STATEMENT

by Prof. Hristo Vasilev Kozhukharov, MD, PhD

Faculty of Medicine, MU-Varna Speciality Psychiatry

REGARDING: THE DOCTORAL THESIS FOR AWARDING THE EDUCATIONAL AND SCIENTIFIC DEGREE OF PHILOSOPHY DOCTOR IN THE DOCTORAL PROGRAMME OF HYGIENE (Incl. OCCUPATIONAL, COMMUNITY, SCHOOL, RADIATION, etc.), PROFESSIONAL FIELD 7.1. MEDICINE, FIELD OF HIGHER EDUCATION 7. HEALTHCARE AND SPORTS

ON THE SUBJECT:

ASSESSMENT OF THE PSYCHOEMOTIONAL TENSION LEVELS IN MANAGERS AND OPTIONS FOR STRESS CONTROL THROUGH AN ACTIVE PHYSICAL PROGRAMME

by

TATYANA BOYKOVA MATEVA, MD (full-time doctoral student)

RESEARCH SUPERVISOR: PROF. TEODORA TODOROVA DIMITROVA, MD, PHD

Basis for writing the review: I have been selected as a member of the Scientific Jury based on Order No. P-109-169/25.03.2025 of Prof. Dimitar Raykov, MD, DSc, Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna, according to Protocol No. 1/31.03.2025, and by decision of the Faculty Council of the Faculty of Public Health, Protocol No. 242/19.03.2025. I have been designated to prepare a statement on the thesis defence procedure of Tatyana Boykova Mateva, MD for obtaining the educational and scientific degree of Philosophy Doctor (|Protocol No. 1 from the first meeting of the Scientific Jury).

General assessment of the documents submitted for the defence

The documentation set for initiating the procedure and admission to public defence of the thesis of Dr. Tatyana Boykova Mateva has been assembled and organised as per the requirements of the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA), its Implementation Regulations, the Rules and Regulations for Academic Staff Development of the MU-Varna. The set contains all required documents, and no violations in the procedure have been found.

Biographical data of the doctoral candidate

Tatyana Boykova Mateva, MD, completed her high school studies at Fourth Foreign Language School Frederic Joliot Curie in Varna in 1986 with a gold medal and full honours. She graduated from the Medical University "Dr. Paraskev Stoyanov" – Varna in 1992. Dr. Mateva's professional career started in 1992 as a resident physician at the Obstetrics and Gynaecology Department of St. Anna General Hospital in Varna. During the period from 1994 to 1999, she served as Head of the Health Services, Emergency Medical Care, in the village of Kitka, Avren municipality, and a physician at the Emergency Medical Service of the municipality. From 2000 to the present, she has been the Medical Director of Boiron Bulgaria laboratories. Since 2016, Dr. Mateva has also been the head of the Occupational Health Service at the Medical Centre Mladost, Varna.

Dr. Mateva has been involved as both a participant and a speaker in various workshops and training sessions aimed at students and professionals in the field of Occupational Medicine. She has two specialities in the field of Hygiene – Occupational Medicine (2016) and Nutrition and Dietetics (2020).

Dr. Mateva is a member of the Bulgarian Medical Association (BMA), Bulgarian Academic Society of Occupational Medicine (BASOM), Bulgarian Society of Nutrition and Dietetics (BSND), Bulgarian Medical Homoeopathic Organisation (BMHO), and is a Member of the Board of Directors of the National Association for Practical Dietetics and Integrative Medicine (NAPDIM), hosting the national symposium Bulgarian Dietetic Days.

She is fluent in written and spoken French and Russian.

Dr. Mateva was enrolled as a full-time doctoral student following the successful completion of a competitive test in 2020 for the doctoral program of Hygiene (including occupational, communal, school, radiation, etc.) at the Department of Hygiene and Epidemiology, Faculty of Public Health, MU-Varna. She was granted the right to public defence after successfully completing her individual doctoral programme plan.

Relevance of the thesis subject

The thesis addresses one of the most relevant issues in the field of occupational medicine – psychoemotional tension in management personnel and the options for stress control through an active physical programme.

