OPINION

by Assoc. Prof. Dr. Elitsa Georgieva Deliverska-Alexandrova, Ph.D.
Department of DOMFS, FDM, MU - Sofia
member of the Scientific Jury by order № P-109-101/07/03/2022.
of the Rector of MU – Varna

Subject: Acquisition of the scientific and educational degree "Doctor" in the field of: 7. Health and sports. Professional field: 7.2. Dentistry. Doctoral program: "Therapeutic dentistry"

On: dissertation topic: „**Drug addicts - oral health and management** "

Author: Dr. Simeon Zdravkov Chokanov, PhD student, full-time education in the procedure for obtaining the educational and scientific degree "PhD", Faculty of Dental Medicine, Medical University - Varna.

Scientific adviser: Assoc. Prof. Dr. Asya Krasteva-Panova, MD

1. General presentation

This opinion was prepared on the basis of an order of the Rector of MU - Varna № P-109-101 / 7.03.2022.

The presented set of materials on paper and electronic media is in accordance with Art. 44 (3) of the Regulations for development of the academic staff in MU - Varna.

The doctoral student has attached 2 publications on the topic of the dissertation and three participations in scientific forums, which quantitatively and qualitatively meet the legal requirements for the dissertation.

2. Brief biographical data about the doctoral student

Dr. Simeon Zdravkov Chokanov was born in 1991 in the town of Troyan.

- 2010 - specialty Chemical-technological production of drugs; professional qualification chemist-operator - High School "St. Cl. Ohridski "; Trojan.

- 20.07–31.07.2015 - internship in prosthetic dentistry at the First Moscow Medical University "I. M. Sechenov "- Moscow.

- 01.08–12.08.2016 - internship in oral and maxillofacial surgery at the Northwestern State Medical University "I. I. Mechnikov "- St. Petersburg.

- 2017 - Master - Dentist, Faculty of Dentistry, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

- from 09.2017–12.2017 - Part-time assistant prof. at the Department of Conservative Dentistry and Oral Pathology, SPF, MU - Varna.

- 2019 - Master of Health Management, Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

- 2018–2022 - full-time assistant prof. at the Department of Conservative Dentistry and Oral Pathology, SPF, MU - Varna.

He speaks English, German and Russian.

- 2012-2016 - Chairman of the Association of Students of Dental Medicine - Varna.

– 2014–2016 г. –secretary general of medical student organization- MU- Varna

Member of the following organizations: BDA, BSSDM, UBS, BSOSAS.

3. Relevance of the dissertation

The dissertation examines and analyzes a significant problem for modern dental practice related to clinical behavior in drug addicts, which often requires an interdisciplinary approach and close collaboration with specialists from other medical specialties. Dental treatment in these patients should begin with patient education, prevention and prophylaxis of oral diseases, treatment of such diseases and measures to prevent the abuse of opioids and analgesics. Often dentists do not know how to treat drug addicts or are afraid to work with them.

Recognizing drug addicts and treating them properly are key points in good oral health management. There is no algorithm of behavior in the dental treatment of these patients in Bulgaria, and the creation of a protocol for the behavior of dentists and a comprehensive medical and dental approach to drug addicts would help and facilitate the treatment and management of these patients.

4. Knowledge of the problem

In the present dissertation work Dr. Simeon Chokanov shows in-depth knowledge of the developed topics and skills for independent research.

The exhibition is written in good scientific language. The author has made a detailed and in-depth critical analysis of the literature, formulating the debatable and unsolved problems. The literature review is highly informative and ends with a clear motivation for the need to introduce a system of behavior in the dental treatment of drug addicts.

This enabled the dissertation to clearly and precisely formulate the purpose of his research, namely: to assess oral health and the peculiarities of oral pathology in drug addicts and to develop a specific algorithm for prevention and treatment.

5. Research methods

The realization of the aim has been achieved through the implementation of five accurately formulated tasks:

1. To perform a comprehensive assessment of oral health in drug addicts.

2. To identify risk factors in drug-addicted patients and their relationship with oral pathology.

3. To determine whether there is a relationship between changes in the oral cavity and the use of various drugs.

4. To establish the impact of dental status on the quality of life of drug addicts.

5. To develop an algorithm for a complex dental approach in the treatment of drug addicts and a protocol for the behavior of dentists.

The clinical material selected for the implementation of the main goals and objectives is sufficient for the development of the dissertation. A total of 154 patients were selected and studied, divided into two groups - drug addicts attending an opioid detoxification program and a control group of patients attending a private dental office.

The following research and analysis methods were used in the implementation of the set tasks:

- Clinical-diagnostic methods for assessment of dental status - registration of patients' dental status and determination of DMFT index (excluding tooth loss due to traumatic and orthodontic reasons), assessment of gingival and periodontal condition - using Papilla bleeding index (PBI), and record the degree of taxation of the language visually and documented

photographically.

- Laboratory-diagnostic methods for assessment of dental status - measuring the level of hydration of saliva, measuring the amount of unstimulated / stimulated saliva, determining the viscosity of saliva, pH of unstimulated / stimulated saliva, buffering capacity, presence or absence of Streptococcus spp spp, Candida spp. in saliva, assessment of the presence or absence of halitosis - subjectively and objectively through a special device HC-212SF FitScan Breath Checker (measures volatile sulfides and hydrocarbon gas).

- Questionnaire method.

- Statistical methods.

