Appendix 24

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CATALOG OF COMPETENCIES in

the specialty “Pediatric dentistry”

 POSTGRADUATE LEVEL

Directory of competencies (postgraduate level) in the specialty "Children's dentist" developed by a working group consisting of: The

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Explanatory note

Currently, in the Kyrgyz Republic, an active reform of the medical industry is being carried out, which is aimed at optimizing the work of all levels of health care, as a result of which the system of medical education is undergoing significant changes, as one of the fundamental divisions that provide practical health care with professional personnel.

The task of health education organizations within the framework of the reforms carried out in the health care system and medical education is to improve the quality of training of specialists corresponding to the changing needs of the population.

In this regard, the proposed new catalog of competencies of a pediatric dentist has been developed.

This catalog of competencies is based on the Standard Curriculum and general education training program for clinical residents in the specialty "children's dentist".

The duration of postgraduate training in the specialty "Children's dentist" in the Kyrgyz Republic on the basis of the program:

"Strategy for the development of postgraduate and continuing medical education in the Kyrgyz Republic for 2014-2020", approved by the Order of the Ministry of Health of the Kyrgyz Republic of 18.05.2015 for No. 248 is 2 years. When developing the document, the standards of training of general practice dentists in international educational institutions, in particular in the Russian Federation and the Republic of Belarus, were also taken into account.

CHAPTER 1. GENERAL PROVISIONS

1.1. Definition of the concepts of pediatric dentistry and"pediatric dentist".

Pediatric dentistry is particularly complex and multi-component, where the specialist acts like a dentist and thinks like a pediatrician, so the training of such a doctor requires the application of maximum effort, time and energy. Children's age has many features both in the manifestation and course of pathological processes in the maxillofacial region, and in the methods of treatment. A pediatric dentist requires knowledge of the age-related anatomy and physiology of the child; the ability to understand the manifestations of pathology at different ages; the ability to choose methods of prevention of dental diseases in children and determine the timing of conservative or surgical treatment.

The purpose of the clinical residency in pediatric dentistry is to prepare a pediatric dentist for independent professional activity in outpatient practice and to perform therapeutic, diagnostic, preventive, consultative, organizational assistance to children with major dental diseases and injuries of the maxillofacial region, taking into account the individual and anatomical and physiological characteristics of the child's body using modern achievements of medical science and practice.

1.2. Basic principles of medical practice

The dentist in his work is guided by the following principles

* Open and unrestricted access to medical care, regardless of the age and other characteristics of the patients;
* Simultaneous treatment of both acute and chronic diseases;
* Preventive focus of care;
* Duration and continuity of care based on the needs of each patient;
* Coordination of medical care to the patient;
* The principle of economic efficiency and expediency of assistance;
* Respect for the rights of the patient and take into account the views of her family members.

1.3. Purpose of the document

This List of competencies should become part of the regulations for postgraduate training and, therefore, valid for all postgraduate training programs in the specialty "Pediatric Dentistry".

Based on this Catalog:

The purpose and content of postgraduate training of a pediatric dentist are determined by:

the level of professional competence, knowledge and practical skills of a pediatric dentist.

Developed by:

* Children's dentist training programs;

- criteria for evaluating the quality of training of a pediatric dentist;

 -standard requirements for the certification of a pediatric dentist;

 - standards of examination, treatment, rehabilitation and follow-up of patients.

Organized by:

- the educational process of training a pediatric dentist;

- professional orientation of medical graduates;

Conducted by:

 -certifications of children's dentists.

1.4. Users of the document

According to the purpose of the document, the users are:

 -Ministry of Health of the Kyrgyz Republic

* Educational organizations
* Health organizations
* Professional associations
* Medical practitioners

 - Residents

- Other stakeholders

CHAPTER 2. GENERAL TASKS

This chapter lists the general competencies that a pediatric dentist should have. A pediatric dentist should be not only a professional in their field, but also a manager, a specialist in communication skills, a promoter of a healthy lifestyle, a research scientist.