The management personnel represent a small but extremely significant social group. In contemporary society, nearly all economic activities are handled by managers. A significant number of individuals in the workforce dedicate over fifty percent of their productive hours under the guidance of a supervisor/manager. In the scientific database, there are very few studies on stress within this particular social group. Strategies to manage workplace stress effectively are still being developed. Physical activity is one of the methods for reducing physical stress, perceived stress, somatisation, depressive and anxiety tendencies. The introduction of an active physical programme for "management personnel" in various fields of activity contributes to improving the stress responses of this group and to the well-being of their teams.

General characteristics of the thesis

The research study complies entirely with present-day standards and the requirements of the Medical University "Prof. Dr. Paraskev Stoyanov" — Varna, regarding a thesis for awarding the scientific degree of Philosophy Doctor in medicine. The thesis is presented on 128 pages, includes 27 figures, 34 tables, 8 appendices, and a literature review of 172 titles, respectively 2 in Cyrillic and 170 in Latin. The established rules concerning the balance between various sections have been respected — literature review, aim and tasks, methods and tools, statistics of the presented results, discussion, recommendations, conclusions, and unique contribution.

The title is formulated precisely and fully corresponds to the content of the thesis.

The literature review is detailed, with a good chronological sequence. The classics in the research field and the latest concepts of stress and methods for dealing with it are cited.

The aim and tasks of the research are formulated precisely and clearly and correspond to the subject.

The study cohort and methods are suitable for the aim and tasks of the research. The representative sample of 152 executives allows for statistically significant analyses and conclusions. The methodology and panel of initial study analyses to determine the inclusion criteria are unique, developed by the doctoral candidate and implemented by a team of specialists at the Medical Centre Mladost, Varna.

Results and discussion

The results of the conducted study are presented correctly and clearly, with clear visuals and interpretation. The applied graphs and tables facilitate the perception of the processed data. The statistically significant differences between the two groups of studied individuals are examined, and the differences between individuals with APP (Active Physical Programme) and those without physical activity are analysed. In the analysis of the results from 4DSQ, both the two studied groups and the details for both genders are compared. The Bourdon test and response time were recorded twice, at the end and at the beginning of the working week. The obtained and analysed results are interpreted from the perspective of other global studies.

Conclusions

The study results in five conclusions that are entirely consistent with the set aim and tasks. The summary of the findings shows that the indicators generally associated with high stress levels do not differ significantly between the two genders and the two groups, with and without physical activity. The difference in the Response Time indicator between the two groups is statistically significant, with those exercising having a much shorter response time than the non-active group of executives. Concerning personal productivity and the demand for quick resolutions from management personnel, the conclusions demonstrate the advantages of APP (Active Physical Programme) as a factor for coping with work-related stress.

Recommendations

The recommendations are logical and practical, directed towards occupational health specialists, employers, and all parties involved in ensuring safe and healthy working conditions. The assessment methodology is easily applicable, and the results contribute to the introduction of strategies and programmes for coping with stress.

Contributions

The thesis showcases its unique contributions. For the first time in Bulgaria, the concept of "management personnel" is formulated, as well as "Active Physical Programme", as far as workplace stress studies are concerned. For the first time, a combined methodology for assessing stress levels has been developed. Innovative is the use of a Psychological Diagnostic System to assess response time as an indirect indicator of stress in "management personnel," as well as analysing the results on the first and last day of the working week.

Conclusion

The thesis presented by Tatyana Boykova Mateva, MD, "Assessment of the Psychoemotional Tension Levels in Managers and Options for Stress Control through an Active Physical Programme", is based on a comprehensive literature analysis and a sound, innovative research methodology. The study was conducted with appropriate tools and a target group for research. The conclusions fully correspond to the set goal. The statistical analysis and data interpretation show skills and in-depth knowledge in the field of scientific research. The summarised conclusions have direct application in practice and provide guidelines for assessment and action on a socially significant issue, such as the evaluation of psychoemotional tension and strategies for managing workplace stress. The present work meets all the criteria for obtaining the educational and scientific degree of Philosophy Doctor according to the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA), its Implementation Regulations, and the Rules and Regulations for Academic Staff Development of the Medical University - Varna. In this regard, I confidently give my positive assessment and recommend to the members of the honourable Scientific Jury to vote positively for awarding the educational and scientific degree of Philosophy Doctor to Tatyana Boykova Mateva, MD.

13/05/2025

Prepared the review:

Заличено на основание чл. 5, $\S1, \ \ 6. \ , B$ " от Регламент (EC) 2016/679

/Prof. Hristo Vasilev Ko