STANOVISHE

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resp. dissertation for the award of an educational and scientific degree "doctor" professional direction **7.1. Medicine**

of Dr. Zhivka Emilova Chuperkova

pediatrician and child neurologist in the Second Pediatric Clinic, UMBAL "St. Marina" - Varna

on "Quality of life and comorbidity in children with epilepsy" PhD Program in pediatrics

Scientific supervisors: Prof. Miglena Dimitrova Georgieva, PhD, Department of Pediatrics, MU-Varna and Prof. Veneta Sashova Bozhinova-Chamova, PhD, Department of Neurology, MF, MU-Sofia

1. General presentation of the procedure

The presented set of materials on an electronic medium is in accordance with the Regulations for the conditions and procedures for acquiring scientific degrees and holding academic positions at the Medical University - Varna and includes all necessary documents.

The review has been compiled in accordance with the requirements of the EPA and Chapter II , Section I of the EPA.

2. Presentation of the doctoral student

Dr. Zivka Chuperkova graduated from Medical University - Varna in 2013. She was immediately enrolled in a specialization with full exposure to all diseases of the pediatric spectrum and with an internship in the Emergency Department, Children's Intensive Care Unit. In 2016, she started working in the Second Pediatric Clinic of the "St. Marina" UMBAL - Varna, and in 2018, after

a regular competition, she became a full-time assistant at the Department of Pediatrics, MU - Varna. In 2018, she acquired a specialty in pediatrics, and in 2021, after a successful specialization, in pediatric neurology. To date, Dr. Chuperkova has a total of 6 publications and 13 participations in scientific forums. She is a member of BPA and the Bulgarian Society of Child Neurology, Psychiatry and Developmental Psychology. She is fluent in English and German and teaches students from the English language program of MU - Varna. During the Department's annual teaching evaluation surveys, she was rated by students as a very thorough and favorite teacher.

3. Actuality of the topic and appropriateness of the set goals and tasks

Epilepsy is the most common chronic neurological disease in childhood. As a general disease, it affects about 1% of children, and individual forms are characteristic of rare diseases or as part of syndromes and genetic conditions (with a frequency of less than 1 in 2000 children). Because of its rarity, the diagnosis and treatment of epilepsy is often a major challenge, especially in general pediatric practice. The topic of the current dissertation is relevant both in a scientific and a practical sense, because the illumination of the available comorbidities would help for their better treatment and for a more complete follow-up of the affected children. It is particularly important to assess the quality of life and outline the directions for its improvement through a validated international instrument from the point of view of both children and parents. The set goal is properly justified against the background of the working hypotheses derived by the doctoral student. Five tasks were formulated, and 2 of them (1 and 2) are rather a description of the applied methodology than tasks. Tasks 3, 4 and 5 focus entirely on the problems under study.

4. Characterization and evaluation of the dissertation work

Dr. Chuperkova's dissertation is presented on 198 standard pages and is illustrated with 65 tables and 84 figures. Also included are 2 supplements. The bibliography contains 304 sources, 17 of which are in Cyrillic and 287 in Latin.

The literature review presents detailed data on the classification, epidemiology and etiology of epilepsy, as well as a detailed description of all known comorbidities (hydrocephalus, brain tumors, congenital brain anomalies, cerebral palsy, generalized developmental disorders, mental retardation, etc.). The overview is readable and of great educational value. Special attention has been paid to the combinations with diseases of the body outside the central nervous system, as well as with such a common symptom in childhood and adolescence, such as headache. In connection

with the goal of studying the quality of life in families with a child with epilepsy, a significant part of the review is dedicated to this issue. On the basis of the review, the doctoral student formulates 6 prerequisites for planning the dissertation work, the most important of which are the characteristic polymorbidity in patients with epilepsy and the need for data on the quality of life for our population, as they are completely lacking until now.

5. Research methodology

The PhD student and supervisors chose to study 100 children with epilepsy over a 2-year period, forming child-parent pairs. There is a lack of calculation of the required sample of patients for the study in order to achieve statistical significance of the results, which is common in research in our country, but regardless of this, the number of subjects is impressive and shows the determination of Dr. Chuperkova to collect valid for our population results. In addition, the studied are from 2 geographically distant regions (Varna and Petrich). A survey specially developed for the purposes of the scientific work was used, and the survey was carried out personally by the doctoral student. Translated into Bulgarian and used for the first time in our country is the KINDL^R questionnaire for children and parents. Typical pediatric parameters such as height and weight, heart rate, blood pressure and neurological status, laboratory, electrophysiological (EEG) and imaging studies were investigated. It was done with informed consent, after approval by the Research Ethics Committee of the University of Varna - Varna. Data were analyzed statistically and presented through descriptive, correlation and regression analysis.

6. Contributions and significance of the results of the dissertation for science and practice

The dissertation ranked mental comorbidities first in the studied patients, followed by neurological and somatic conditions. The fact that comorbidities are often combined in the same patient is emphasized. A detailed assessment of the quality of life was made according to the answers of the children and according to the answers of their parents, as expected, for the children a good current physical condition is the most important, while for the parents the health condition in general is also important, as well as the absence of psychological comorbidities. A greater number of comorbidities leads to lower quality of life scores. Through a modern regression analysis, the relative share of weight was calculated. the quality of life of each studied indicator. The formulated 7 conclusions follow the correctly set tasks and logically summarize the research carried out.

At the end of the dissertation, after a very professional and interesting discussion of the own

results, a total of 6 contributions were made - 3 scientific-theoretical and 3 of a scientific-applied nature. They are formulated with the inherent accuracy and modesty of Dr. Chuperkova, and correctly reflect the summary of her own results.

8. Evaluation of the publications on the dissertation work and the personal contribution of the dissertation student

Dr. Zivka Chuperkova presents two publications and two announcements in connection with her dissertation work. Although this meets the requirements of the Regulations for the Development of the Academic Staff of the MU - Varna, the dissertation has a greater potential for publication. Data on the quality of life and its relationship with comorbidity in our country would certainly be interesting for the international scientific community, which requires the work to be expanded. I have no critical notes.

9. Abstract of the dissertation

The abstract presents the dissertation correctly and fully, as well as discusses the own results in detail.

Conclusion

In conclusion, I am convinced that Dr. Zhivka Chuperkova's dissertation work is an extremely timely and significant insight into the problems of children with epilepsy in our country and their families. The work is well thought out, structured, with clearly formulated and executed tasks. Its conclusions are logical, and the contributions are correctly divided into scientific-theoretical and scientific-applied. The dissertation represents an excellent basis for further research and improvement of care for this group of patients. It is executed precisely and intelligently, with the intelligence and responsibility inherent in a dissertation.

The dissertation meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of ZRASRB and the relevant Regulations at the Medical University - Varna.

All this gives me reason to confidently recommend to the members of the esteemed Scientific Jury to award Dr. Zhivka Emilova Chuperkova the educational and scientific degree "Doctor".

Заличено на основание чл. 5, §1, 6. "В" от Регламент (EC) 2016/679

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