

STATEMENT

on a dissertation on a topic
"Study of quality of life in some socially significant diseases of the CNS"
of Dr. Vladimir Pavlov Damyanov
for awarding the PhD degree
in the scientific specialty "Social Medicine and Health Management"
Prepared the statement: Prof. Plamen Stoyanov Dimitrov, MD, PhD
Elected a member of the scientific jury by order № RD-461 / 01.12.2020 of the
Director of the National Center of Public Health and Analysis

Relevance of the topic

Socially significant diseases are a major cause of death and disability in the world. Forecasts of the frequency and severity of socially significant diseases point to a negative upward trend, calling into question the implementation of the UN Sustainable Development Goals. This is also related to the aging process of the population, due to the fact that socially significant diseases are most common among the elderly population. One of the leading socially significant diseases in Bulgaria are neurological diseases. There is evidence that many of them are preventable, but the resources allocated for their prevention are insufficient. In assessing quality of life, the role of neurological diseases is essential. This is an increasingly topical issue given the multiplicity of chronic diseases with advancing age and given the prolongation, albeit at an insufficient pace, of life expectancy among the Bulgarian population. It is important not only the length of life, but also whether the extra years of life are in good health, or with disease or disability. For this reason, the study of quality of life in patients with some socially significant diseases of the central nervous system is relevant and contributes to modern scientific and practical knowledge in this field.

Characteristics of the dissertation

General presentation of the dissertation

The dissertation is presented in a volume of 175 pages and is illustrated with 21 tables and 69 figures. It is structured on a modular principle, containing introduction, literature review, purpose, tasks, hypotheses, material and models,

methodology of conducting research, analysis and discussion of results, conclusions, contributions, recommendations, bibliography.

Literature review

The literature used includes 220 titles, of which 25 in Cyrillic and 195 in Latin. In this part of the dissertation, Dr. Damyanov makes an overview of the socially significant diseases that are leading for our country and presents the criteria that determine the diseases to be socially significant. They are the main causes of disability, premature mortality and lead to high medical costs for treatment, rehabilitation and long-term care. Data are showing the leading place that Bulgaria occupies among the countries in Europe in terms of their prevalence, hospitalizations, mortality. Dr. Damyanov reviews the development of the term "quality of life" since its appearance in 1966, the parameters that determine it and the models for its evaluation. A significant part of the literature review is devoted to risk factors, epidemiology, social significance and measurement of quality of life in stroke, Parkinson's disease, epilepsy and multiple sclerosis, which are the subject of this dissertation. The literary review is of interest and is a synthesis of modern knowledge on the problems. The author shows high awareness and knowledge, as well as in-depth skills to analyze and interpret scientific literature. Analyzing the data from the literature review, the doctoral student logically formulates the goals and objectives of his research.

Aims and objectives

The dissertation aims to assess the quality of life of patients suffering from stroke, epilepsy, Parkinson's disease and multiple sclerosis in Bulgaria. To achieve this goal, the doctoral student has set four main tasks: 1. Analysis based on literature data, what are the specifics and severity of the four main socially significant diseases affecting the central nervous system worldwide and Bulgaria. 2. Translation and validation of questionnaires for quality of life assessment in specific groups of patients suffering from stroke, epilepsy, Parkinson's disease and multiple sclerosis. 3. Statistical demographic analyzes of the results in the application of questionnaires for assessing the quality of life in patients suffering from stroke, epilepsy, Parkinson's disease and multiple sclerosis. 4. Correlation analyzes to determine the degree of interdependence of individual factors influencing the quality of life in patients suffering from stroke, epilepsy, Parkinson's disease and multiple sclerosis.

The formulation of hypotheses that must be confirmed or rejected in the process of conducting one's own research makes a good impression.

Materials and methods

The materials, models and methodology of the study are presented in detail in a volume of 18 pages. Two conceptual models for quality of life assessment are presented, as well as different tools for assessment of different diseases, which are specific to each of them. The study methodology included the use of the SS-QoL questionnaire in 30 stroke patients, the QOLIE-31 questionnaire in 40 patients with epilepsy, the PDQ-39 instrument in 40 Parkinson's patients, and the MSQOL-54 instrument in 31 patients with multiple sclerosis. The collected data are analyzed using various statistical methods - relative values, means and statistical scattering, analysis and evaluation of hypotheses.

Results, conclusions, contributions and recommendations

The results of the quality of life study were presented separately for each disease. The answers to the questions and the domains in the applied questionnaires and tools are analyzed, and the main findings are presented in graphical and tabular form.

5 conclusions from the obtained results of the dissertation are presented, which in synthesized form are:

- translation and validation of questionnaires for quality of life assessment in specific groups of patients suffering from stroke, epilepsy, Parkinson's disease and multiple sclerosis was performed.

- statistical demographic analyzes were conducted to assess the quality of life in patients suffering from the above diseases, which show that deterioration in quality of life has been progressing with age.

- the performed correlation analysis confirms this connection.

- assessing the quality of life using validated questionnaires would make it easier to assess risk domains on a case-by-case basis.

- the high-tech capabilities of Artificial Intelligence are analyzed, both for timely diagnosis and for tracking the QoL of stroke patients and their rehabilitation.

On the basis of the discussion of the obtained results and of the formulated main conclusions, scientific-theoretical and scientifically-applied contributions are derived, which I accept.

In conclusion, the author makes four recommendations, both with specific addressees - the Ministry of Health, the National Health Insurance Fund, the press and the media, and general recommendations at the national level.

Personal participation of the author

The author has a personal participation in all stages of the study, including data collection and systematization, analysis and summarization of the results. Dr. Vladimir Damyanov has the necessary qualities to carry out research at a high professional level.

Scientific publications in connection with the dissertation

Dr. Vladimir Damyanov has 4 scientific publications in connection with the dissertation. In addition, the author presents a list of 19 other publications.

Abstract

The abstract of the dissertation for the acquisition of PhD degree by Dr. Vladimir Damyanov reflects the essence of the dissertation, it is properly structured and is prepared according to the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria and Regulation for the Development of Academic Staff in NCPHA. It synthesizes the main points of the dissertation, the achieved results, the conclusions and the contributions.

CONCLUSION

I appreciate the presented dissertation, which is characterized by scientific integrity and practical orientation, contains potential and ideas for future research. The specifics of the obtained results, the emphasis of the research and the applied methods are in an area that requires special training and attitudes. The topicality and the good formulation of the scientific research, the significance of the results show the possibilities of Dr. Vladimir Damyanov for independent research work. The dissertation is developed in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for

Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria and Regulation for the Development of Academic Staff in NCPHA. The stated considerations give me grounds to propose to the members of the respected scientific jury to highly appreciate the dissertation and to vote positively for awarding the PhD degree to Dr. Vladimir Pavlov Damyanov.

04.01.2021

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