

REVIEW

from

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Regarding: announced competition for the academic position of "professor" in the field of higher education at the University "Prof. Dr. Asen Zlatarov" - Burgas, 7. Health care and sports, professional direction 7.1. Medicine, scientific specialty "Psychiatry" announced in State Newspaper, issue 7 of 17.06.2022

By Order N:RD-260 of 15.09.2022 of the Rector of the University "Prof. Dr. Asen Zlatarov" - Burgas, I have been elected as a member of the Scientific Jury under the procedure for acquiring the academic position "Professor" with candidate Associate Professor Dr. Georgi Panov Panov, MD, and by the Decision of the Chairman of the Scientific Jury, I have been appointed to prepare a review regarding the competition for the academic position "professor" in the field of higher education 7. Health care and sports, professional direction Medicine, scientific specialty "Psychiatry" and Report with Reg. Number 2034 of 28.07.2022

The only candidate in the competition is Associate Professor Dr. Georgi Panov Panov, MD, PhD, DSc, Associate Professor at the "Health Care" Department of the University "Prof. Dr. Asen Zlatarov" - Burgas.

Biographical data of the candidate

Assoc Prof Dr Georgi Panov was born on 26.05.1965 in the city of Stara Zagora. He completed his secondary education at a polytechnic high school in the same city. He completed his higher education at a medical institute in Stara Zagora in 1991. Acquired a specialty in psychiatry in 1997. In 2004, he defended his dissertation work, with which he obtained the educational and scientific degree "doctor". In 2016, he acquired a specialty in nervous diseases, and in 2020, a qualification in "health management". In 2022, he defended his dissertation and acquired the scientific title "Doctor of Sciences".

Since 2016, he has been elected as an "associate professor" in the Faculty of Public Health and Healthcare, at the University "Prof. Dr. Asen Zlatarov" - Burgas.

Throughout his professional career, he has conducted various forms of training both in the country and abroad in the field of psychiatry, epileptology and clinical neurophysiology. He is an active participant in various scientific forums in the country and abroad. In most of them, he presented lectures and discussions on various topics in the field of psychiatry and epileptology.

The professional career

In 1991, he started working at the State Psychiatric Hospital, Radnevo. In 1993, after participating in a competition, he started working at the District Hospital, Stara Zagora, in the neurophysiological laboratory of the functional department. There he conducted EEG, EMG and evoked potentials on patients with various mental and neurological diseases. Since 2016, after a competition, he has been the head of a psychiatric clinic at the University Hospital, Stara Zagora.

Throughout this period, he conducted neurophysiological studies (electroencephalography, brain mapping and evoked potentials) and examinations of patients with psychoneurological diseases in a private medical center.

Scientific activity

Associate Professor Panov's research activity is characterized by a high impact factor – 19.356. This is a very high indicator of the publication activity, as I consider this factor to be even more significant than the fact that the majority of these developments were carried out by associate professor Panov independently or he was the sole author.

In connection with his participation in the competition, the candidate submitted 76 scientific works, as follows:

1. Dissertation and abstract for an educational and scientific degree "doctor".
2. Dissertation and abstract for the scientific degree "doctor of the medical sciences".
3. Publications in foreign scientific publications - 7

4. Publications in scientific journals in our country - 26
5. Summaries of participation in scientific congresses and conferences in our country - 25
6. Summaries of participation in international and scientific forums - 7
7. Author of 2 monographs
8. Contributions with 7 chapters in a monograph

Out of a total of 41 publications in full-text journals, associate professor Panov is the first author in 30 /73.2%/ of them. Second author of 4 /9.6 %/. These data show that Associate Professor Panov showed and shows high independence as a researcher

It is important to emphasize that the majority of articles with an impact factor and those in journals referenced in a global database were published after obtaining the scientific degree "Associate professor".

Citations of articles by Assoc. Prof. Dr. G. Panov

A total of 62 citations

Of them in three textbooks, two monographs, a dissertation and articles in the country and abroad

Participation in contests:

1. Participation in 6 scientific commissions for awarding the educational and scientific degree "doctor"
2. Participant in two scientific juries for awarding the scientific degree "chief assistant"
3. Participant in 2 scientific commissions for awarding the scientific degree "docent"

Review activity:

Reviewer of an international project on neuroimaging in mental disorders
Reviewer of a published electroencephalography manual

Reviewer of 3 publications in refereed journals with a high impact factor
Participation in projects

Assoc Prof. Panov participated in an international project in the field of schizophrenia with his own presentation -"LAURIE" project.

