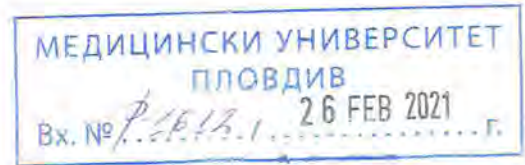


Review, scientific degree „Doctor of Science“

REVIEW



by Prof. Dr. Bozhidar Ivanov Yordanov, PhD
Dean of the Faculty of Dental Medicine, Medical University - Sofia
Head of Department of Prosthetic Dental Medicine,
of a dissertation for the award of a scientific degree
„Doctor of Science“

Professional field: Dental medicine

Doctoral programme: Dental clinical allergology

Author: Associate Professor Iliyana Ivanova-Stoeva PhD

Department: „Department of Diagnostic Imaging, Dental allergology and Physiotherapy“,
Faculty of Dental Medicine, Medical University - Plovdiv

Topic: „Work-related skin and respiratory symptoms among dental staff“

1. General presentation of the procedure and the doctoral candidate

The presented set of materials on paper and electronic media is in accordance with the Rules and Regulations of MU - Plovdiv, the Law For The Development Of Academic Staff In The Republic Of Bulgaria and the Regulations of the same Law and includes the following documents:

- Application (by model) to the Rector of MU - Plovdiv for admission to official defense with an inventory of documents;
- Minutes of the extended CB for preliminary discussion of the dissertation and the decisions taken to start the procedure and composition of the scientific committee;
- Curriculum vitae in European format - signed;
- PhD diploma - notarized copy;
- Dissertation work for the "Doctor of Science" degree with an author's summary on paper and electronic media;
- List of publications and scientific papers on the topic of the dissertation;
- List of noticed citations;

- Copies of publications and scientific papers on the topic of the dissertation - signed;
- Declaration of originality and authenticity of the attached documents (by model);
- Information card of the National Center For Information And Documentation for defended dissertation work in Bulgarian;
- Information card of the National Center For Information And Documentation for defended dissertation work in English.

The candidate has attached documents for a published chapter in a collective monograph - a total of 3 in two monographs and 12 publications in specialized scientific journals, including such with impact factor.

Brief biographical data about candidate

Assoc. Prof. Dr. Iliana Lyubomirova Stoeva, PhD, was born on May 18, 1977 in the city of Blagoevgrad.

1996 - graduated from the Language School "Acad. Lyudmil Stoyanov "Blagoevgrad, languages studied - French and English;

2002 - graduated higher education "Master of Dental Medicine" at MU - Sofia, Faculty of Dental Medicine;

2004 - 2008 - full-time doctoral student in the Department of Imaging and Oral Diagnostics and resident in the Department of Prosthetic Dentistry, FDM, MU - Sofia;

2008 - 2010 - full-time assistant in the Department of Imaging and Oral Diagnostics, Faculty of Dental Medicine, MU - Sofia;

2009 – PhD degree at MU - Sofia, Faculty of Dental Medicine - successfully defended dissertation on "Intraoral contact hypersensitivity to prosthetic dental materials";

2010 - full-time assistant in the Department of Diagnostic Imaging, Allergology and Physiotherapy, Faculty of Dental Medicine, Medical University - Plovdiv;

2010 - Acquired specialty in Prosthetic Dentistry;

2011 - 2012 - Chief Assistant in the Department of Diagnostic Imaging, Allergology and Physiotherapy, Faculty of Dental Medicine, Medical University - Plovdiv;

2012 - Associate Professor in the Department of Diagnostic Imaging, Allergology and Physiotherapy, Faculty of Dental Medicine, Medical University - Plovdiv;

2015 – Specialty in "Dental Clinical Allergology";

2020 - Head of the Department of Diagnostic Imaging, Allergology and Physiotherapy, FDM, MU - Plovdiv, and Vice Dean of Science and Research Activities, Faculty of Dental Medicine, MU - Plovdiv;

She has control of French and English.

3. Topicality of the thesis and expediency of the set aims and tasks

The dissertation presented for review is relevant and of great importance for all specialties of dental medicine, as it examines modern methods for assessing the prevalence, risk factors and allergic mechanisms in work-related skin and respiratory symptoms among dental staff. To date, no modern analysis of the problem has been performed in Bulgaria regarding the etiology, clinic, diagnosis, treatment and prevention of sensitization to allergens from the work environment.

4. Knowledge and understanding of the problem

In the literature review the candidate presents the problem of the impact of work-related allergic reactions on dental staff in an analytical and reasoned manner.

In the literature analysis, Assoc. Prof. Stoeva defends the need for up-to-date information on the problem in the country, which will allow the preparation of specific strategic measures to limit the occurrence and development of adverse reactions to chemical compounds from the work environment which should be set as early as the period of training of students in Dental Medicine, Dentistry and Nursing.