Based on the study of the medical documentation of the selected patients, additional information was collected on: the type of narcotic substances, duration of use, comorbidity, risk factors, etc. Review articles from the scientific literature and own data were used in order to systematize and develop an algorithm for a complex dental approach in the treatment of drug addicts and a protocol for the behavior of dentists.

The methods applied in the development of the set tasks are precisely selected and presented and have enabled the doctoral student to obtain significant qualitative and quantitative original and reliable results. The methodologies are modern, based on good medical practice and correspond to the set goal and tasks.

6. Characteristics and evaluation of the dissertation

The dissertation is written on 145 pages, illustrated with 33 figures, 27 tables and 5 appendices and two practical appendices. The bibliography includes 218 sources, of which 8 in Cyrillic and 210 in Latin. It contains all the necessary sections for a dissertation. The results are comprehensively and correctly described, as the data from each indicator, previously laid down in the methodology of the scientific research, are analyzed in detail and thoroughly. The good visualization and the competent approach of the dissertation in the interpretation of the obtained data make an excellent impression.

The dissertation ends with conclusions based on the analysis of the results, discussion and summaries. The findings correlate with the objectives and are grouped in terms of comprehensive assessment of oral health of drug addicts, risk factors and their relationship with oral pathology, as well as the impact of dental status and oral health on the quality of life of these patients.

A number of important conclusions have been made about clinical practice, namely that the lifestyle of drug addicts, disadvantages and bad habits are key to deteriorating oral status, and reduced salivary function leads to severe consequences in the oral cavity - xerostomia, increased risk of tooth decay. caries, tooth loss, fungal infections, mucosal lesions and periodontal disease. One of the consequences of drug addiction is related infectious diseases and their effect on oral health. Drug-addicted patients usually seek dental care only in emergencies and to solve a single problem with a very low probability of complex treatment.

7. Contributions and significance of the dissertation

The conclusions, conclusions and contributions logically follow the results of accurate research and are undoubtedly significant for modern clinical practice.

Contributions of original character:

1. This is the first detailed study and assessment of oral pathology in drug addicts in our

country.

2. An up-to-date algorithm for a complex dental approach in the treatment of drug-addicted patients and a protocol for the behavior of dentists are proposed.

3. A questionnaire has been prepared for drug-addicted patients, enabling an assessment of their quality of life and how this correlates with their oral health.

4. The problems related to the treatment of oral diseases in drug addicts in Bulgaria are presented.

Contributions of scientifically applied nature

1. A comprehensive assessment of oral health in drug addicts has been performed.

2. Risk factors in drug-addicted patients and their relationship with oral pathology have been identified.

3. The influence of dental status on the quality of life of drug addicts has been studied.

8. Personal participation of the doctoral student

The conducted research and observations of patients and the resulting conclusions and contributions to the dissertation are the personal work of the doctoral student.

9. Abstract

The abstract fully corresponds to the content of the dissertation, accurately reflects the accents and is developed in accordance with the requirements of Act on development of the academic staff in the Republic of Bulgaria and the regulations of MU - Varna.

The set of materials provided to me, related to the dissertation, is complete and is in accordance with the Act on development of the academic staff in the Republic of Bulgaria and the regulations for its implementation, as well as with the Regulations of MU - Varna.

Conclusion

The topic chosen by Dr. Simeon Chokanov in the dissertation **"Drug-addicted patients - oral health and management"** treats a topical and interesting problem for dental science and practice. The scientific development is well structured, with properly selected methods and reliable results and theoretical and applied contributions in dentistry. The study is relevant given the growing number of drug addicts to various illicit substances and the need to raise awareness of dentists about the registration, prevention and treatment in the daily clinical practice of oral pathological manifestations in these patients. Comprehensive oral diagnosis, prevention and accurate treatment of drug addicts are key to good oral health management. Clinical behavior in this group of patients often requires an interdisciplinary approach due to comorbidity or as part of a complex treatment in close collaboration with specialists from other medical specialties. In many cases, cognitive-behavioral therapy is required in conjunction with dental treatment and strict monitoring by a physician or pharmacist of drug therapy. It is important for dentists to pay attention to this contingent of patients, given that there are no specific oral manifestations due to the use of more than one banned substance and to approach professionally, improving their dental health and improving their quality of life.

The literature review is highly informative and ends with a critical analysis and clear motivation for the need to introduce a system of behavior in this contingent of patients. The development meets the criteria for a dissertation, and the data from the results obtained and their interpretation, as well as the presented publications related to it, I accept as a personal work of the author. The dissertation shows that Dr. Chokanov has in-depth theoretical knowledge and

professional competence, knows modern specialized literature, demonstrating qualities and skills for independent research, which allows to develop an algorithm for a comprehensive medical and dental approach in the treatment of drug addicts and a protocol for the behavior of dentists when working with drug addicts.

The dissertation contains original and scientifically applied contributions and meets all the requirements of the Act on development of the academic staff in the Republic of Bulgaria and **fully** complies with the specific requirements adopted in connection with the Regulations for the implementation of the same law and the relevant Regulations of MU - Varna.

In conclusion: I confidently give a positive assessment of the dissertation on **"Drug addicts - oral health and management"** and I will vote **"YES"** for **Dr. Simeon Zdravkov Chokanov** to obtain the educational and scientific degree **"Doctor"** in the scientific specialty **"Therapeutic Dentistry"**.

Sofia, 25.03.2022 ▪

Prepared the opinion:

(Assoc. Prof. Dr. Elitsa Deliverska, PhD)