula	10	
2. Determination of DMF, df, DMF + df indices on simulators	10	
3. Determination of hygiene indices on simulators:	10	
a. according to Fedorov-Volodkina	5	
b. according to Green–Vermilion	3	
c. according to Silness-Loe	2	
4. Determination of periodontal tissue condition on simulators by indices:	10	
a. PMA	5	
b. CPI	3	
c. CPITN	2	

Practical skills and manipulations	Planned	Completed
5. Definition of TER, CESRE, CRT-test on simulators	5	
6. Applications of remineralizing solutions on simulators	5	
7. Coating teeth with fluoride varnish, gel on simulators	5	
8. Sealing of fissures in temporary and permanent teeth on simulators	5	
9. Oral hygiene training on simulators	10	
10. Carrying out of controlled brushing of teeth on simulators	10	
11. Professional teeth cleaning on simulators	10	
12. Selection and appointment of means and methods of hygienic care of the oral cavity	10	

Mark on differentiated tes	t
Lecturer's signature	

Recommended literature

- 1. Медсестринство в стоматології : навч. посіб. для мед. сестер зі стоматології, гігієністів зубних, помічників лікаря-стоматолога та зубних лікарів / І. П. Мазур, Л. О. Щербак, С. В. Хлєбас [та ін.] ; за ред. І. П. Мазур; рец. : Л. В. Смаглюк, А. В. Борисенко. К. : Медицина, 2017. 160 с.
- 2. Профілактика стоматологічних захворювань : підручник для студ. стомат. факультетів закладів вищої медичної освіти / Л. Ф. Каськова, Л. І. Амосова, О. О. Кулай [та ін.] ; за ред. проф. Л. Ф. Каськової ; УМСА. Стереотипне видання. Львів : ПП «Магнолія 2006», 2019. 404 с.
- 3. Сестринство в стоматології : навч. посіб. / під заг. ред. проф. М. Д. Короля. Полтава : ФОП Мирон І. А., 2019. 312 с.
- 4. Терапевтична стоматологія дитячого віку : підручник. Т. 2 / Л. О. Хоменко, Ю. Б. Чайковський, О. В. Савичук [та ін.] ; за ред. проф. Л. О. Хоменко. К. : Книга плюс, 2016. 328 с.

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FOR NOTES

Навчальне видання

ЩОДЕННИК ВИРОБНИЧОЇ ПРАКТИКИ З ПРОФІЛАКТИКИ СТОМАТОЛОГІЧНИХ ЗАХВОРЮВАНЬ У СТОМАТОЛОГІЇ ДИТЯЧОГО ВІКУ

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