2.1. A pediatric dentist, as a medical specialist/expert

A pediatric dentist is a doctor who has received special training to provide specialized dental care to the population, regardless of the age and other characteristics of the patients. As a specialist, he provides care to patients regardless of age within the limits of his professional competence, observing the principles of deontology and medical ethics.

General competencies

Action of the children's dentist:

conduct a clinical examination of children of different age groups;

interpret the information obtained during the collection of anamnesis and clinical examination, establish a preliminary and differential diagnosis, and develop a patient management plan using the results of an objective examination; assign appropriate diagnostic and therapeutic measures, explain their essence to patients and interpret the results; perform the necessary diagnostic and therapeutic manipulations, taking into account the ratio of cost to reasonable utility, and guarantee the safety of patients, applying the principles of efficiency, expediency and cost-effectiveness;

 take proper and long-term care of patients with chronic, incurable, progressive diseases;

advise patients and their families on the formation of a healthy lifestyle, prevention of oral diseases;

- take care of the health of patients and communities (to assess the risks for the dental health of patients, to give us tips regarding the maintenance and strengthening of dental health, healthy lifestyle, both physically and mentally.);

- to advise, accompany and care for patients in collaboration with representatives of other professions, duly respecting their right to self-determination;

- take on dispensary registration and conduct dispensary monitoring of patients

- store and protect medical information properly;

 maintain and expand your professional competence.

2.2. Communication skills

A pediatric dentist, in the interests of effective treatment of the patient and in accordance with the situation, enters into a trusting relationship with his family members, contact persons and other specialists involved in the treatment. He bases his decisions and communication on mutual understanding and trust.

Competencies

A pediatric dentist must:

-obtain important information from patients and their environment, discuss it and convey elements of the acquired knowledge, taking into account the patient's situation;

- communicate the risks and benefits of diagnostic and treatment measures in a form understandable to the patient and obtain informed consent;

- make a decision regarding incapacitated and underage patients about diagnostic and treatment procedures, discussing these procedures with the relevant representatives of these patient groups;

- document the information received during consultations and submit it within the required time frame;

- empathize with bad news and responsibly report complications and mistakes;

- recognize differences of interests, accept different opinions, and avoid conflicts and resolve them through cooperation.

2.3. Skills of working in cooperation (in a team)

The children's dentist cooperates in the interests of the health of patients, actively cooperates with other specialists, taking into account their opinions and conclusions.

2.4. Management skills (manager)

The children's dentist is a member of the health care system and helps to optimize the work of the organization in which he works. It carries out its management tasks within the framework of its inherent functions.

Competencies

As a manager, a pediatric dentist is able to:

 use health resources effectively, taking into account adequacy and cost-effectiveness in the interests of patients;

 provide and improve the quality of medical care;

 manage their professional activities and take on management tasks that correspond to their professional position;

2.5. Health promotion and healthy lifestyle promotion skills

The children's dentist should constantly conduct active promotion of a healthy lifestyle and compliance with oral hygiene among the children's population.

**Competencies**

Actions of the children's dentist: выявля

identify problems that have a negative impact on the health of children and take the necessary measures to eliminate them together with representatives of the authorities and other people who actively care about their health and support them;

 раскрыть to reveal the factors of the locality that favorably affect a person and use them in practice to restore and strengthen the health of the population, including dental health;

2.6. Research Scientist

The children's dentist in the course of his professional activity analyzes the features of the course of oral diseases, systematizes the results obtained, identifies patterns, highlights and actively participates in public discussions

Competencies

A pediatric dentist is able to: critically understand specialized medical information and its sources and take it into account when making decisions;

 the development, dissemination and introduction of new knowledge and methods of diagnosis, treatment and prevention.

constantly improve the skills;

2.7. Knowledge in the field of professional ethics

The children's dentist carries out his practical activities in accordance with ethical norms and principles, quality standards of medical care and regulatory legal acts in the field of healthcare.

