



REVIEW

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According to the competition for the occupation of the academic position "Associated professor" in "Kinesiotherapy" in the field of higher education 7. "Health and sport" in the professional direction 7.4 "Public health" for the needs of the specialty "Rehabilitator" in MK of 0.5 state, announced in the Official Gazette No. 99/13.12.2022. The review was prepared according to the Act on the Development of the Academic Staff, the Terms and Conditions and Procedure of Occupying the Academic Positions, the Regulations for the Development of the Academic Staff at Trakia University- St. Zagora, Order No. 294/06.02.2023 of the Rector of Trakia University for the appointment of Scientific jury and meeting of the latter – Protocol No. 1.

Only one candidate participated in the competition and have been accepted by the document acceptance committee - Ana Todorova Nikolova, PhD. She is a lecturer –chief assistant in Kinesiotherapy at the Medical College of Trakia University Stara Zagora and Honorary lecturer at Vasil Levski National Sport's Academy, Sofia, Department of Kinesiotherapy. The candidate is 45 years old. She graduated with a bachelor's degree in kinesiotherapy from the National Sport's Academy, "Vasil Levski", Sofia in 2000.

A. Nikolova has a master's degree in "Public Health and Health Management" from the Medical University of Sofia, since 2012. In 2019, she was awarded the educational and scientific degree " PhD " by a scientific jury of Southwest University -Blagoevgrad, based on a defended dissertation on the topic "Postoperative kinesiotherapy after fractures in the elbow region" (Diploma No. 0395- /2019). The candidate is a full-time lecturer at the Medical College of Trakian University of Stara

Zagora since 2021. She has held academic positions as an assistant in the Department of Kinesiotherapy at Southwest University (SWU)-Blagoevgrad (2019-20) and Honorary Lecturer at the National Academy of Sport (2014-2017 and from 2023). The entire working experience of Ana Nikolova as a kinesiotherapist is 23 years. During this period, she worked at SBALAG "Maichin Dom"-Sofia, UMBAL "Tsaritsa Joanna - ISUL"-Sofia, Private Praxis fur physicalische therapie "Maria Anne-Widmann", Ulm, Germany, Department of Orthopedics, Traumatology and Reconstructive Surgery of the Sofia Military Medical Hospital, Military Medical Hospital Kuwait, and Physiopilates LTD. Her experience gives her the opportunity to work practical kinesiotherapy and to develop scientific activity in this specialty. Ana Nikolova, PhD, is fluent in English and German languages. She has a number of specializations in Bologna - Italy, Gothenburg - Sweden, Frankfurt Germany and more. The candidate participated in kinesiotherapy trainings related to the Central nervous system and Musculoskeletal system as well as specialized courses - Thera-Band, Physical treatment of peripheral phlebo-lymphedema, Mulligan Conception Course and Kinesiotaping. Ana Nikolova is also a member of the Association of Physiotherapists in Bulgaria, EUSSER (European Association of Shoulder and Elbow Physiotherapists), etc.

1. SCIENTIFIC PRODUCTION

In the current competition, Ana Todorova Nikolova, PhD, submitted:

list and availability of electronic copies of one dissertation abstract, one monograph, one book based on a protected dissertation work for awarding the educational and scientific degree "PhD", scientific publications in Bulgarian and foreign magazines, reports and announcements from participation in international and national conferences, symposia, and congresses - a total of 37 titles. The enlisted documentation is presented below:

Author's place	Dissertation	Publications in ref. journals and IF	Monography	Publications and reports in non-referred peer-reviewed journals or co-edited volumes	Published peer-reviewed book based on a defended dissertation	Scientific reports in international scientific forums abroad	Scientific reports in national and international forums in Bulgaria	All
1. Single author	1	0	1	2	1	1	1	7
2. First author	0	2	0	3	0	13	7	25
3. Second author	0	0	0	1	0	0	0	1
4. Third and following author	0	1	0	2	0	1	0	4
All	1	3	1	8	1	15	8	37

