

**MINISTRY OF HEALTH OF UKRAINE**

**Odessa National Medical University**

**DIARY**

of student's internship

**STUDENT'S INTERNSHIP IN PREVENTION OF DENTAL DISEASES**

at the Pediatric Dentistry Department

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(Full name)

Odesa-2022

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The diary of student's internship in pediatric dentistry was discussed at the meeting of the Department of Pediatric Dentistry. Protocol №\_\_\_\_\_. from \_\_\_\_\_.

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The diary of student's internship was approved at the meeting of the subject cycle methodical commission on stomatological disciplines. Protocol №\_\_\_\_. from \_\_\_\_\_.

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Approved and recommended for publication by the Central Coordination and Methodological Council of the University \_\_\_\_\_. Protocol №\_\_\_\_\_.

The diary is a reporting document that reflects the volume and quality of student's work during the internship.

**STUDENT'S INTERNSHIP** – it 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 the reception of patients.

### **STUDENT 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. To 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.

### **Student must know:**

- methods of dental examination of the child's mouth;
- 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 focal demineralization of enamel and its prevention;
- methods for determining the caries resistance of enamel, methods for increasing the caries resistance of enamel in 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 appointment, 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, toothbrushes: 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 ages 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 the intensity of caries in children of different ages;
- determine the Green Vermilion index and provide an interpretation of its values;
- determine the Silnes 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;
- to remove mineralized dental plaque
- to appoint means for individual hygienic care of an oral cavity to children of preschool age;
- to appoint means for individual hygienic care of an oral cavity at multiple caries of teeth;
- to appoint means for individual hygienic care of an oral cavity;
- demonstrate the standard method of brushing teeth, conduct training in the standard method of brushing teeth;
- to carry out controlled brushing of teeth;
- to make the plan of conversation on prevention of stomatologic diseases with children of different age in the organized collectives (kindergarten, school).

### **Curriculum of practical training on the practice of prevention of dental diseases**

	Topic	Amount of 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 is required.	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, Phones, Reite, Smith-Bell, Charter, Stillman, brush rotation). Demonstrations of non-compliance on dental phantoms.	2
7	Complex system of caries and teeth prevention. The main elements of the program. Criteria for evaluating the effectiveness of the program for the prevention of caries in teeth and periodontal disease.	2
8	Differentiated assessment	2

## Independent work

	Topic	Amount of hours
1	Preparation for practical, seminar classes (theoretical, working out practical skills, abilities), topic numbers: <b>1-7</b>	24.0
2	Independent study of topics that are not included in the classroom plan, topics: <b>1-4</b>	
2.1	Kuzmina EM oral hygiene index, modified Rustogi index.	4.0
2.2	Modern devices for professional oral hygiene <i>PROPHY – MAX, AIR – MAX BOOSSTER</i> , Mini-Piezon, Cavitron, AerFlow 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 assessment	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-Vermilion, Silnes-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. To 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. To teach a child hygienic care of the oral cavity with the use of toothpicks, dental floss, stimulants, etc.
21. To form dispensary groups of children with diseases of teeth and periodontal tissues.

### **Student report on 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	
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 test** \_\_\_\_\_

**Lecturer's signature** \_\_\_\_\_

### **Recommended sources**

1. Nursing in dentistry: education manual / Under general ed. Prof. M. D.

Korolya – Poltava: *FOP Myron I. A.*, 2019. – 312 p.

2. Nursing in dentistry: education. manual for stomatology nurses, dental hygienists, dental assistants and dentists / I. P. Mazur [et al.]: by ed. I. P. Mazur; review: L. V. Smaglyuk, A. V. Borysenko. – Kyiv: *Medicina*, 2017. – 160 p

3. Prevention of dental diseases: a textbook for stomatological students of faculties of higher medical education institutions / L.F. Kaskova, L.I. Amosova, O.O. Kulai [et al.]; by ed. prof. L.F. Kaskova; UMSA. - stereotypical edition – Lviv: *PP “Mahnoliya 2006”*, 2019. – 404 p.

4. Pediatric Therapeutic Dentistry Vol 2: textbook / L.A. Khomenko, Yu.B. Chaykovskyy, O.V. Savychuk [et al.]; by ed. prof. L.A. Khomenko. – K: *Knyha Plus*, 2016. – 328 p.