

*To the chairman of the Scientific Jury,  
appointed by an order of the  
Rector of Medical University – Varna  
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## STATEMENT

by

**Prof. Dr. Tihomir Dobrinov Georgiev, DMD, PhD, DSc,**  
Head of Department “Oral surgery”,  
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**Subject:** Dissertation on the topic "**Improving the quality of life of patients with snoring and obstructive sleep apnea through intraoral devices**" for the award of the educational and scientific degree "Doctor" in the field of Higher education: 7. Health and sports, Professional field 7.2. Dental medicine, according to the PhD program "Orthopedic Dentistry".

### **Brief biographical data of the doctoral student:**

Dr. **Dr. Lyudmil Hristov Matev, DMD** was born on 15.09.1976. In 2005 he completed a six-year training course at the Faculty of Dental medicine, Medical University - Sofia.

From 08.1992 till 05.1993 Dr. Matev worked in the Dentistry department of Workers' Hospital - Devnya.

From 2005 till 09.2008, Dr. Matev worked in a private dental practice.

In 2008, he was appointed a full-time assistant in the Department of Prosthetic Dentistry and Orthodontics at the Faculty of Dental Medicine at Medical University - Varna.

Dr. Matev works in the University medical and dental center since its foundation in 2014.

Since 2013, Dr. Matev is a specialist in “Prosthetic dental medicine”

Dr. Matev is a member of the Bulgarian dental association, Union of Scientists, Varna Branch, Bulgarian Society of Obstructive Sleep Apnea and Snoring.

### **Relevance and structure of the dissertation**

Sleep apnea is a common and potentially dangerous sleep disorder, characterized by alternating periods of cessation and resumption of breathing, as well as an increased resistance of the upper respiratory tract. Among the main symptoms of the disease are: severe snoring and periods of a complete lack of breathing during sleep, and during the day - morning headaches, fatigue, severe drowsiness and difficulty concentrating. Sleep apnea is associated with an increased risk of cardiovascular diseases, hypertension and traffic accidents due to strong daily drowsiness.

The presented dissertation is written over 165 from which: Content - 2 pages, Abbreviations used - 1 page, Introduction – 2 pages, Literature Review – 54 pages, Results from the literature review – 1 page, Aim and Tasks – 1 page, Methodology – 8 pages, Own results and Discussion – 50 pages, Conclusions – 2 pages, Contributions – 2 pages, References – 30 pages, Applications – 10 pages. The dissertation is illustrated with 81 figures, 6 tables and 3

applications. The exhibition of the work is presented clearly and concisely in a very good scientific style.

The bibliographic reference to the dissertation consists of 332 sources, of which 7 are in Cyrillic and 325 in Latin.

The relevance of the developed topic is protected in the detailed and analytical literature review, which is sufficient in volume and thematically corresponds to the set tasks. The scientific works known so far on the topic are presented. The scientific literature on risk factors, diagnosis, treatment and quality of life in patients with obstructive sleep apnea was analyzed.

The goal of the PhD study is formulated precisely and clearly. Through it, Dr. Matev gives the main directions of his research work, namely - to study the effectiveness of diagnostic and therapeutic approaches to improve the quality of life in patients with snoring and OSA and a pathological dental status.

The analysis of the literature review in the presented dissertation is up-to-date and includes a sufficient number of contemporary authors, dealing with the problems related to the tasks of the dissertation study. My conclusion is that the author is well acquainted with the issues involved.

**The fulfillment of the goal was achieved through five main tasks, for the fulfillment of which modern diagnostic, clinical, sociological and statistical methods were used.**

The set tasks fully correspond to the topic and are sufficient to achieve the scientific goal of the research.

The material is sufficient to derive reliable and representative results.

Under Tasks One and Two, 120 patients are examined by an otolaryngologist in order to determine the status of the rhinopharyngeal area. Soft palate and uvula, size and position of the tongue, epiglottis, pharynx, nose and nasal passages were examined.

Tasks Three and Four compared the functional indicators of respiration and quality of life in 120 patients before and after the application of intraoral devices and CPAP-therapy for treatment of obstructive sleep apnea. The PhD student defined 3 clinical groups:

- 1) Treatment with intraoral apparatus (30 patients)
- 2) CPAP therapy (71 patients)
- 3) Group of patients without treatment (19 patients)

The methods used are adequately focused on each of the tasks. The results are subjected to a detailed statistical analysis and are very well illustrated with tables and figures. They correspond exactly to the set tasks by applying the necessary research methods. The analysis of the results is accurate and critical. The publications on the topic are sufficient in number (4) and well present the experience of the author.

A diagnostic and therapeutic algorithm has been developed in adult patients with snoring and OSA and pathological dental status. After being diagnosed with snoring and OSA by an ENT specialist, the patient is referred to a prosthetic dental medicine specialist to examine dental and periodontal status, mucosal condition, tongue size, and occlusion abnormalities.

The treatment of patients with sleep apnea is a long and difficult process, involving an interdisciplinary team of pulmonologists, neurologists, cardiologists, psychiatrists and sleep medicine specialists.

The presented conclusion is logical and justifies the conclusions of the dissertation.

The contributions are divided into three main groups: contributions of a scientifically applied nature, contributions of an original nature for the country and contributions of a confirmatory nature. The most important are:

1. An assessment of the frequency, risk factors, diagnosis, treatment and quality of life of dental patients with obstructive sleep apnea was made for the first time in Bulgaria.
2. A critical analysis of the use of intraoral devices for the treatment of obstructive sleep apnea has also been made for the first time in the country.
3. The risk profile of patients with OSA among the Bulgarian population - male, overweight and obesity, the strength and frequency of snoring.
4. A diagnostic and therapeutic algorithm was developed for older patients with obstructive sleep apnea and snoring who have a pathological dental status.

The dissertation was carried out entirely by the doctoral student under the guidance of his two academic supervisors and summarizes thoroughly and reliably the results reached, showing both the theoretical knowledge of Dr. Matev on the research topic and his ability to conduct independent research.

The abstract of the dissertation summarized its content in a concise form and meets the requirements and regulations of MU-Varna. The results of the research were popularized by the doctoral student in three publications, two of which published in an international journal.

### Conclusion

More than 15 years of experience of the author as a clinician and instructor in the field of prosthetic dentistry gives him the necessary experience - theoretical and clinical, for the preparation of a dissertation, so as to meet modern requirements of science. Therefore, I believe that the topic of the dissertation of Dr. Lyudmil Hristov Matev is of significant interest for dental medicine. The dissertation "**Improving the quality of life of patients with snoring and obstructive sleep apnea through intraoral devices**" covers all scientometric requirements of the law and rules of MU-Varna for the award of the educational and scientific degree "Doctor".

The scientific work, personal qualities and professional experience of the dissertation give me reason to give a POSITIVE assessment to the Scientific Jury for the award of educational and scientific degree - "Doctor" to Dr. Lyudmil Hristov Matev.

10.01.2022  
Varna

Signature:

