### **STATEMENT**

In connection with a dissertation for the award of the educational and scientific degree "DOCTOR" on the topic: "RESEARCH ON THE CHANGES OCCURRING IN THE SPEECH AND CHEWING FUNCTIONS DURING PROSTHETIC TREATMENT"

#### Author of the dissertation:

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# Supervisor:

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# Member of the Scientific Jury who prepared the review

- Assoc. Prof. Dr. Alexander Valkov Valkov, MD, Department of Ophthalmology, ENT Diseases and Oral and Maxillofacial Surgery with Surgical Dentistry, Department of Ear, Nose and Throat Diseases, Medical University of Pleven, Pleven.

The review was prepared in according to the Law on the Development of the Academic Staff, the Regulations for the Application and the Regulations for the Terms and Procedures for Acquiring Scientific Degrees and Holding Academic Positions at MU-Varna. The scientific jury for the public defense of the dissertation was determined by order of the Rector of the Medical University - Varna No. P-109-129/01.04.2024. The presented set of materials on paper / electronic media is in accordance with the procedure for acquiring the "doctor" and the regulations of the MU - Varna.

**Dr. Dimo Krasimirov Nedelchev** was born on February 24, 1989. In 2018 graduated with a master's degree in Dentistry at the Medical University of Sofia and began his professional career as a dentist immediately after completing his higher education. Since 2016, he has been an assistant at the Faculty of Dental Medicine at the Medical University "Prof Dr. Paraskev Stoyanov" Varna. In 2023, he successfully passed the exam to acquire the specialty "Prosthetic Dentistry". In November 2020. was enrolled as a doctoral student in an independent form of study in the doctoral program "Orthopedic Dentistry" at the Medical University of Varna. **Dr. Nedelchev** completed all the tasks and activities set out in the individual study plan on time. He successfully passed the doctoral minimum exam.

## Structure of the dissertation:

The dissertation of **Dr. Dimo Krasimirov Nedelchev** is written on 182 standard pages, of which:

- 1. Title page 1
- 2. Content -3
- 3. Abbreviations used in Bulgarian -1
- 4. Introduction 2
- 5. Literary review 53
- 6. Purpose and tasks 1

- 7. Materials and methods 27
- 8. Results and discussion 53
- 9. Conclusions 2
- 10. Conclusions 2
- 11. Contributions of the dissertation -2
- 12. Publications related to the dissertation work -1
- 13. Participation in projects 1
- 14. Bibliography -27
- 15. Appendices 5

The ratio overview: methodical: result-examining part is optimal, respectively 30:10:60%. The dissertation contains a total of 61 figures, 32 tables. The bibliography includes 251 sources, of which 16 are in Cyrillic and 235 are in Latin. All cited titles are directly related to the research problem.

On the topic of the dissertation, the candidate has published three works, accepted and printed in the journals "Journal of the Union of Scientist- Varna. Medicine and Ecology series=" and "International Bulletin of Otorhinolaryngology". Based on this, the scientific activity in the period of preparation of the work is evaluated as satisfactory.

### Characteristic features of work:

The topic of the dissertation "RESEARCH ON THE CHANGES OCCURRING IN THE SPEECH AND CHEWING FUNCTIONS DURING PROSTHETIC TREATMENT" is well chosen in terms of the importance of the problem, relevance at the present moment and projection into the future. We have almost no publications related to research methods and trends in the change of speech and masticatory function during prosthetic treatment and the manner of their change. The literature review is made up of 53 pages and presents the author as an expert on the subject. The voice function, pathological processes of the larynx that would change it and their diagnosis and classification, the speech function and other organs involved in it, research methods, maxillary diastema and its treatment methods, diagnostic modeling and the impact of oral prosthetics are successively covered. in the speech and masticatory function. The actual prerequisites for the study are derived from the review in the form of a conclusion.

**The purpose of the study** is precisely and clearly formulated, namely - to study the changes, occurring in speech and masticatory function after prosthetic treatment of single frontal maxillary defects. In order to achieve it, the dissertation student has defined 5 main tasks in her dissertation:

- 1. To carry out an otorhinolaryngological screening for the selection of patients without pathology in the vocal cords.
- 2. To carry out a retrospective study of the epidemiology of MD in patients from North-Eastern Bulgaria
- 3. To perform a speech therapy evaluation of patients with single frontal maxillary defects.
- 4. To analyze the masticatory efficiency after prosthetics using subjective methods
- 5. The very formation of the sequence of the set tasks is an example of structuring scientific research from an active search for patients for prosthetic treatment of single maxillary

defects, through analyzing the pathology and therapeutic options, building and introducing a practical approach to the diagnosis of speech and masticatory function by subjective methods, and to analyze the data obtained.

The results obtained are convincing. They are presented clearly, accurately - in general for the studied contingent, as well as by subgroups, giving the opportunity to track and compare the data. Fully appropriate statistical methods were used to obtain them. Each chapter ends with a summary of the obtained data, as the doctoral student makes a successful attempt to integrate them in order to build an optimized system approach.

The conclusion corresponds to the results obtained, the same applies to the conclusions drawn. The contributions of the dissertation are of a marked scientific-applied nature, well formulated and are the result of the research. For the first time in Bulgaria, a critical analysis of the influence of the speech and masticatory function of patients with prosthetic treatment due to single maxillary defects and .

I highly appreciate Dr. Nedelchev's work. in several directions

1. The significance of subjective methods for evaluating speech and masticatory function in patients with prosthetic treatment is shown.

2. Emphasis is placed on the multidisciplinary approach to diagnosis and treatment

3. The proposed system approach for diagnosis of speech and masticatory function is based on modern diagnostic methods

The results of the dissertation confirm, specify, supplement and enrich the knowledge about adults with prosthetic treatment and its effect on masticatory and speech function, and especially their diagnosis, and the study is of great practical value for our country.

Conclusion: In conclusion, the dissertation presented by Dr. Dimo Krasimirov Nedelchev contains scientific, scientific-applied and applied results, which represent an original contribution to science and meet the requirements for awarding the educational and scientific degree "DOCTOR". The dissertation shows that the doctoral student has in-depth theoretical knowledge and professional skills in the scientific specialty, demonstrating qualities and skills for independent conduct and discussion of scientific research. On these grounds, I propose to the respected members of the Scientific Jury to vote positively and propose to the Rector of the MU - Varna to award the scientific and educational degree "Doctor" in the scientific specialty "Orthopedic Dentistry" to Dr. Dimo Krasimirov Nedelchev, Department of "Dental Materials Science" and propaedeutics of prosthetic dentistry", Faculty of Dental Medicine, MU "Prof. Dr. Paraskev Stoyanov" Varna.

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679

10.05.2024

Assoc. Prof. Dr. Alexander Valkov Valkov RhD Head of Ear, Nose and Throat Sector Medical University - Pleven