He is the scientific supervisor of five psychiatry specialists, one of whom took the specialty "Psychiatry" under his supervision last year.

Analysis of the publication activity of Associate Professor Dr. Panov

The presented scientific works of the candidate can be conditionally divided into 10 thematic areas:

1. Clinical Epileptology - 11 publications
2. Psychiatric comorbidity in patients with epilepsy - 7 publications
3. Psychological functioning in patients with epilepsy - 3
4. Sexual disorders in patients with mental disorders - 2 of the publications;
5. The relationship between psychiatry and neurology
6. The psychoorganic syndrome - one publication
7. Dependencies -1 publication
8. Peculiarities in the anthropometric and sex-associated role in patients with schizophrenia – 3 publications
9. Features of resistance in patients with schizophrenia - extensive dissertation work and 3 publications

Scientific and applied scientific contributions:

The candidate's contributions will be presented in the targeted 9 thematic areas:

1. Clinical epileptology

An algorithm was developed for the early differentiation of patients with resistant and well-controlled seizures. This algorithm is of high importance for clinical practice due to the need for a different therapeutic approach in patients with refractory seizures.

For the first time in the country, a large-scale study of the factors related to the resistance of epileptic seizures was carried out. The dynamics of epileptogenesis and the secondary temporalization of seizures with the development of comorbid mental disorders were evaluated.

The concept of single antiepileptic drug treatment has been questioned, with indications of disease progression debating early "more aggressive" therapeutic interventions in relation to distinguishing between anticonvulsant and antiepileptogenic effects of therapy. It has been found that during progression of the disease, the appearance of complex partial seizures is reached, primarily of temporal origin in connection with the increased vulnerability of these structures to repetitive bioelectric discharges during an epileptic seizure.

The author used two parallel classification models to analyze patients, especially those with complex partial seizures, which also shows the advantages of purely "clinical" models over holistic ones.

The publications on the clinical features of epileptic seizures, made after the dissertation work, are a natural continuation of the theme of resistance. Associate Professor Panov examines the issue of biological antagonism /epilepsy-psychosis/, which is also related to the phenomenon of "Forced normalization" of the EEG after control of epileptic seizures. An assessment of the therapeutic possibilities in these cases with the need for a combined therapeutic strategy was made.

The relationships between the etiology and the possibility of resistance, the relationship between the type of attacks and their dynamics with the probable outcome of the treatment were analyzed. The chronobiological aspect of resistance at the onset of seizures was also evaluated. The fact has been established that when the seizures occur, both at night and during the day, the probability of refractoriness is high. The analysis of the factors leading to seizures and the change of these factors over time is important in order to build strategies to prevent seizures and their dynamics and progression. It is concluded that without a complex evaluation of patients with epilepsy, it would be difficult to achieve clinical remission.

2. Psychiatric comorbidity in patients with epilepsy / 5,8,15,18,20/

The assessment of comorbid mental disorders was made after an epidemiological analysis of anxiety, affective and psychotic manifestations in patients with

epilepsy. Differences in the clinical picture, appearance, duration of psychoses in patients with resistance and those with good treatment control were tracked. There are many indicators that show the possibility of predicting possible psychotic episodes in them.

It has been established that psychotic episodes, which are observed in patients with epilepsy with resistance to treatment, appear late after the onset of the disease, which usually begins in early childhood, polymorphic seizures are observed, most often complex partial. In these patients, diffuse changes in the main EEG activity and registration of epileptiform paroxysmal episodes were found.

It is concluded that psychoses in patients with refractory seizures develop as a result of disease progression associated with neurobiological changes associated with loss of neuronal populations, secondary reorganization and dendritization of neuronal networks, as a result of repetitive electrical discharges. These observations raise the question: whether resistant epilepsy should not be considered as another clinical entity in which seizures are part of the clinical presentation.

In a similar way, observations were made in patients with affective and anxiety disorders, in which an increased frequency of refractoriness of attacks was also observed.

3. Psychological functioning in patients with epilepsy / 1,4,5,6,7/

A comparative observation was made regarding the psychological functioning of patients with seizure control and those with marked resistance. The syndrome of "learned helplessness", which is the basis of the apparent mental well-being in patients with refractory seizures, has been established and proven. Registration of this fact is essential because it can also be established in other patients with chronic and debilitating diseases, which build "secondary" psychological comfort within the "sick" position.

