## **REVIEW**

by Prof. Krasimir Dimitrov Ivanov, DMedSc

## Faculty of Public Health Medical University of Varna "Prof. Dr. Paraskev Stoyanov"

**Regarding:** A selection procedure for the academic position of "professor" in the higher education field of "7. Healthcare and Sport", research area "7.4. Public Health", academic specialty "Public Health Management" promulgated in State Gazette, issue 86/06.10.2020, for the needs of Training Sector "Rehabilitator", Department of Physiotherapy, Rehabilitation, Thalassotherapy and Occupational Diseases, and the Faculty of Public Health at the Medical College – Varna affiliated with Medical University of Varna "Prof. Dr. Paraskev Stoyanov.

## Assoc. Prof. Gergana Nenova, DSc.

By order P-109-558/04.12.2020 of the Rector of *Prof. Dr. Paraskev Stoyanov* Medical University – Varna I was appointed as a member of the scientific jury, and with a Decision of the Chairman of the Scientific Jury, protocol № 1/11.12.2020 I was designated to prepare a review as an internal member of a selection procedure in regards to the bestowal of the academic position **Professor** in the specialty "*Public Health Management*", professional field 7. *Healthcare and Sports* for the needs of the Training sector "*Kinesitherapy*", Department of Physiotherapy, Rehabilitation, Sea Treatment and Occupational Diseases, Faculty of Public Health at the Medical University "*Prof. Dr. Paraskev Stoyanov*" -Varna.

Only one candidate has applied to this competition - Assoc. Prof. Gergana Nenova, DSc. The applicant has submitted all necessary documents in accordance with the requirements of the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA) and its corresponding implementing regulation as part of the Rules of the Medical University - Varna.

Assoc. Prof. Gergana Nenova was born in 1975 in Ruse. She graduated consecutively with a Bachelor's Degree and a Master's Degree in Kinesitherapy from "Angel Kanchev" University of Ruse in 1998/99 before earning a Master's Degree in Health Management from MU-Varna. Her professional career began in 1999 in balneological and SPA centers on the Black Sea coast, and in 2009 she started working at the University Hospital St. Marina – Varna as a physiotherapist at the Physical Medicine and Rehabilitation Clinic. Since 2011 the

candidate has worked as a physiotherapist in the Orthopedics and Traumatology Clinic at the same hospital.

In 2016, after winning a competition, Gergana Nenova was appointed as an assistant at MU-Varna and defended a doctoral thesis in the "Public Health Management" specialty. Since 2017 she has held the academic position of an Associate Professor in the "Kinesitherapy" specialty. In 2020 the candidate was awarded the title of "Doctor of Science" in Kinesitherapy from the Department of Kinesitherapy and Rehabilitation at the National Sports Academy "Vasil Levski".

Assoc. Prof. Gergana Nenova has participated in a significant amount of national and international forums such as: Synchronization of the profession "Physiotherapist" in Bulgaria according to the standards of the World Confederation for Physical Therapy (WCPT) and the European Region (ER-WCPT) and situation in other EU Member States (Declaration). Sofia, 16th September 2016, XIth conference of BAAST ESSKA live-surgery, Varna, 11-14 May 2017, 7th Haemophilia Academy, March 13-14, 2018 Budapest, Hungary, Simpozionul "Chirurgia umărului. Instabilitățile umărului", sectiunea kinetoterapeuți, desfășurat la Sibiu în 20.04.2018, 28 - th Annual Assembly of IMAB and 5- th International Meeting of Alumni Club at Medical University Varna, Bulgaria, Varna, Golden Sands, 13-16 May 20018, 1st National Conference on Stroke, Varna, 8-9 June 2018, XXVII International Scientific Conference for Young Scientists 2018, Blagoevgrad, Southwestern University "Neofit Rilski",14-15.06.2018, 7th Scientific Session for Lecturers and Students, Medical College - Varna, 05-06.10.2018, European Region of the WCPT 4th Conference on Clinical Guidelines "Bringing Evidence into Practice"., s-Hertogenbosch 8 December 2018, Netherlands, 1st International Conference on Scoliosis Management. April 12-13, 2019 Istanbul - Turkey, 29 - th Annual Assembly of IMAB at Medical University Varna, Bulgaria, Varna, Golden Sands, 09-12 May 20019, WFH 16 th International Musculoskeletal Congress Madrid, Spain, May 10-12, 2019, XIV National Congress of the Bulgarian Orthopedic and Traumatological Association. 03-06 October 2019, 10-th South-East European Conference on Chemotherapy, Infections and Cancer. Budva, Montenegro, 17-20 October, 2019, 30 - th Annual Assembly of IMAB Varna, Bulgaria, 18-21 October 2020, etc.