**Competencies**

As a professional, a pediatric dentist must:

 perform their professional activities in accordance with high quality standards, demonstrating a responsible and careful attitude;

practice ethically and responsibly, observing the legal aspects of the activities of medical professionals.

CHAPTER 3. SPECIAL TASKS

Types of activities of a pediatric dentist

The children's dentist is obliged to master the following types of activities and their corresponding personal tasks to provide specialized dental care to the children's population in accordance with the regulatory legal documents of the Kyrgyz Republic:

 диагностика diagnosis, treatment, prevention and rehabilitation of the most common dental diseases;

-provision of emergency medical care;

-performing medical manipulations;

 организ organizational work.

Accordance to the activities of a pediatric dentist, professional competencies are organized into the following categories::

3.1 Common symptoms and syndromes (List 1)

3.2 Common Diseases and conditions (List 2)

3.3 Medical manipulations (List 3)

3.4 Emergency conditions (List 4)

LIST 1-COMMON SYMPTOMS AND SYNDROMES

|  |
| --- |
| Symptom/The syndrome |
| Increased body temperature |
| Headache |
| Vertigo |
| Edema of the soft tissues of the face |
| Toothache from various irritants |
| Difficult and limited opening of the mouth |
| Enlarged lymph nodes |
| Tumors and neoplasms |
| Facial pain from various stimuli |
|   |
| Tooth hard tissue defect |
| Changing the color of teeth |
| Bleeding gums |
| Aphthous lesion of the SOPR |
| Ulcers of the SOPR |
| Tooth mobility |
| Pathological dentoalveolar pockets |
| Bad breath |
| Dryness, burning of the oral mucosa |
| Metallic taste in the mouth |
| Exposing the necks of the teeth |
| Quincke syndrome. |
| Xerostomia syndrome. |
| Macroglossia syndrome. |
| Manganotti syndrome. |
| Marginal periodontal syndrome. |
| Acquired immunodeficiency syndrome. |
| Behcet syndrome |
| Papillon-Lefebvre syndrome |
| Stevens-Johnson Syndrome |
| Nikolsky's symptom |
| Gunther syndrome |
| Getchinson syndrome |
| Klein syndrome (galvanism) |
| Costen's Syndrome |
| Fordyce syndrome |
| Stainton-Capdepon syndrome |

To indicate the level of competence that must be achieved by the end of training, in this discipline, the following gradation is used:

Level 1-indicates that the resident can independently diagnose and treat the majority of patients with this disease or condition accordingly; if necessary, determine the indications for hospitalization.

Level 2-indicates that the resident is guided in this clinical situation, makes a preliminary diagnosis and redirects the patient to the secondary or tertiary level for final verification of the diagnosis and selection of therapy; subsequently, controls the prescribed therapy (medical examination).

The letter " H " - means that the condition or disease is urgent and indicates the need for emergency diagnosis and / or treatment. The resident is able to assess the patient's condition and begin to provide emergency care and organize urgent hospitalization.

LIST 2 COMMON DISEASES AND CONDITIONS.

