

REVIEW

**by Prof. Elena Mladenova Shipkovenska, MD, Ph.D.
Member of the Scientific jury, following an order No P-109-174/ 23.04.2021 of
the Rector of MU-Varna**

**Concerning: Competition for academic position "Associate Professor" in the
field of the higher education 7. Healthcare and sport, Professional Field: 7.4.
Public Health, Specialty: Public Health Management**

The competition for the academic position "Associate Professor" in the scientific specialty "Public Health Management" was announced in SG issue 17 of February 26, 2021 for the needs of the Training Sector "Rehabilitator", Medical College, MU-Varna.

One candidate participated in the competition - **Silvia Ivanova Filkova, PhD** - Chief Assistant Professor in the Training Sector "Rehabilitator", Medical College – Varna.

APPLICANT CHARACTERISTICS

Silvia Ivanova Filkova has graduated as "Rehabilitator" from the „Yordanka Filaretova“ Higher Medical Institute - Sofia. She started her professional development in 1992. From 1992 to 2012 she worked consecutively as a rehabilitator at the University Pediatric Hospital, Bankya; Air Transport Polyclinic - town of Sofia; Pulse Health Center - Varna; „View Style“ - Varna.

In 2000 she defended her master's degree in "Health Management" at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. In 2016 she defended her second master's degree in "Rehabilitation, sea treatment, wellness and SPA" at the same university.

After winning a competition from 2012 until now, she has held the academic positions of Assistant professor, Chief Assistant professor and Head of the Board "Rehabilitator" at the Medical College - Varna.

She has an educational and scientific degree "Doctor" since 2017 in the scientific specialty "Public Health Management"; Diploma № 219 / 22.05.2017 from the Medical University - Varna.

A number of additional qualifications have been acquired through the forms of continuing education in the field of recreation, rehabilitation, traditional Chinese medicine, Ayurveda,

physical therapy, applied kinesiology, etc. A total of 25 qualification courses were conducted at home and abroad.

She speaks English and Russian.

Member of: Bulgarian Scientific Society of Public Health and Association of Physiotherapists in Bulgaria.

RESEARCH ACTIVITY

I. Quantitative evaluation of scientific production

1. Publications - a total of 29 scientific papers

- 4 publications in scientific journals are presented, with references and indexes in world-famous databases of scientific information;
- 25 publications and reports are presented, published in not referenced magazines with scientific review or published in edited common work volumes /included in the National Reference List of National Centre for Documentation and Information/.
- 3 publications and reports were presented outside the participating evidence to cover the minimum requirements for holding the academic position of "Associate Professor".

2. Monograph

3. Dissertation work

4. Authorship of publications: The dissertation and the monograph work and 4 articles (13%) were written independently, the first author of 14 (45%) scientific publications.

5. Scientific activity: The applicant has 36 participations in Bulgarian and international scientific forums, of which 8 - abroad.

Applied science activity is well distinguished through participation in two Research and Development Projects № SL-104 / 15.01.2019-SL-427 / 07.02.2019: "Systematization of methodology for organization, functional research and prevention of incorrect posture for 6-11 year old students "and Project № KP-06-PN37 / 1:" Ergonomic study of the working environment through innovative computer models, in order to prevent musculoskeletal disorders "- „Research Fund“.

II. Qualitative assessment of the scientific achievements of the candidate

The peer-reviewed papers and the resulting contributions are mainly in the field of the competition specialty. Scientific articles and reports have been published in the following

specialized publications: General Medicine, Nursing, Varna Medical Forum, Scripta Scientifica Salutis Publicae, Trakia Journal of Sciences, Research in kinesiology and others.

The research activity of Ch. Assistant Professor Silvia Filkova has a strong scientific and applied nature and can be summarized thematically in three areas:

- Health promotion (Γ_{7-1} ; Γ_{7-3} ; Γ_{8-4} ; Γ_{8-7} ; Γ_{8-8}).
- Prevention of spinal deformities and low back pain. (A1; B₃; Γ_{8-1} ; Γ_{8-3} ; Γ_{8-5} ; Γ_{8-6}).
- Innovative approaches in recreation and rehabilitation (Γ_{7-2} ; Γ_{8-2} ; Γ_{8-9}).

An important merit of the scientific production in these areas is the answer to some questions that are poorly studied in our country, such as: problems related to screening, prevention and treatment of spinal deformities in children; innovative methods for assessment and diagnosis of functional and structural spinal deformities; skills and techniques of the rehabilitator, innovative approaches in recreation and rehabilitation, etc.