From the works of Ana Todorova Nikolova, Ph.D. for participation in the Competition according to the Annex on Minimum National Requirements for the Occupancy of Academic Positions under 7.4. Public health, 14 (fourteen research papers) are acknowledged. Of these – 1 dissertation abstract, 1 monograph, 1 peer-reviewed book based on a defended dissertation, 8 publications in Bulgarian scientific journals and 3 publications in scientific journals referenced in a global database (1 in print) (Official note from the Central Library, Trakia University Ex. No. 1/27.01.2023)

All publications were not used when awarding the degree "PhD ". Of the actual publications, 4 are in English and 7 in Bulgarian. The candidate is the author of a monography - "Kinesiotherapy in femoroacetabular conflicts", "Alfa Star" publishing house, 2022, ISBN 978-619-7582-24-6. Reviewers of the work are Prof. Hristo Georgiev, Associate Professor Daniela Popova. The monograph has a volume of 117 pages and is completely authors. Based on a protected dissertation work, A. Nikolova has published an independent book - "Guideline of postoperative kinesiotherapy for fractures in the elbow joint region", publishing house CMB at the MU, Sofia, 2022; ISBN 978-619-7491-54-8 with reviews by Prof. Diyan Enchev, PhD and Assoc. prof. Vladimir Rusimov, PhD in volume 115 pages.

In 10 (71%) of the scientific works recognized for the competition, A. Nikolova is the only or first author. They contain their own scientific research and scientific-practical conclusions.

According to references for citations of the candidate's scientific works, she has a total number of citations – 11 (2 citations in refereed journals from the World Databases Web of Science and Scopus, and the remaining citations in Bulgarian journals and anthologies with ISBN. With this scientific production, Dr. Ana Todorova Nikolova, PhD fully meets the mandatory quantitative scientometric criteria, according to Art. 81, para. 3 of the Regulations for the Development of the Academic Staff at Trakia University - St. Zagora when occupying the academic position of "associate professor". I am taking into consideration the scientific reports and announcements at conferences abroad - 15 and presentations in Bulgaria 8 -total of 23 – with added value to the scientific work presented by the candidate. They are in leading scientific forums of EFFORT, ICSET/ICSES, SICOT, IMSMC and HWES. Participation in national forums is mainly at BOTA Congresses, BOTA Conferences, AFB Congresses, BFS Conferences. According to the National minimum scientometric requirements for occupying the academic position "associate professor" in professional direction 7.4 Public health, for which the competition is held, Ana Nikolova, PhD

fully meets the set minimum scientometric requirements for occupying the academic position

"associate professor" at Trakia University, Stara Zagora:

Group of indicators	Content	Minimum requirements for "Associate Professor"	Evidence submitted by a participant in a competition for "Associate Professor" in the MC of TrU-St. Zagora POINTS %	Points	% PERFORMANCE
A	Index 1	50	Dissertation	50	100%
B	Index 3,4	100 Monography	Monography ISBN 978-619-7582-24-6	100	100%
Г	Sum of indicators 5-9	200	refereed- 3 unrefereed 8 book based on dissertation ISBN 978-619-7491- 54-8 - 1	227	114%
Д	Sum of indicators 10-12	50	Foreign base - 2 Bulgarian magazines - 9	65	130%

Qualitative analysis of the works of Ana Todorova Nikolova, Ph.D

Sixty eight percent of the total number of scientific works, (9 items) examine kinesiotherapeutic problems in orthopaedic and traumatological patients. The publications are mainly in journals with orthopedic and special scientific-research focus. The rest are devoted to kinesiotherapy in hemophilia, the impact of online learning on physical and mental health, the role of proprioception, etc.