|  |  |  |
| --- | --- | --- |
| Diseases and pathological conditions in children of different age groups. | **LEVEL** | **Н** |
| Non-carious origin of teeth |  |  |
| Hypoplasia | 1 |  |
| Fluorosis | 1 |  |
| Hyperplasia | 1 |  |
| Hereditary disorder | 2 |  |
| Traumatic injuries | 1 |  |
| Wedge-shaped defect | 1 |  |
| Erasing teeth | 1 |  |
| Necrosis, erosion of the hard tissues of the teeth | 2 |  |
| DENTAL CARIES: |  |  |
| Initial caries | 1 |  |
| Surface Level | 1 |  |
| Average | 1 |  |
| Deep | 1 |  |
| Compensated form of caries | 1 |  |
| Subcompensated form of caries | 1 |  |
| Decompensated form of caries | 1 |  |
| DISEASES OF THE TOOTH PULP: |  |  |
| Acute focal | 1 |  |
| Acute diffuse | 1 |  |
| Chronic fibrotic |  |  |
| Chronic gangrenous | 1 |  |
| Chronic hypertrophic pulpitis | 1 |  |
| Chronic acute pulpitis | 1 |  |
| PERIODONTAL DISEASES: |  |  |
| Acute serous apical periodontitis | 1 |  |
| Acute purulent apical periodontitis | 1 |  |
| Chronic fibrotic periodontitis | 1 |  |
| Chronic granulomatous periodontitis | 1 |  |
| Chronic granulating periodontitis | 1 |  |
| Chronic periodontitis in the acute stage | 1 |  |
| PERIODONTAL DISEASES |  |  |
| Gingivitis | 1 |  |
| Periodontitis | 2 |  |
| Periodontal disease | 2 |  |
| Periodontal disease | 2 |  |
| DISEASES OF THE ORAL MUCOSA: |  |  |
| Traumatic lesions of the SOPR | 2 |  |
| Leukoplakia SOPR | 2 |  |
| INFECTIOUS DISEASES SOPR |  |  |
| Acute herpetic stomatitis | 2 |  |
| Recurrent herpetic stomatitis | 2 |  |
| Herpangina | 2 |  |
| Measles stomatitis | 2 |  |
| Chickenpox stomatitis | 2 |  |
| Herpes zoster | 2 |  |
| FOOT-AND-MOUTH DISEASE IS ACCOMPANIED BY |  |  |
| Ulcerative-necrotic stomatitis of Vincent | 2 |  |
| Impetigo | 2 |  |
| Chancriform pyoderma | 2 |  |
| Tuberculosis SOPR | 2 |  |
| SYPHILIS IS ACCOMPANIED BY | 2 |  |
| Candidiasis SOPR | 2 |  |
| Actinomycosis IS ACCOMPANIED BY | 2 |  |
| ALLERGIC DISEASES SOPR | 2 |  |
| Multiform exudative erythema | 2 |  |
| Chronic recurrent aphthous stomatitis | 2 |  |
| Behcet syndrome | 2 |  |
| CHANGES IN SOPR IN EXOGENOUS INTOXICATIONS |  |  |
| CHANGES IN THE SOPR IN SOME SYSTEMIC DISEASES AND |  |  |
| DISEASES OF THE METABOLISM: | 2 |  |
| Hypo -, beriberi | 2 |  |
| Diseases of the endocrine systems | 2 |  |
| Diseases of the gastrointestinal tract | 2 |  |
| Diseases of the cardiovascular system | 2 |  |
| Diseases of the blood system | 2 |  |
| Diseases of the nervous system | 2 |  |
| Collagenoses |  |  |
| Skin diseases | 2 |  |
| For systemic diseases | 2 |  |
| CHANGES IN THE SOPR IN DERMATOSES |  |  |
| Pemphigus | 2 |  |
| Red lichen planus | 2 |  |
| Lupus erythematosus | 2 |  |
| ANOMALIES AND INDEPENDENT DISEASES OF THE TONGUE |  |  |
| Folded glossitis | 2 |  |
| Diamond-shaped glossitis | 2 |  |
| Black, hairy tongue | 2 |  |
|  Lip disease. | 2 |  |
| Exfoliative cheilitis | 2 |  |
| Simple glandular cheilitis | 2 |  |
| Contact allergic cheilitis | 2 |  |
| Actinic cheilitis | 2 |  |
| Meteorological hailit | 2 |  |
| Atopic cheilitis | 2 |  |
| Eczematous cheilitis | 2 |  |
| Macroheilitis | 2 |  |
| PRECANCEROUS DISEASES |  |  |
| Bowen's disease | 2 |  |
| Warty precancer | 2 |  |
| Limited precancerous hyperkeratosis of the red border of the lips. | 2 |  |
| Abrasive Precancerous Cheilitis Manganotti | 2 |  |
| Skin horn | 2 |  |
| DEFORMITY OF THE DENTITION AND BITE |  |  |
| Anomalies in the number of teeth: | 2 |  |
| Hypertension (in the presence of extra-complete teeth). | 1 |  |
| Hypodentia (full and partial dental adentia) | 1 |  |
| Anomalies in the shape and size of teeth: |  |  |
| Anomalies in the shape of teeth | 1 |  |
| Tooth color abnormality | 1 |  |
| Anomalies of the tooth size (height, width, thickness) | 1 |  |
| Anomalies of the structure of the hard tissues of the tooth | 1 |  |
| Hyperplasia of the hard tissues of the tooth | 1 |  |
| Macrodentia | 1 |  |
| Microdentia | 1 |  |
| Anomalies of the position of the teeth(in one, two, three directions) |  |  |
| Crowding | 1 |  |
| Diastema | 1 |  |
| Offset | 1 |  |
| Tortoanomalia | 1 |  |
| Trems | 1 |  |
| Transposition Retentedor impacted teeth with an incorrect position of their or adjacent teeth | 1 |  |
| Anomalies of the dentition: |  |  |
| Violation of the shape |  |  |
| Violation of the size (in the transversal direction-narrowing, expansion; in the sagittal direction-elongation, shortening) | 1 |  |
| Violation of the sequence of teeth, violation of the symmetry of the position | 1 |  |
| Violation of contacts between adjacent teeth (crowding or rare position) | 1 |  |
| Anomalies of the jaws: |  |  |
| Violation of the shape | 2 |  |
| Violation of the size (in the sagittal direction-shortening, elongation, transversal direction-narrowing, expansion; in the verticaldirection-increasing and decreasing height; combined in 2 and 3 directions) | 2 |  |
| Violation of the relative position of the parts of the jaw, violation of the position of the jaws | 2 |  |
| Anomalies of occlusion of the dentition: |  |  |
| In the sagittal direction (distal, medial) | 2 |  |
| In the vertical direction (incisor disocclusion,direct occlusion, deep incisor occlusion,deep incisor disocclusion) | 2 |  |
| In the transversal direction (cross-occlusion, vestibulo-occlusion, lingvo-occlusion, palato-occlusion) | 2 |  |
| Acute inflammatory diseases MFS |  |  |
| Odontogenic osteomyelitis | 2 |  |
| Phlegmon and abscess of the maxillofacial region. | 2 |  |
| Odontogenic sinusitis | 2 |  |
| Fractures of the upper and lower jaw. | 2 |  |
| Odontogenic tumors and tumor-like formations of the jaws. | 2 |  |
| Benign tumors of the maxillofacial region. | 2 |  |
| Malignant tumors of the maxillofacial region. | 2 |  |
| Congenital clefts of the maxillofacial region. | 2 |  |