What is emphasized is the fact that for a successful diagnosis of work-related skin and respiratory reactions it is necessary to not only identify the allergens discovered so far, but also to understand the current range of allergens which are the result of the continuous production of new materials with new chemical compounds.

5. Research methodology

Modern methods have been utilized to identify contact allergens in modern dental materials and disinfectants - using standardized allergens from Chemotechnique Diagnostics, Vellinge, Sweden. Surveys to study the prevalence, characteristics and risk factors for skin and respiratory reactions related to the work environment were filled. Clinical test and skin allergy tests - epicutaneous and prick tests were performed. With the help of a computer program a methodology for registration of the dental medical staff with work-related skin or respiratory symptoms was created.

All data is processed statistically.

6. Characteristics and evaluation of the dissertation

The dissertation of Assoc. Prof. Dr. Iliana Stoeva is written on 270 standard pages. It is structured correctly. It includes: Abbreviations used; an Introduction; Literature review with analysis; Aim and tasks; Own research; Materials and methods; Results and discussion; Conclusions; Implications; Bibliography with 546 sources - 8 in Cyrillic script and 538 in Latin script. The dissertation is illustrated with 57 tables and 45 figures.

The introduction presents the significance of the problem from a dental and general medical point of view.

The literature review discusses the most important aspects of modern issues related to the allergenic potential of dental materials and disinfectants - epidemiological data on work-related skin and respiratory symptoms, characteristics of contact dermatitis, respiratory hypersensitivity, etc..

Own research includes the materials and methods used - target groups for the surveys under the first and second task, identification of contact allergens in modern dental materials and disinfectants, use of a dental screening series with 30 allergens (10 additional) to establish clinical manifestations and prevalence of allergens in the professional environment, functional system for management of relational databases with software product Microsoft Access, etc.

The design of the study is presented in tabular form and visualizes the studied groups of dental staff, the main methods and reporting the results. The own research in the dissertation follows the design of the study and this allows the reader to track both the methods used and the results obtained. There is a discussion of the results for each task, as well as a final summary, from which the implications, 9 in number, are formulated.

The dissertation ends with author's conclusions related to the epidemiology of work-related skin symptoms, the most significant risk factors for the occurrence and in different groups of subjects, including anamnestic data - a quarter of dental staff suffers from work-related respiratory symptoms, assessment of the standard series for complex allergological diagnostics in case of suspicion of work-related allergy, prevalence of contact dermatitis.

7. Contributions and significance of the work for science and practice

I accept the theoretical, scientific and applied contributions for assessing the prevalence of work-related skin and respiratory symptoms among dental staff in the country, which are of original character.

The risk factors for the occurrence of work-related skin and respiratory symptoms among dental staff are derived.

An assessment of the role of allergic mechanisms in the occurrence of work-related skin reactions among dental staff was made.

Contact allergens from dental materials, safety equipment and disinfectants were identified.

An electronic register was created for the dental and medical staff with professionally conditioned skin and respiratory symptoms.

8. Evaluation of dissertation publications

The publications in connection with the dissertation are completely sufficient - 3 participations in textbooks and monographs and 12 publications in specialized scientific journals, 3 of them with impact factor.

9. Personal participation of the candidate

The dissertation is the personal and own work of Assoc. Prof. Dr. Stoeva. The presented material and methodology are correctly selected and precisely used to obtain reliable scientific results and conclusions.

10. Author's summary

The presented summary of 60 pages is structured correctly according to the requirements and reflects the main results achieved in the dissertation.

11. Critical remarks and recommendations

The methods of task 3 are missing from in the summary.

12. Recommendations for future use of the dissertation contributions and results

I recommend that the results of the dissertation be presented in Bulgarian and international specialized publications and in scientific forums in order to become available to dentists.

CONCLUSION

The dissertation *contains scientific and applied results, which represent an original contribution to science and meet all* the requirements of the Law For The Development Of Academic Staff In The Republic Of Bulgaria, the Regulations for application of the same and the Rules and Regulations of MU - Plovdiv. The presented materials and dissertation results **fully** comply with the specific requirements of MU - Plovdiv.

The dissertation shows that the doctoral student Assoc. Prof. Dr. Iliyana Stoeva, PhD, **has in-depth** theoretical knowledge and clinical skills in the scientific specialty **Dental Clinical Allergology**, **demonstrating** qualities and abilities for independent research.

I give my *positive assessment* of the research, presented by the above-reviewed dissertation, summary, results and contributions, and I will *confidently vote that the scientific degree "Doctor of Science" is to be awarded* to Assoc. Prof. Iliana Lyubomirova Stoeva, PhD, in the doctoral program **Dental Clinical Allergology**.

22.02. 2021

Reviewer: 

Prof. Dr. Bozhidar Ivanov Yordanov, PhD