

STATEMENT OF OPINION

by

Assoc. Prof. Dr. Svetlana Veselinova Yordanova, DDM,
Associate Professor at the Department of Orthodontics, Faculty of Dental Medicine
at the Medical University of Plovdiv;

**External member of the Scientific Jury, determined by Order № P-109-560 of the Rector
of MU-Varna.**

about

dissertation for obtaining the educational and scientific degree "Doctor" in the scientific specialty "Orthopedic Dentistry", in the professional field: 7.2 Dentistry, in the field of higher education: 7. Health and Sports

on "Improving the quality of life in patients with snoring and obstructive sleep apnea through intraoral apparatus"

of Dr. Lyudmil Hristov Matev, PhD student in independent form of study at the Department of Dental Materials Science and Propaedeutics of Prosthetic Dentistry of the Faculty of Dental Medicine at MU - Varna with supervisors Assoc. Prof. Dr. Hristina Ivanova Arnautska, Ph.D. and Assoc. Prof. Dr. Mario Petrov Milkov, Ph.D.

Candidate details:

Dr. Lyudmil Matev was born on September 15, 1976 in the city of Varna. In 2003 he graduated from the Medical University - Sofia, majoring in Dental Medicine. Since 2008 he has been working as an assistant in the Department of Prosthetic Dentistry. Since 2018 he has been an assistant in the Department of Dental Materials Science and Propaedeutics of Prosthetic Dentistry. Since then, Dr. Matev has been enrolled as a doctoral student in an independent form of study at the same department. He is fluent in English. He is a member of the Bulgarian Dental Association and the Bulgarian Scientific Society of Dental Medicine.

STATEMENT OF WORK

1. Project Overview

2. Objectives

3. Scope

4. Deliverables

5. Timeline

6. Roles and Responsibilities

7. Budget

8. Risk Management

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20. Final Report

21. Signatures

22. Date

Relevance of the topic and expediency of the set goals and objectives

The topic that Dr. Matev has chosen for his dissertation is relevant and has great scientific and practical potential. Sleep apnea is a dangerous sleep disorder, with alternating periods of cessation and resumption of breathing, as well as increased resistance of the upper respiratory tract. Its prevalence is still too high. Its main symptoms increase the risk of developing a number of other common diseases. The influence of apnea on the overall physical and mental health of the individual and their quality of life and at the same time the many unresolved issues regarding this condition make the dissertation topic extremely significant.

Characteristics and evaluation of the dissertation

The dissertation is developed in the correct sequence and in sufficient volume. It consists of 165 pages and is illustrated with 6 tables, 81 figures and 3 appendices. The bibliographic reference is up-to-date and covers 332 literary sources /7 in Cyrillic and 325 in Latin/ with predominant titles from the last five years.

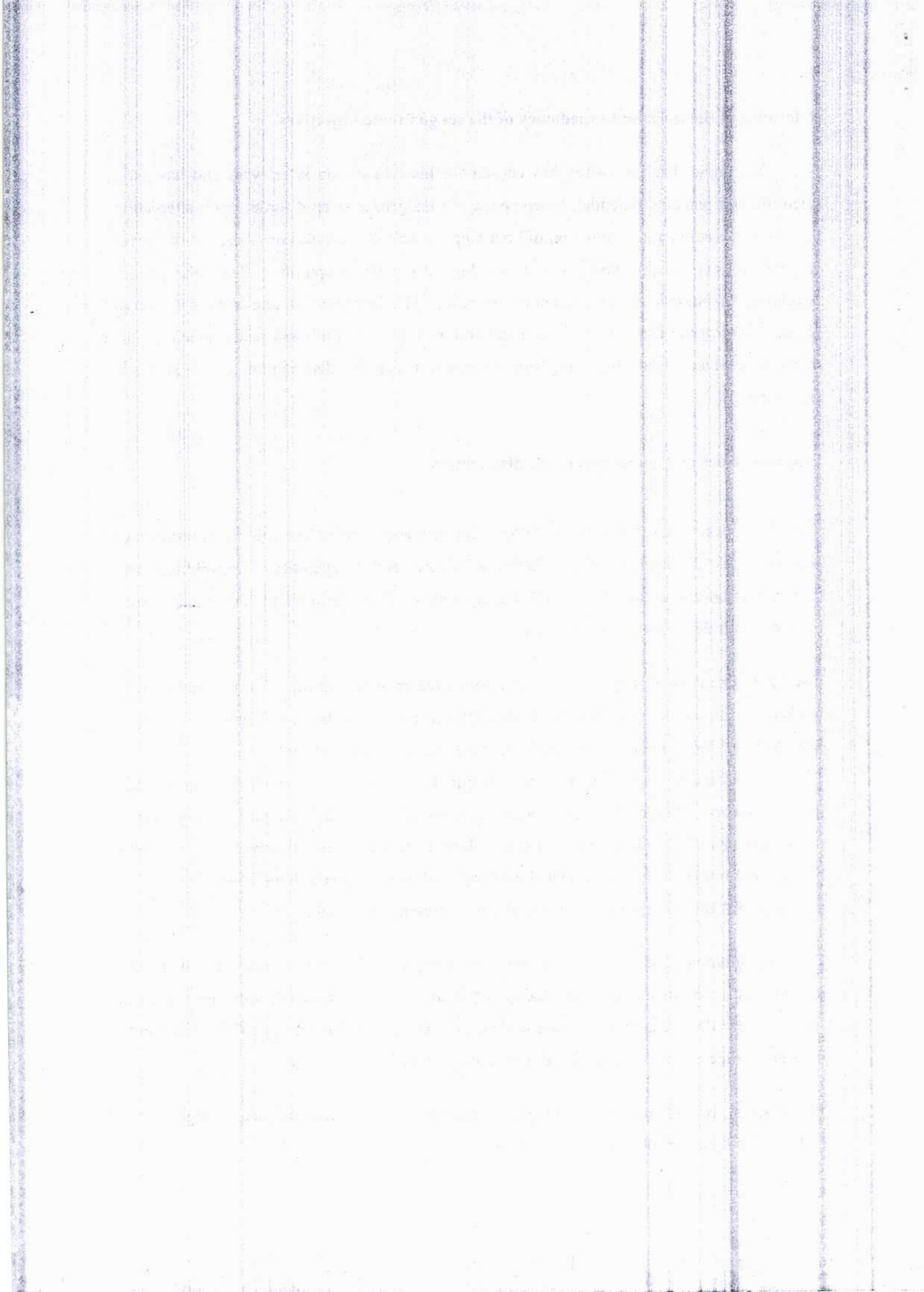
The literature review is systemized and informative enough with regard to the authors who worked on the problems related to the dissertation tasks. Risk factors, diagnosis, treatment and quality of life of patients with obstructive sleep apnea were analyzed.