Based on the candidate's scientific production, I can indicate methodological, practical and original contributions:

1. A scientific study of kinesiotherapy in femoroacetabular conflict of the hip joint has been initiated.
2. The relationship between the development of the femoroacetabular conflict and some types of professional sports, especially when the sports career started in early childhood, has been established.
3. Originally, a detailed analysis on the affected muscle groups and myofascial components of and around the hip joint in femoroacetabular impingement and their significance for clinical manifestations has been performed
4. A self-developed kinesiotherapy technique for femoroacetabular conflict is initiated for the first time.

(Works: monograph, Publications No. 4, 6)

5. The reliability of exercises with elastic resistance in preventing the rapid development of rigidity in the elbow joint after complex surgical interventions is shown.
6. It has been established that complications after trauma in the elbow joint region can be a secondary manifestation as a result of an incorrect approach in the period of functional recovery.
7. Data have been reported for the first time on an increased risk of developing ectopic ossification in the elbow region, both bone and soft tissue, due to the application of passive stretching in combination with aggressive passive movements in order to increase the range of motion in the joint, especially in the early post-operative and post-traumatic period.
8. A study was conducted specifying the causes of contractures in the elbow joint, including joint capsule and Fat Pad Sign - a symptom of the fat pad.
9. It has been estimated the necessity to achieve muscle control after injuries and operative intervention in the elbow complex with current range of motion.

(Works: a book based on a dissertation, Publications No. 5, 8, 11) These are also the most cited works of A. Nikolova.

10. Scientific works related to hemophilia offer a modern approach through combined programs of special physical exercises and some elements of sports, effective in reducing pain, increasing the range of motion and muscle strength, and reducing the feeling of fear of movement and injury.

11. Fundamental research in kinesiotherapy is reflected in Papers No. 1 and 3. They present Kabat's diagonal/spiral models and their neurophysiological effect on patient recovery.

12. Single works in co-authorship (2, 9, 10), consider the development and introduction of the innovative keystone-perforator lamp, calcium phosphate ceramics in the treatment of bone defects, the impact of online training on physical and mental health, and others. These scientific works confirm A. Nikolova's all-round erodibility.

2. EDUCATIONAL AND TEACHING ACTIVITY

Ana Nikolova, PhD, has been actively involved in teaching since 2014. During this period, she was a full-time or honorary lecturer at the National Sport's Academy of Sofia, South West University of Blagoevgrad and currently at the Trakia University. She was elected in 2021 as Chief Assistant in Kinesiotherapy at the Medical College, Trakia University.

Ana Nikolova prepares lectures and exercises on kinesiotherapy, kinesiology and pathokinesiology for students from the 1st and 2nd year in Rehabilitation department. Her total study load according to the attached report for the last academic year is 175 credits.

The candidate has developed tests and innovations in training, all of which are included in the above-cited book based on a dissertation, used as a guide in the preparation of students.

A. Nikolova, fully meets the legal requirements under this section.

In my opinion the abilities of the candidate regarding treatment and diagnostics should be fully acknowledged. She is an advanced kinesiotherapist who has the expertise to perform

independently almost all modern methods of kinesitherapy and is certified by leading national and European centers.

In conclusion:

The resolution, of all the administrative required documentation, based on the submitted works, their quantitative and qualitative analysis as scientific production and their compliance with the requirements of the mandatory conditions and quantitative criteria and scientometric indicators according to the current national and university laws, applications and regulations, give me the reason to vote "positive" and propose to the honorable Jury, as well as to the members of the Faculty Council of MK at Trakia University Stara Zagora, the only candidate who submitted the necessary documentation for the announced contest (announced in SG No. 99/13.12.2022) for the academic position of "Associate professor" in the field of higher education 7. "Health and sport" by professional direction 7.4 Public health for the needs of the specialty "Rehabilitator" in MK at 0.5 at TrU-Stara Zagora, chief assistant. Ana Todorova Nikolova, PhD, to be elected as Associate Professor of Kinesiotherapy.

28.02.2023

Prof. Dr. Hristo Georgiev DSc