When applying various psychological instruments for registering depression, anxiety and quality of life, results are presented that correspond to their adaptation to the new social environment in which they are forced to live. The author establishes that conducting psychological assessments cannot reflect their real social integration, which requires a more complex approach when working with them, because the patient becomes rigid in efforts to break this model. The registration of this phenomenon in patients with refractory attacks raises the question to what extent it can be globalized in other patients with chronic and debilitating diseases.

4. Sexual disorders in patients with mental disorders /20, 27/

Reviews and clinical comparisons have been made regarding the prevalence of sexual disorders in patients with mental illnesses. The two publications draw a parallel, on the one hand, sexual disorders have an increased frequency in the presence of mental illnesses, and on the other hand, they are often provoked in the course of treatment with an incorrect therapeutic approach. The evaluation of sexual problems, both in the course of the disease and in the course of therapy, is extremely important, because it is the basis of building cooperation from the patient.

The analysis of the sexual functioning of the patient is not always done in the description of the psychopathological phenomena, as well as in the preparation of the therapeutic plan. This often leads to errors in the choice of drug therapy and subsequent relapses. These publications give a clear indication of the need for active observation and structured directed interviewing in order to engage the patient in the therapy, which is directly related to the success of the treatment.

5. The relationship between psychiatry and neurology /3,6,10/

An interesting observation (undescribed so far in the literature) was made by a large international team, of which Dr. Panov is the second author, on a patient with comorbid neurological and psychiatric problems. She was observed to have autism, electrical status epilepticus during sleep, tuberous sclerosis, mutism and normal intelligence. The observation was published in a reputable journal with an impact factor. Various studies were performed - neuroimaging, neurophysiological, psychological, the neurological and mental status were evaluated, as well as the development of the patient during the course of the treatment.

The question arises, how does normal intelligence manage to "survive" in the presence of this pathology and severe drug-resistant seizures. Is callosotomy the only way out?

Analysis of the literature on the relationship between fibromyalgia and mental disorders is a topic that requires future large-scale development, due to the high clinical significance of the problem. The presence of pain sensations, on the one hand, influence the psychopathological phenomena in various mental disorders. On the other hand, mental illness alters and influences pain-related experiences.

These two-sided relationships change the cooperation of the patient to the treatment and further complicate the condition of the patients. The publication raises the question of selecting medications that target both certain psychopathological symptoms and central nociceptive pathways in order to achieve a treatment effect.

6. Forensic psychiatry and ethical problems in psychiatry/ 17,18/

In a separate publication, the regulatory framework and expert activity related to the judicial system in Bulgaria are examined. The results of the experience of an interdisciplinary team in the preparation of expertise for the assessment of persons using narcotic substances and precursors have been published. An analysis was made of the problems in the preparation of these complex expertises, the test methods used in them and the relationship with the judicial authorities.

7. Psychoorganic syndrome /14/

In a separate publication, the factors predisposing and maintaining the appearance of the acute psychoorganic syndrome are analyzed. This is one of the most common conditions that lead on the one hand to severe debilitating consequences for the patient / a high percentage turn into chronic dementia / and on the other hand, further complicate the main disease that necessitated hospitalization. They are one of the most common acute conditions requiring psychiatric consultation in hospitals for active treatment. The analysis of the factors predisposing to the appearance of delirious symptoms in patients is important in order to prepare a strategy for its prevention.

This problem is particularly relevant in connection with the aging of the population and the increasingly frequent need for consultations in the other medical units of multidisciplinary hospitals.

8. Peculiarities in the anthropometric and sex-associated role in patients with schizophrenia - 3 publications /5,8,9/

Anthropometric characteristics in patients with schizophrenia have been the subject of numerous publications and analyzes over many years. Numerous factors predisposing to the development of schizophrenic symptoms in persons with a certain constitution have been established.

It is important to note that in patients with schizophrenia, who generally have a different course, no in-depth comparison of resistance as a factor associated with a certain constitutional type has been conducted. Associate Professor Panov in his dissertation work and corresponding publication on the subject analyzes the relationship, finding that linearity in the habit is associated with a higher probability of resistance to drug therapy. An in-depth study of education was also conducted and the author found no correlation with response to therapy.