The purpose of the dissertation is specified and clearly formulated, namely: to study the effectiveness of diagnostic and therapeutic approaches in order to improve the quality of life of patients with snoring, OSA and pathological dental status. To achieve it, five tasks have been formulated and implemented using optimal, modern research methods.

The material is sufficient to derive reliable and representative results.

The methodology of the experiments is comprehensive and consistent with the implementation of the tasks. Before and after treatment, patients were examined by means of specific methods of examination used in dentistry and by sleep apnea specialists. Erkodent's intraoral device Silensor-sl and CPAP were used for treatment.

The results are well described, adequately illustrated with sufficient images, figures and tables and subjected to detailed statistical analysis.



With the first task, the profile of patients with symptoms of snoring and OSA has been established - men over 45 years, overweight and obese (BMI over 30 kg/m²). A relationship between the feeling of fatigue after sleep and a number of indicators has been found.

With the second task, the influence of the patient's bite on increasing the risk of OSA has been proved. The study of the dynamics of the functional indicators of respiration showed how and with which values the cardiovascular risk, AHI and AI correlate.

With the third task, it has been found that after treatment there is a significant improvement in CRI, AHI and HI values. It has also been found that patients at low risk perform better with intraoral devices, while those at moderate and high risk perform better with CPAP. The data are objectively and correctly presented and supported by a number of images and graphics.

With the fourth task, it has been proved that the individual elements of quality of life differ significantly between men and women. The quality of life of women is better and it is improved significantly more than that of men after treatment with intraoral devices.

With the fifth task, a diagnostic and therapeutic algorithm has been developed for adult patients with snoring and OSA and pathological dental status. It has been systemized in which cases treatment should be carried out with individualized oral devices and in which cases it should be carried out with CPAP. The importance of an interdisciplinary team in the treatment of sleep apnea is emphasized.

The 13 conclusions made are of scientific accuracy and are a logical consequence of the results obtained.

The contributions are divided into three main groups: contributions of scientific and practical nature, contributions original to the country and contributions of a confirmatory nature. The most important of them are:

1. For the first time in Bulgaria, the prevalence, risk factors, diagnosis, treatment and quality of life of patients with obstructive sleep apnea and dental pathology have been assessed.
2. For the first time in Bulgaria, the use of intraoral devices for the treatment of obstructive sleep apnea has been subjected to critical analysis.
3. Special attention is paid to the participation of a dentist in the multidisciplinary team for the treatment of obstructive sleep apnea and snoring.
4. The risk profile of patients with OSA among the Bulgarian population has been established - male, overweight and obese, the strength and frequency of their snoring.
5. A diagnostic and therapeutic algorithm has been developed for adult patients with snoring and OSA and pathological dental status.

Evaluation of dissertation publications

In connection with the dissertation, the author has promoted his research in 3 publications, of two of which he is an independent author.

The abstract consists of 66 pages and is properly structured. It fully meets the requirements of the Act on the Development of Academic Staff in the Republic of Bulgaria.

In conclusion:

The dissertation of Dr. Lyudmil Matev completely meets the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for its implementation and the respective Regulations of MU-Varna. The studied problem is relevant to modern practice. The obtained results confirm the role of the multidisciplinary team for early determination of the order examination of the patient by different specialists. The importance of intraoral devices in the treatment of patients with primary snoring without OSA and as long-term maintenance therapy for patients with OSA after treatment of their common diseases and treatment with CPAP has been proven.

The scientific development and the professional qualities of the doctoral student give me a reason to vote with a strong "Yes" for the award of the educational and scientific degree "Doctor" to Dr. Lyudmil Matev and I recommend to the esteemed Scientific Jury to award the scientific and educational degree "Doctor" in the scientific specialty "Orthopedic Dentistry" to Dr. Lyudmil Hristov Matev.

25.01.2022

Reviewer:



Plovdiv

/Assoc. Dr. Svetlana Yordanova, MD/

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY

REPORT OF THE COMMITTEE ON THE
PROGRESS OF THE WORK

The Committee on the Progress of the Work
of the Department of Chemistry
has the honor to report to the
Faculty of the University of Chicago
the results of its work during
the year 1911.

The work of the Department of Chemistry
during the year 1911 has been
characterized by a high degree
of activity and by the production
of many important results.

1911

W. B. BAKER, Chairman