The list of listed diseases and conditions is not exhaustive. Tasks are classified according to the competencies that must be achieved by the end of training in this discipline.

LIST 3. MEDICAL MANIPULATIONS /SKILLS

A children's dentist should be able to perform the following manipulations independently.

Evaluate:

- the data of morphological and biochemical parameters of the analyses;

- parameters of the anthropobiometric study of diagnostic models of the jaws

 radiation research methods: sighting and survey radiography of teeth and jaws, visiography, orthopantomography, telerentgenography, multispiral computed tomography, TMJ radiography; sialography;

-MFS muscle functions with evaluation of electromyography, myotonometry, and mastication data; ВН indicators of TMJ function with evaluation of arthrography, orthopantomography data;

- data for studying face photos in full face and profile

- results of biometric study of plaster, stereometric, and virtual jaw models;

-functional and clinical samples used in dentistry

-General manipulations

Be able to:

 injections (i / m, i / v, n / a).

- determination of blood type, Rh factor

 interpret the results of the conclusions of instrumental studies (X-ray, ultrasound, echocardiography, EGDS, FVD).

 - stop external bleeding.

 - taking smears for cytological, bacteriological examination.

 - gastric lavage.

 - eliminate coprostasis (finger and enema).

-take material for microscopic, bacteriological studies (from the throat, nose, wounds, rectum, etc.)

