

**MINISTRY OF HEALTH OF UKRAINE
VINNYTSIA NATIONAL MEDICAL UNIVERSITY
NAMED AFTER M.I. PYROGOV**

“APPROVED”

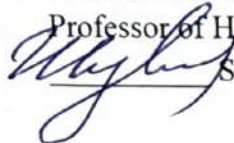
by Methodological Council
of dentistry disciplines

Protocol № 8

dated “26” 03 2025

Head of the Methodological Council

Professor of HEI

 Serhii SHUVALOV

“AGREED”

The head of the Examination

Commission № 4

dated “27” 03 2025

Professor of HEI

 Mariia SHINKARUK-DYKOVYTSKA

EXAMINATION MATERIALS

**STATION №8 «STANDARDIZED PATIENT IN THE CLINIC OF
ORTHOPEDIC DENTISTRY (OSP(C)E)»**

SPECIALTY

221 Dentistry

EDUCATIONAL PROGRAM

«Dentistry»

FACULTY

Faculty of Dentistry

APPENDICES TO EXAM MATERIALS

1. Instructions for students at the station (Appendix 1)
2. List of practical skills (Appendix 2)
3. Algorithms for performing practical skills (Appendix 3)
4. Sample task (Appendix 4)
5. Regulatory documents (Appendix 5)

Appendix 1

INSTRUCTIONS FOR STUDENTS AT STATION No. 8 “Standardized patient in the clinic of orthopedic dentistry”

THE FOLLOWING COMPETENCES ARE ASSESSED: manipulations, tactics and treatment, prevention. The station also provides for the performance of technical skills from the list of medical manipulations according to List 5 of the Higher Education Standard for specialty 221 "Dentistry". The higher education (HE) candidate must greet and present the examiner with the identification number that was assigned during registration at the OSP(K)I. The candidate's response is videotaped at the station. The HE candidate receives a task according to a certain clinical scenario. Work at the station involves interaction with a tutor who plays the role of a standardized patient (mostly) or a medical worker, as indicated in the scenario.

In cases where work on a mannequin or dummy is expected, this is indicated in the scenario.

Before starting communication with the tutor, the candidate is familiarized with the “Task for the student”. Then he clearly performs all the items of the “Task” according to the following scheme.

| Stages of work | Instructions |
|--|--|
| Avoid focusing too much on one stage | |
| Beginning of interaction with the patient | Greet and introduce yourself (without giving your last name). Briefly explain the essence of the communication to the patient. Consider ethical and legal aspects: obtain consent for further actions, warn about possible unpleasant sensations. |
| Collection of complaints and medical history | Collect complaints, detail them. Collect medical and life history. Avoid excessive immersion in information that does not relate to the main complaints. |
| Objective examination | Before and after contact with the patient, treat your hands with an antiseptic. Use the information provided in the condition. Indicate any deviations in vital signs. Conduct the examination according to the conditions of the scenario. Start manipulations from painless or unaffected areas. Consider the possible appearance of pain or other unpleasant sensations in the patient. |
| Diagnostics | Comment on the available X-ray image. Formulate a diagnosis on the model according to the Kennedy classification. Suggest additional diagnostic methods if the scenario requires it. |
| Determining management and treatment tactics | Determine the chewing efficiency of teeth according to M.I. Agapov. Make a treatment plan to prepare the patient for prosthetics. |

| | |
|--|--|
| Implementation of preventive elements of treatment | Suggest the most rational prosthesis design, considering that the patient refused dental implantation. |
| Completion of the exam | Confirm the completion of the tasks. |

The duration of work at the station is 8 minutes.

After completing the task or the end of the time spent at the station, return the task to the teacher, wait for the signal about the end of the time spent at the station, leave the station. After the end of the time spent at the station, the examiner does not accept a response. The examiner is an observer of your actions and does not provide instructions, does not comment or question.

After passing the first station, the student must move to another station according to the route sheet.

IT IS PROHIBITED to communicate with the examiner (except in cases related to safety issues, deterioration of well-being, unforeseen circumstances, etc.), use educational and auxiliary materials, use gadgets, transmit, copy, and distribute any information related to the exam and not publicly available. If a candidate for VO violates the above norms, his/her exam is terminated, and the grade for passing the exam is given as “failed” (violation of the rules of academic integrity).