The applicant is also a member of the Board of the Association of Physiotherapists in Bulgaria and participates in a working group on European issues (2018-2020 mandate) at ER WCP. She is a chairman and member of multiple scientific juries that award scientific degrees and academic positions at MU-Varna, South-West University "Neofit Rilski", "Angel Kanchev" University of Ruse.

Assoc. Prof. G. Nenova is actively engaged in teaching the following disciplines: "Massage" to students majoring in Kinesitherapy; "Kinesitherapy in outpatient and domestic conditions", "Kinesitherapy for orthopedic and surgical diseases", "Kinesitherapy for neurological and mental diseases" and "Therapeutic massage, part 1" to the students majoring in Rehabilitation, and in the Master's Degree program "Rehabilitation, Sea Treatment, Wellness and SPA" at the Medical University of Varna.

Her annual teaching hours meet and exceed the university's employment norm.

The full list of publications presented by the candidate contains the following 35 titles:

- I. Publications included in a reference list in line with a form, proving the fulfillment of the minimum requirements for acquiring the academic position of "Professor", in accordance with DASRBA from 2018:
- 1 dissertation for awarding the academic rank of "Doctor", presented with an abstract;
- 1 dissertation for awarding the scientific title "Doctor of Science";
- 1 published habilitation thesis monograph;
- 6 publications in scientific journals, referenced and indexed in world-renowned databases with scientific information;
- 10 publications in journals with scientific reviews, not referenced in world-renowned databases with scientific information;
- 1 published chapter of a collective monograph.
  - II. A list of publications apart from the ones included in the evidence report that meet the minimum requirements for holding the academic position of "Professor":

The list of cited publications contains  $\Pi/10-4$ ,  $\Pi/11-3$ ,  $\Pi/12-4$ .

The reviewers and the scientific jury were presented with 26 scientific publications (18 on the reference list for the fulfillment of minimum requirements and 8 separate from the evidence report that covers the minimum requirements), distributed by quantitative indicators according to the criteria as follows:

- 1 monograph - (independent author);

- 6 full-text publications in scientific journals, referenced and indexed in Scopus and foreign scientific publications (2 as a first/main author; 1 as a second author; 3 publications as the third or so author);
- 2 full-text publications in journals with scientific review, not referenced in worldrenowned databases with scientific information, foreign scientific publications (1 as a second author; 1 as a third or so author);
- 8 full-text publications in journals with scientific review, not referenced in world-renwoned databases with scientific information, Bulgarian scientific publications (1 as an independent author; 4 as a first author; 1 as a second author; 2 publication as third or next author);
- A chapter of a collective monograph, foreign scientific publications (first author).

Scientific publications not included in the evidence report that covers the minimum requirements for acquiring the academic rank of "Professor":

- 3 full-text publications in journals with scientific reviews, not referenced in world-renowned databases with scientific information, foreign scientific publications. (1 as a second author; 2 as a third or next author);
- 5 full-text publications in journals with scientific reviews, not referenced in world-renwoned databases with scientific information, Bulgarian scientific publications (1 as a second author; 4 as a third or next author).

The scientific work that the applicant has provided for this selection procedure emphasizes the kinesitherapeutic approach and integrated care in cases of chronic debilitating disease and in more common orthopedic and traumatological conditions. Assoc. Prof. Gergana Nenova has sought the overcoming of these obstacles through constructing an adequate motor activity, as it is the most physiological resource for execution of daily activities such as work and hobbies. Sufficient feedback has been gathered through a patient satisfaction survey in which a patient-centered kinesitherapy approach was applied through the means of the author's uniquely prepared questionnaire. The analysis of the results has provided guidelines, from the patient's point of view and his/her needs, for changing the curricula of medical specialists who are trained to practice treatment through movement in higher education. Thus, in the candidate's scientific work - the systematic integrity of science, practice and training of kinesitherapy specialists is

achieved, as this is of strategic importance for the development of the profession as a medical specialty.

The main topical areas of the research and the applicant's teaching activity combine the achievements in her professional path, with a focus on the possibilities for changes in the public health through the means of integrated kinesitherapeutic care and complex rehabilitation. The areas of research are systematized as follows:

## Main thematic areas of the scientific research:

- 1. Satisfaction from the integrated care in kinesitherapy practice.
- 2. The specialized kinesitherapeutic approach in orthopedic practice.
- 3. Kinesitherapy as part of the complex rehabilitation of chronic debilitating disease.
- 4. Improving the training of students in the fields of kinesitherapy and rehabilitation.