-use personal protective equipment (type 1 anti-plague suit)

Special manipulations:

1. Performing all types of local anesthesia;

2. Preventive treatment of teeth with anti-carious agents.

3. Remineralizing therapy of dental caries in the spot stage and evaluation of its effectiveness.

4. Filling of teeth using various filling materials, polishing of fillings.

5. The application of therapeutic and insulating pads in the treatment of dental caries.

6. Treatment of pulpitis in one session using the methods of pulpotomy and pulpectomy under anesthesia.

7. Treatment of pulpitis (according to indications) by devitalization or preservation of pulp viability.

8. The use of anchor pins when filling the root canals of teeth.

9. Carrying out instrumental and medical treatment of root canals in the treatment of pulpitis and periodontitis.

10. Methods of studying the electrical excitability of the pulp of intact and carious teeth.

11. Methods of electrophoresis in the treatment of caries, pulpitis, periodontitis, periodontal disease and diseases of the oral mucosa.

12. Re-sealing of the tooth channels, extraction of tool fragments, elimination of other errors in the treatment of pulpitis and periodontitis.

13. Expansion of narrowed root canals with the help of chemicals (trilon-B, EDTA, etc.).

14. Registration of the condition of teeth, periodontal disease, before using the appropriate indices before and after the treatment of periodontal diseases.

15. Removal of dental deposits with anesthesia, local treatment of periodontal diseases using ointments, applications, dressings, etc.

16. Use of modern matrices and matrix holders for filling teeth.

17. "Stepback" root

canal technique 18. "CrownDown" root canal technique»

19. Temporary filling of root canals with pastes containing calcium hydroxide.

20. Filling root canals with paste.

21. Filling of root canals by the method of lateral condensation.

22. Performing surgical operations for periodontal diseases (curettage, gingivotomy, etc.).

23. Prescribing and conducting physiotherapy procedures (vacuum massage, ultrasound, Kulazhenko test, fluctuation, laser, etc.).

24. Treatment of dental diseases with the use of a helium neon laser.

25. Selective grinding of teeth and splinting in the complex treatment of periodontal diseases.

26. Conducting a biopsy and functional tests.

27. Local treatment of pathologically altered areas of the oral mucosa with appropriate means.

28. Injections of medicines as indicated in the submucosal layer.

29. Teeth whitening.

30. Determination of microcurrents of the oral cavity.

LIST 4. URGENT (EMERGENCY) STATES

The children's dentist should be able to independently diagnose and provide emergency (emergency) care at the pre-hospital stage, as well as determine the tactics of providing further medical care in the following emergency conditions, as well as determine the tactics of providing further medical care - to send them to hospitalization or to consult a specialist in a timely manner.

1. Fainting.

2. Collapse.

3. Shock (anaphylactic, toxic, traumatic, hemorrhagic, cardiogenic, hypovolemic, septic, etc.).

4. Coma (anemic, hypoglycemic, diabetic, brain, liver, unknown etiology, etc.).

5. Edema and stenosis of the larynx.

6. Severe attack of bronchial asthma, bronchoobstructive syndrome in children.

7. Quincke's edema..

8. Hypertensive crisis.

9. Myocardial infarction. 10. External bleeding. 11. Acute urinary retention.

12. Concussions, bruises, compression of the brain.

13. Pulmonary edema.

14. Convulsive states, epileptic status.

15. Chemical and thermal burns, frostbite.

16.Electric shock, lightning, heat and sunstroke.

17.Poisoning.

18. Drowning, suffocation.

19. Bites and stings.

20. Traumatic eye injuries, including removal of foreign bodies.

21. Clinical death.

Manipulations for emergency care:

 Injections (i / m, i / v, n / a).

 Gastric lavage.

 Stopping external bleeding

- pressure bandage

- applying a tourniquet

- ligature of the bleeding vessel

 Cardiopulmonary resuscitation:

- indirect heart massage

- mouth-to-mouth, mouth-to-nose breathing

-restoration of airway patency

- using the Ambu bag

- tongue fixation and duct insertion

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