

REVIEW

**By Prof. Dr. Dimitar Raykov DSc, Head of Department of Orthopedics and
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By Procedure for Occupation of Academic Position "Professor" in Higher Education 7. "Health and Sports" in professional field 7.1 "Medicine" and scientific specialty "Orthopedics and traumatology" at the Faculty of Medicine, Department "Orthopedics and traumatology" for the needs of Department of Orthopedics and Traumatology, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, in connection with a competition announced in the State Gazette, no. 8 / 28.01.2020

The review has been prepared in accordance with the Law for the Development of the Academic Staff in the Republic of Bulgaria, Rules for the implementation of this law, Rules for the development of the academic staff at the Medical University - Varna, November 28, 2016, Annex No. 1 to these Rules and Order No. P - 109 - 195 / 03.06.2020 of the Rector of the Varna University.

Only one candidate, Associate Professor Margarita Mihailova Kateva, MD, Head of the " Hand Surgery and Reconstructive Surgery Clinic " at the University Hospital "Sofiamed" participated in the competition.

Following the official and teaching activity of the candidate according to the attached documents show rich biography that meets the requirements of the Law on the development of the academic staff in the Republic of Bulgaria.

1. SCIENTIFIC PRODUCTION

In this competition, Assoc. Prof. Margarita Mihaylova Kateva, MD, presented: List and available copies of the thesis abstract of the thesis

-dissertation of "Emergency reconstruction of traumatic defects of the fingers with retrograde homodigital and metacarpal island flaps",

-monography "Flap for reconstruction of post-traumatic hand defects "2019 ISBN - 978-619-91405-1-2

- monography " Early surgical treatment after trauma to plexus brachialis "2019 ISBN - 978-619-91405-0-5,

-scientific publications in our and foreign countries journals, reports and announcements from participation in international and national conferences, symposiums and congresses - a total of 128 titles.

-total scientific output, which includes 152 scientific papers.

The tabular presentation of the quantitative indicators submitted by the applicant for the competition is as follows:

Author place	Dissertation	Publications in refereed and IF Journal	Monography	Publications in non-refereed journals	Participations in national and international forums in Bulgaria	Participations in international forums abroad	Overall
1. Only author	1	0	2	2	15	14	34
2. First author	0	2	0	24	16	13	55
3. Second author	0	0	0	4	13	9	26
4. Third author	0	4	0	2	3	4	13
Overall	1	6	2	32	47	40	128

From the writings of Assoc. Prof. Margarita Mihailova Kateva, MD for participation in the Contest according to the ZRASRB, RASPRSRB and PRA of MU-Varna, I acknowledge 45 (forty-one scientific papers). Of these - 1 abstract of dissertation, 2 monographs, 36 publications in Bulgarian scientific journals and collections and 6 publications in scientific journals with IF (3 publications) and abstracted in a worldwide database (3 publications) in English (Comptes Rendues de L ' Academie Bulgare des Sciences, Journal of hand surgery-european volume and German Medical Science). Of the actual publications, 6 are in English, 17 in Bulgarian and English and 20 in Bulgarian. Of these, the candidate has an overall IF of 0.321. (Academic reference of Varna University, March 18, 2020) According to Art. 100. item 4 of the Regulations for the Development of the Academic Staff at the Medical University-Varna and Annex 1, all publications were not used for the award of a scientific and educational degree "Doctor" and an academic position "Associate Professor".

It is presented a monographic work of Assoc. Prof. Dr. M. Kateva - "Early surgical treatment after trauma of plexus brachialis" which is reviewed by three habilitated surgical professors. The monograph does not repeat the dissertation submitted for the acquisition of the Doctor of Medical Sciences.

The applicant presents the abstracts of the monograph work in Bulgarian and English.

In 31 (76%) of the scientific papers recognized for the competition, Assoc. Prof. Dr. Kateva is only author or the first author

According to the references of the applicant's scientific works, made by the Central Medical Library (Ex. № 102 / 16.03.2020) and copies from other sources, it has a total number of citations - 42 (4 citations in refereed journals from World Databases Web of Science and Scopus, 5 citations in monographs and dissertations and 33 citations in Bulgarian journals).

Assoc. Prof. M. Kateva, MD is a participant in 1 (one) research project in our country - project ".2108, No. H27 / 36 with the theme" Antenna technologies for wearable devices on the human body in the future communication networks "(Fund). Research)". As an added value for the high scientific output of Assoc. Prof. Kateva, I can also reflect the scientific reports and announcements at national and international congresses with podium presentations and posters, a total of 87 scientific papers. They are in the leading scientific forums in the field of FESSH, IFSSH, ICMS, German Nerv Club Meeting and others.

Participations in national forums are at BOTA congresses mainly with international participation, conferences of the Society of Surgery of the Hand, congresses of the Balkan Association of Plastic, Reconstructive and Aesthetic Surgery and others.

According to Art. 102 (1), item 177b of the Regulations for the Development of the Academic Staff at the Medical University of Varna, Assoc. Prof. M. Kateva submitted a registration to Google Scholar, with 6 scientific publications and 4 citations in her scientific profile (Academic reference MU Varna, March 18, 2020 and the Information of the Central Medical Library of the Republic of Bulgaria Issue 102 / March 16, 2020).