YOU MUST HAVE gloves and masks **WITH YOU**.

Appendix 2

LIST OF PRACTICAL SKILLS AT THE STATION

To propose a prosthetic treatment plan.

To propose a plan for preparing the patient's oral cavity for prosthetics.

To obtain an anatomical impression of the lower and upper jaws.

To fit a rigid individual tray and obtain a functional impression in the complete absence of teeth.

To determine the central occlusion in group II of dentition defects according to Betelman.

To determine the central occlusion in group III of dentition defects according to Betelman.

To determine the central occlusion in group IV of dentition defects according to Betelman.

To provide anesthesia during the preparation of vital teeth.

To prepare the tooth for a cast metal crown. To prepare the tooth for a pinlay.

To prepare the tooth for a metal-free ceramic crown.

To fit artificial crowns.

To check the design of the bridge prosthesis.

Fit a cast bridge.

Fix the crown and bridge.

Check the design of the partial removable denture.

Check the design of the complete removable denture.

Fit a partial, or complete removable denture.

Correct the partial, or complete removable denture.

Fit the arched removable denture's frame.

Fit the arched removable denture, and identify the areas that require correction.

Analyze the patient's odontoparadontogram.

Perform selective grinding of teeth.

Perform alignment of the occlusal curve by grinding teeth.

Remove (cut and expand the edges) the stamped crown from the abutment tooth.

Select the design of the prosthesis using implants.

Appendix 3

ALGORITHMS FOR PERFORMING PRACTICAL SKILLS

Demonstrate the method of objective examination of the patient. - facial examination - assess symmetry, condition of muscles, skin, lymph nodes - oral examination:

- structure and shape of the dentition.
- identify missing teeth, defects.
- assess the mucous membrane, alveolar processes, tongue, palate - palpation of the gums in the area of the fistula.

- determine the sensitivity and degree of mobility of the teeth

Make a diagnosis on the model according to the Kennedy classification.

- examine the jaw model or digital cast.

- determine the type of defect.

Determine the chewing efficiency of the teeth according to M.I. Agapov.

- assess the number and location of functioning teeth.
- determine its chewing efficiency for each tooth
- the sum of the points on the two jaws is the actual chewing efficiency.
- according to the loss of teeth, calculate the percentage of loss of efficiency.

Make a treatment plan to prepare the patient for prosthetics.

- treatment of the 15th tooth: repeated endodontics or extraction.
- assessment of the condition of the mucous membrane and periodontium.
- taking impressions and making diagnostic models.
- analysis of occlusion and determination of intermaxillary relationships.
- sanitation of the oral cavity.
- making bite templates.
- forming a prosthetic bed (according to indications - correction of the mucous membrane, preparation of teeth).

Choose the most rational prosthesis design, taking into account that the patient refused dental implantation.

The patient refused implantation, so we choose a removable design.

- arched removable denture with clasps, or attachments:

- partial removable denture (with financial limitations, or medical contraindications to arched removable denture).

SAMPLE TASKS

Station No. 8. Standardized patient in the orthopedic dentistry clinic

You are a prosthodontist. A patient suffering from the problems of the dento-maxillary system has sought help. Objective indicators: dentition: bilateral end defects on the upper and lower jaws.

Missing teeth:

- upper jaw: 16,17,18 / 25,26,27,28

- lower jaw: 45,46,47,48 / 35,36,37,38

15th tooth: filled, has mobility of the II degree, fistulous course on the gum, on the radiograph:

- one wide canal, filled for 1/3 of the length,

- periapical granuloma.

1. Start interaction with the patient. Consider legal and ethical issues.

2. Conduct a survey (collection of complaints, their detailing, anamnesis).

Focus on issues of previous treatment.

3. Conduct an objective examination of the patient's dento-maxillary system. Establish the type of defect according to the Kennedy classification of dentition defects.

4. Make a diagnostics: Determine chewing efficiency according to Agapov. Conduct a repeated X-ray examination.

5. Tactics and treatment. Suggest orthopedic treatment tactics, taking into account the patient's clinical picture, taking into account his wishes.