Of interest is the fact that the analysis of the gender-associated and accepted role shows that the male gender is much more likely to be associated with the female gender role than with the male gender role in schizophrenic patients. The author does not find these aspects of personal functioning to be related to treatment resistance.

9. The peculiarities of resistance in patients with schizophrenia - an extensive dissertation as well as 3 publications / 1,2,3,4/

The author sets himself a task analogous to the first dissertation of analyzing the influence of individual factors related to treatment resistance in patients with schizophrenia.

Compared to the first dissertation, the author does a much larger-scale analysis by tracking 61 factors that influence the development of resistance. The results are consistently presented as the author managed to extract the most important characteristics and illustrate them with tables and figures. When presenting the data, the multi-disciplinary approach is as impressive as the conclusions drawn. The author was able not only to look at the individual results obtained when using given diagnostic tools, but also to make correlations by giving an explanation of the indicated results and conclusions.

The author analyzed both the clinical features of the patients using the modern scales for clinical assessment PANSS BPRS, but also conducted numerous associated psychological analyzes to find the connections in the course of the development of the schizophrenia process.

In the publication activity of the candidate, some of the factors analyzed in the dissertation were brought out and expanded in journals with a high impact factor, which is the basis for the high personal IF of the candidate.

The analysis of the degree of dissociation in patients with schizophrenia and the relationship between high values of the scale and resistance has a certain

contribution, which calls into question many established paradigms in psychiatry and its nomenclature.

The data on the functional lateralization of brain processes can be analyzed in the same way, which Associate Professor Panov does in patients with resistance and in those in clinical remission. data is a good starting point for assessing early resistance.

The fact related to the assessment of the effect of the first antipsychotic medication cannot be overlooked. By analogy with the publications in the field of epileptology, the candidate analyzes the effect of the application of the first antipsychotic and its involvement in the assessment of early resistance.

The result is interesting, which shows that in patients with epilepsy, the administration of the first antiepileptic medication, in patients with schizophrenia, the first antipsychotic drug are effective in the same percentage of patients.

Teaching activity

From the academic report made by Trakia University - Stara Zagora, Haskovo Branch, it can be seen that Dr. Georgi Panov has been a part-time teacher from 2006 to the present moment /16 years/. Dr. Georgi Panov leads the lectures and exercises in Psychiatry and Medical Psychology for students from the "Nursing" and "Midwifery" specialty.

He participated in the preparation and consultations on various projects and scientific developments. It also develops the curricula for the preparation of students in individual disciplines.

Doctor Georgi Panov leads the lectures and exercises in Psychiatry and medical psychology for the students of the "Rehabilitator", "Nursing" and "Midwifery" specialties, as well as for the health care specialists at the Faculty of Social Sciences and health care at the University "Prof. Dr. Asen Zlatarov" in the city of Burgas. He participated in the development of the curricula for the above specialties.

Associate Professor Dr. Georgi Panov Panov is a teacher well received by students, with a creative focus and an innovative approach to their education, as well as a well-received speaker at professional forums and conferences.

Therapeutic and diagnostic activity

Dr. Panov has many years of experience (31 years) in inpatient and outpatient settings with patients with various diagnoses. The emphasis in his practical activity is clinical and consultative psychiatry, epilepsy and conducting neurophysiological research.

He copes excellently both with the consulting activity and with the organizational and clinical work as the head of the Psychiatric Clinic at the "Prof. Dr. Stoyan Kirkovich" UMHAT, Stara Zagora. Associate Professor Panov is proficient in various diagnostic techniques, clinical scales, standardized interviews, which he uses in his work. Has excellent teamwork skills.

From the analysis of the entire creative path of Associate Professor Georgi Panov Panov, it is clear that he is emerging as an excellent professional with an interdisciplinary focus both in the field of epileptology and in the entire field of clinical psychiatry.

I believe he has the necessary experience as a practicing psychiatrist, educator and scientist with broad professional interests.

CONCLUSION

The topicality and significance of the presented scientific developments, the high level of preparation, the solid practical and teaching activity of the candidate are reasons with conviction to give a positive assessment and propose to the respected Scientific Jury to vote for the occupation of the academic position "Professor" in the field of higher education 7. Health and sport, professional direction 7.1. Medicine, in the scientific specialty "Psychiatry" of Associate professor Dr. Georgi Panov Panov MD, PhD, DSc

26.10.2022 година

Проф. д-р Христо Кожухаров ~~д.м.~~