Contributions to the first area. The applicant has defined the place of the physiotherapist in public health and the development of integrated care (IA\_1/1, I\Gamma\_8/2, I\Gamma\_8/5). She has examined the national and international experience in providing integrated care (III\_5, IIB\_3), and has identified the barriers that need to be overcome on national level (IIB\_1, II\_7/3). Gergana Nenova has clarified that the satisfaction of patients who have chosen the individual kinesitherapeutic approach can be applied as a method for assessing the competence and work of kinesitherapists. Her original and highly reliable measuring scale for testing the satisfaction from the physiotherapist's work has been approved. On this basis, the satisfaction of patients with chronic diseases has been studied and the leading role of the physiotherapist in the model of team rehabilitation in outpatient, hospital and home environments has been substantiated. (II\_7/2, II\_7/4, II\_7/5, II\_8/1, IIB\_3).

The contributions to the first area are methodological and applicable in practice.

Contributions to the second area. A specialized kinesitherapeutic approach for the treatment of patients with hip arthroplasty and custom femoral stem has been developed by the candidate. Exemplary schemes and exercise complexes for patients with an individual femoral stem have been applied. Assoc. Prof. Gergana Nenova has also provided descriptions on methodical instructions for performing kinesitherapeutic procedures, which are specifically useful in practice. She has researched the complex impact of the specialized kinesitherapy program on the functional capabilities, satisfaction and the expectations of patients for their recovery. (IE\_2/1, IB\_3/1, IF\_7/6, IIF\_3). The scientific works - IF\_8/6, IIE\_1, IIE\_4, IIE\_5, IIF\_1 - present the kinesitherapeutic behavior in other orthopedic conditions, patient-centered solutions

and the requirements for following the principles of timeliness, gradualness and orderliness in rehabilitation.

The contributions to the second area of research are theoretical, methodological and applicable in practice.

Contributions to the third area. The applicant has discussed the main challenges that the kinesitherapists as medical specialists face while working with chronically ill. Overcoming these challenges has been sought through establishing the adequate motor activity as physiological resource for performing the activities of everyday life. (I $\Gamma$ \_9/1, I $\Gamma$ \_8/10, II $\Gamma$ \_2). Likewise, the author has considered the disability as a consequence of untimely and insufficient rehabilitation of chronic disease and its importance for public health, the social and healthcare systems and for the patient himself (IIB\_2). Assoc. Prof. Gergana Nenova is also a co-author of articles in which historical understandings of various societies about disability as a severe consequence of chronic diseases, the terminal condition and the corresponding willingness to end life have been analyzed. (I $\Gamma$ \_7/1, I $\Gamma$ \_8/3, I $\Gamma$ \_8/7, I $\Gamma$ \_8/8, II $\Gamma$ \_4).

The contributions to the third area of research are applicable in practice.

Contributions to the fourth area. The candidate has examined the attitudes, needs and satisfaction with the educational process and the realization on the labor market among students majoring in *Rehabiliton* and on this basis the syllabus has been updated. The main problems of rehabilitation and kinesitherapy training aimed at restoring the rehabilitation potential have also been studied. The applicant has carried out an assessment of the teaching methods, the topics included in the curricula and has made proposals for expanding the topics of rehabilitation and kinesitherapy. Based on the results of the research, changes have been proposed in regards to adapting the content of the curricula, the form and teaching methods, so that the complex assessment of the learning process is supported (IB\_8/4, IB\_8/9, IIA\_1, IIE\_2).

The contributions to the fourth area of research are theoretical, methodological applicable in practice.

In conclusion, the candidate meets the minimum national requirements specified in the Regulations for the implementation of the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA) and the Rules of the Medical University – Varna. Her established scientific contributions, teaching and clinical experience give me grounds for my suggestion to

the Honorable Members of the Scientific Jury to **vote positively** and propose Assoc. Prof. Gergana Boncheva Nenova, DSc to be awarded with the academic rank "*Professor*" in the specialty "*Management of Public Health*" for the needs of the Training Sector "*Kinesitherapy*", The Department of Physiotherapy, Rehabilitation, Sea Treatment and Occupational Diseases, Faculty of Public Health at the MU-Varna.

12.01.2020

Prof. Krasimir Ivanov, DMedSc.