6. Complete work at the station.

Standardized patient instructions

You are impersonating a 38-year-old patient with problems with the dento-maxillary system. You complain of difficulty chewing, especially when eating something hard, because chewing teeth are missing on both sides - both top and bottom. You also notice an unpleasant odor from your mouth and pus periodically appears in the area above the fifteenth tooth on top. From time to time, you feel a dull pain there, especially when you press. The tooth seems to move a little. Aesthetically, everything seems normal, but functionally it has become difficult. The pus started coming out about a week ago, but the discomfort was there before. There was no fever, but you feel tired. This 15th tooth was treated 3 years ago, after which it remained under a filling, without a second X-ray.

Manipulations. At the student's request, provide the oral cavity for examination. When touching the tooth, you feel pain

Take part in the discussion of choosing a treatment method that will satisfy you, based on the fact that you refuse dental implantation.

OSP(K)I station evaluation checklist

| № | Practical skills | Number of points per skill | Number of points of the applicant |
|--|--|----------------------------|-----------------------------------|
| Communication | | | |
| | (greetings, introductions, beginning and end of communication) | 1.5 | |
| Demonstrate the technique of objective examination of the patient | | 1.0 | |
| | Extra oral examination | 0.25 | |
| | Palpation | 0.25 | |
| | Intra oral examination | 0.5 | |
| Make a diagnosis on the model according to Kennedy classification | | 1.0 | |
| | Class | 0.5 | |

| | | | |
|---|--|------------|--|
| | Subclass | 0.5 | |
| Define the masticatory efficiency according to Agapov | | 1.0 | |
| | Coefficients | 0.5 | |
| | Calculating the masticatory efficiency | 0.5 | |
| Create a treatment plan to prepare the patient for prosthetics | | 1.0 | |
| | Surgical preparation | 0.25 | |
| | Therapeutic preparation | 0.25 | |
| | Orthodontic preparartion | 0.25 | |
| | Prosthodontic (orthopedic) preparation | 0.25 | |
| Choose the most rational prosthesis design, considering that the patient refused dental implantation | | 0.5 | |
| | Indications to the manufacturing of removable dentures | 0.25 | |
| | Indications to the dental implantation | 0.25 | |
| Ethical aspects | | | |
| | Maximum points per station | 6.0 | |
| | The amount of points the student scored | | |

Appendix 5

REGULATORY DOCUMENTS

- 1) Orthopaedic Dentistry: lecture course : lecture training text-book for IV–V academic years students of stomatological faculty with English language form of study / V. Novikov [et al.] ; eds.: V. Novikov, V. Dvornyk, 2019. – 205 p.
- 2) Orthopaedic Dentistry: lecture course : lecture training text-book for IV–V academic years students of stomatological faculty with English language form of study / V. Novikov [et al.] ; eds.: V. Novikov, V. Dvornyk. 2020. – 205 p.
- 3) Prosthetic Dentist. Rozhko M.M. Nespriadko V.P., 2022. – 696 p.
- 4) Propaedeutics of orthopedic stomatology. Korol M.D., 2009 – 200 p.
- 5) Practical Periodontics [Text] ed.: Kenneth Eaton, Philip Ower. 2017. – XII, 357 p.
- 6) Cobourne, Martyn. Handbook of Orthodontics [Text] / M. Cobourne, A. DiBiase. – 2nd ed. – Edinburgh [etc.] : Elsevier. 2016. – XII, 571 p.
- 7) Fixed prosthodontics. Hasiuk P.A., 2020 – 150 p.
- 8) Aesthetic aspects of prosthetic design (Естетичні аспекти дизайну ортопедичних конструкцій). Hasiuk P.A., Demkovych A.Ye., Bodnarchuk I.V., 2017 – 98 p.
- 9) The Basic Technologies of Dentures Producing. The Textbook for individual-training of practical classes. Beliaiev E.V., Hasiuk P.A., Komnatskyi B.Y. etc., 2019 – 122 p.
- 10) Optimization of clinical and laboratory stages of making of complete removable dentures depending on the condition of the tissues of foundation areas. 2020 – 148 p.
- 11) Dental-prosthetic technique. Rozhko M.M. 2016 – 559 p.

