

STATEMENT

by assoc. prof. Iliyana Lyubomirova Stoeva, DSc

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On the doctoral thesis for the award of the educational and scientific degree “PhD”

Professional field: 7.2 Dental medicine

Doctoral program: Prosthetic dental medicine

Author: Tsvetelina Nikolova Kanlieva,

PhD student on government financed training

Department: Dental materials science and prosthetic dental medicine

Topic: Prosthetic treatment of patients with a strong nausea and vomiting reflex

Scientific advisor: Prof. Dr. Metodi Zahariev Abadzhiev, DSc, PhD, DMD

The current statement was prepared pursuant to order № P-109-394/08.09.2023 of the Rector of MU – Varna and is in accordance with the Law for the Development of Academic Staff in the Republic of Bulgaria (LDASRB), the Rules for the Application of the LDASRB and the rules of the Medical University – Varna. Dr. Tsvetelina Nikolova Kanlieva provided all necessary materials.

Relevance of the topic of dissertation work

Dental treatment, in particular prosthetic treatment, requires short-term or prolonged contact of dental materials with different areas in the oral cavity including the most reflexogenic areas such as palate and distal third of the tongue. Some patients experience nausea and vomiting when they visit the dentist. There are a variety of relative or constant causes of nausea and vomiting. Frequent onset of nausea and vomiting reflex, when the patient visits the dentists, can lead to avoiding regular dental treatment and worsening the oral health. Prosthodontics are the most affected by the problem of nausea reflex as they frequently manipulate on the mouth reflexogenic areas when taking impressions or putting partial or total dentures. In the scientific literature, there is data on nausea reflex degree and its prophylaxis during prosthodontic treatment. It can be summarized that the topic of the dissertation work and the accomplished research are up-to-date and of essential importance for the routine dental practice. The aim and the tasks in the doctoral thesis are set correctly, and their implementation determines informative results, on the basis of which relevant conclusions can be derived.

Understanding of the Problem

The literature review demonstrates an excellent understanding of the problem and the cited literature related to the topic of her dissertation. The literature review covers the anatomic

characteristics of oropharyngeal region. Pathophysiological prerequisites of nausea and vomiting reflex onset are described in detail. Furthermore, the epidemiology, etiologic and pathogenetic factors, as well as classification of nausea and vomiting symptoms in prosthodontic patients are thoroughly presented. Relationships between particularities in some anatomic regions and nausea and vomiting reflex are described in detail. The cited references are contemporary, they are selected appropriately and are informative.

Characteristics and assessment of the doctoral thesis

The doctoral work was written in 162 standard pages. It is illustrated with 95 figures, 21 tables and 6 appendixes. The bibliographic reference includes 175 sources, 45 of which are in Bulgarian.

The aim of the doctoral thesis is clearly formulated and convincingly achieved. The aim was to study the reflex of nausea and vomiting in at-risk patients and to create algorithms for working with them in various prosthetic manipulations. The set four specific tasks are in line with the defined goal and actually contribute to its realization.

Methodology of the research

The accomplished research study is correctly planned and executed. The results are reliably reported and subjected to detailed statistical analysis. A quantitative and qualitative study of the degree of the nausea and vomiting reflex in patients was conducted among 121 patients via assessment of pharyngeal reflex and surface sensitivity of the mucous membrane in the areas activating the nausea reflex. Two methods of reducing the nausea in these patients such as contact anesthesia with Lidocaine spray and homeopathic remedies intake were compared. Questionnaire research on nausea reflex was conducted in both dentists (n=150) and patients (n=118). The statistical methods and the numbers of the necessary permits for working with patients were indicated. The chosen methods are suitable for the implementation of the tasks and the achievement of the doctoral work goal.

Results

The results were presented in such a way that they follow the logically set tasks. They were set out in 8 tables and 65 figures. The posterior palatal seal area and fovea were identified as the most common nausea reflex area (100%), followed by the posterior third zone of the tongue (91.74%). Half of the patients developed nausea reflex when they were stimulated on the lateral edges of the tongue (52.98%) or in the middle of the palate (45.00%). The less sensitive area was the buccal mucosa (38.01%). A proportional correlation between nausea reflex and the size of the receptor field identified. Higher prevalence in nausea reflex was registered in women (57% vs 43%). According to the results in task 2 the number of patients with the gag reflex reduced by 48.76% (mean percentage for all areas) after topical Lidocaine administration, as being the most highest in posterior palatal seal area and fovea (72.7%). The use of contact anesthetic contributed to the reduction in intensity of both tactile sense (50.35%) and nausea reflex (19.89%). Homeopathic remedies also demonstrated changes in the studied indicators with less effectiveness compared to the lidocaine. Similar changes were made by homeopathic remedies, except for their effect on the sense of touch remaining unchanged.

Contributions and significance of the doctoral thesis for the science and the practice

In the doctoral work, 16 conclusions are presented, and 10 contributions are formulated. I fully acknowledge and accept the original contributions made in this dissertation. The created algorithm of using homeopathic remedies for the management of patients with an increased nausea reflex, suitable during both dental treatment and adaptation period of prosthodontic treatment is extremely valuable for clinical practice.

The author's abstract was written according to the requirements and reflects the results achieved in the dissertation.

The Kanlieva is the first author of three publications related to the topic of her dissertation.


Conclusion

The dissertation work of Dr. Tsvetelina Nikolova Kanlieva contains scientific and applied results that constitute an original contribution to the field of science and meet the requirements of the Law on Academic Staff Development in the Republic of Bulgaria for obtaining the educational and scientific degree of "Doctor" and the regulations of the Medical University of Varna.

Based on the above, I confidently give my positive assessment of the conducted research and recommend to the members of the scientific jury to award the educational and scientific degree of "Doctor" to Dr. Tsvetelina Nikolova Kanlieva.

Plovdiv

31.10.2023


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/Assoc. prof. I. Stoeva, DSc/