In summary, the **most important contributions** from the overall scientific and scientific-applied activity of the candidate, reflected in the scientific works are:

1. The modern methods for screening for spinal deformities in children are competently and critically considered. In-depth knowledge is demonstrated in the comparative analysis of trends in the prevention of this problem in our country and around the world and the applied innovative methods for diagnosis and treatment of functional and structural spinal deformities in children and adolescents.
2. Important conclusions have been made about the research conducted in our country on the problem and it is emphasized that the researchers focus on children over 10 years of age, when different types of orthostatic deformities arising from the factors of student life have already formed. The need for uniform assessment methods in the screening programs has been identified and author's solutions with recommended tests and criteria in accordance with the age and sex of the children have been proposed.
3. The importance of four groups of factors increasing the risk of reduced physical activity and subsequent health problems has been proven: demographic, socio-economic, environmental factors and behavioral factors.
4. Barriers at individual and societal level that hinder promotional activities have been identified. Up-to-date data have been obtained on the levels of awareness of persons of

different age and social groups about the factors influencing health, with an emphasis on physical activity.

5. There is a deficit in the awareness of parents about spinal deformities and motor activity in children, as well as the implementation of measures for their prevention. The insufficient involvement of GPs in performing prophylactic examinations for spinal deformities in children is emphasized.
6. A scientific approach to ergonomics of the school has been developed and an author's methodology (exercises with a sports hammock) has been proposed, presented in the form of a game for preschool children, in order to improve posture and prevent spinal deformities. For the first time in Bulgaria a purposeful study of the effect of the applied exercises was made.
7. Of great practical value are the proposed programs of rules and exercises for children who spend a long time in front of electronic devices and the tools of diagnostic methods and modern rehabilitation approaches for prevention and treatment of children with low back pain. Of interest is the application of the Yoga Fly system in children with autism and in aggressive children.

Proof of the consistent research work in the field of rehabilitation care for children with spinal deformities and logical completion of the long-term practical experience of the candidate is her **monograph** "Modern lifestyle and functional spinal deformities". In it, the author skillfully presents the world experience in the prevention, diagnosis and treatment of scoliosis. Makes a critical assessment of the applied screening tests and offers an improved model for screening in schools, consistent with the age and gender characteristics of children. Sample corrective exercises are recommended in order to maintain the balance of body posture and improve the efficiency of movement.

I agree with the positive assessments of the two reviewers of the monograph.

Quotations:

The reference for the citations was prepared by the Library of Medical University Varna. The scientific works of Chief Assistant Professor Filkova have been cited 8 times, 2 of which by foreign authors. / Indicator Д 10-12 /.

Total number of points - 85.

APPLICANT PEDAGOGICAL ACTIVITY

Assistant Professor Filkova has 9 years teaching experience at the Medical College, Medical University of Varna . For the last five years she has been giving lectures and exercises in Kinesitherapy and Therapeutic Massage to first and second year students majoring in Rehabilitation.

The report presented about the teaching activity in the last five years shows high activity level of 404 to 535 hours, including practical lessons and training practice.

Assessment for compliance with the minimum national requirements

The electronic report attached shows that Silvia Ivanova Filkova covers the required scientific and metric indicators of the Rules on academic staff development in MU Varna, and meets the conditions and order for being awarded with the academic title "Associate Professor" as per the Law on academic staff development in Republic of Bulgaria.

Group of indicators	Indicator	Number
A	1.Thesis for the award of Educational and Scientific Degree „Doctor“	1
B	3.Monograph/Habilitation work	1
Г	7. Publications and reports in scientific journals, refereed and indexed in world databases	3
	8. Publications in journals with scientific peer review, non-refereed in world databases	9
Total		14

Scientific publications outside of the evidence given for the fulfillment of the minimal requirements for the occupation of the academic position "Ass. Professor":

Publications related to PhD thesis	5
Full-text publications in foreign scientific journals	2
Full-text publications in Bulgarian scientific journals	1
Total	8

CONCLUSION

In the competition, S. Filkova, Ph.D presents herself as a specialist with sufficient rehabilitation, research and teaching experience. She has moved up the academic ladder to chief assistant Professor . She has significant teaching and administrative experience as the Head of the Rehabilitator Training Sector. Its scientific production is completely covers the required scientific and metric indicators of the Rules on academic staff development in MU Varna, and meets the conditions and order for being awarded with the academic title "Associate Professor" as per the Law on academic staff development in Republic of Bulgaria.

On these grounds, I support the candidacy and propose to the members of the esteemed Scientific Jury to elect Ch. Assistant Professor Silvia Ivanova Filkova, Ph.D, in the academic position of "Associate Professor" in the field of higher education 7 Health and Sports; Professional field: 7.4. Public Health, specialty "Public Health Management" for the needs of the Training Sector "Rehabilitator", Medical College, MU-Varna.

Sofia, 06.06.2021

REVIEWER: 
Prof. Dr. E. Shipkovenska, Ph.D