According to the National Minimum Scientometric Requirements for Occupation of the Academic Position "Professor", Professional Degree 7.1 Medicine, under which the competition is held, Assoc. at the Medical University, Varna:

Group of indicators	Content	Minimal requirements for professor	Evidence of participation in a competition for "professor" at the MF of Varna Medical University	Points	% implementation
A	Indicator 1	50	Disertation	50	100%
B	Indicator 3	100 monography	Monography ISBN - 978-619-91405-0-5	100	100%
C	Sum of indicators 4-9	200	Monography not main habil - 1 refereed. -6 non-refereed.- 25	532.7	266%
D	Sum of indicators 10-12	100	International - 4 Bg monography. - 5 Bg journals - 33	275	275%

Qualitative analysis of the works of Assoc. Prof. Margarita Mihailova Kateva, MD

All the scientific works of Assoc. Prof. Kateva are in the field of orthopedics and traumatology of the Regional State Administration.

- Problems of peripheral nerve surgery - 1 monograph, 20 actual publications, 30 posts with published abstracts and 21 reports in scientific forums. The publications are mainly in journals with the focus - " Emergency Medicine and in the Journal of Orthopedics and Traumatology.

-Flaps for reconstruction of post-traumatic hand defects is the subject of 1 dissertation, 1 monograph, 22 publications and 28 scientific reports - 35% of scientific papers.

- The remaining 16% can be summarized as upper limb and varia orthopedics.

The thematic distribution of works is:

Topics	Real Publications and Monographs Reports	Participations, Plenary lectures	Overall
Early surgical treatment after plexus brachialis injury	8	16	24
Anatomy	2	1	3
Surgical reconstruction of plexus brachialis trauma in the newborn	1	12	13
Postoperative behavior	5	3	8
Description and application of neurotisation in the treatment of plexus lesions	6	12	18
Algorithm of treatment in recovery of movements in the parquet become	3	7	10
Behavior algorithm for abduction, rotation, and stabilization in the shoulder joint	3	5	8
Nerve transfers with high peripheral nerve damage upper limb	6	20	26
Nerve transfers in n.medianus injury	3	5	8
Nerve transfers in case of n.ulnaris injury	2	8	10

Nerve transfers in n.radialis injury	1	7	8
Surgical treatment for peripheral nerve injury of the lower limb	4	3	7
Flap for reconstruction of posttraumatic hand defects	23	28	51
Upper limb orthopedics	7	7	14
Varia	9	3	12

A brief analysis of the contributions by topic sections

Description and application of neurotisation in the treatment of plexus lesions. The topic is covered in 1 monograph and 6 publications. The main contributions to this topic are: A built-in and imposed algorithm for behavior in restoration of movements in the elbow joint and behavior for abduction, rotation and stabilization in the shoulder joint. The contributions are scientifically applicable and confirmatory. **The citations in this section are in 5 publications**

Plexus brachialis injury. The contributions are mainly scientifically applied. The main clinical features of the different degrees of trauma of plexus brachialis are described. The basic rules of approach for obstetric palsy are outlined. Algorithms of operative behavior at different levels and degrees of damage to the plexus, postoperative protocols and reporting of postoperative results have been developed. The topic is cited in 8 publications.

Nerve transfers for high peripheral nerve injury of the upper extremity subject to 5 publications. 1.N.radialis- 2.N.medianus 3.N.ulnaris. **Quotations are 5.**

In one monograph and 22 publications, the applicant presents his / her own experience with the application of a flap for reconstruction of post-traumatic hand defects. An objectively applicable algorithm of operative behavior for the reconstruction of the thumb, for skin defects of the fingers and reconstruction of the first annulus is introduced **are 2.**

2. TEACHING ACTIVITIES

The total teaching experience of the applicant is 9 years, with total employment of lectures, exercises and extra-curricular employment that fully meets the requirements of Art. 100. item 2 of PRA of MU-Varna.

Assoc. Prof. Margarita Mihailova Kateva, MD is actively involved in teaching activities as a lecturer at the Aftergraduate Education. She is a lecturer and supervisor of orthopedics and traumatology residents at IORTOPs and traumatologists at SPC. For the period 2011-2014 she was a former lecturer and supervisor of summer internships for medical students. (References from the Department of Scientific Activity of UMBALSM "Pirogov", from the Department of

Orthopedics and Traumatology of the MF, the Medical University of Sofia and the Rectorate of the Medical University of Sofia).

As a trainee lecturer, Assoc. Prof. Kateva has lectured in the Basic Traumatology Course of 2017 and has conducted emergency training in orthopedics and traumatology for the period 2011-14. She is the scientific supervisor of three trainees under Ordinance 1. (Sl. . note from UMHB "Sofiamed").

Assoc. Prof. M.Kateva, MD, PhD, is a scientific supervisor of three PhD students in the PhD program "Orthopedics and Traumatology". One of them, Nadezhda Antonova Popova, successfully defended the Doctor of Science in 2017. This meets the requirement of this competition.

3. DIAGNOSTIC AND MEDICAL ACTIVITY

Assoc. Prof. Margarita Mihailova Kateva, MD is a fully established orthopedic traumatologist. Performs independently complex and very complex operations in the field of operative orthopedics and trauma of the RSA. The surgical load of the candidate in recent years is higher than required by the standard "Orthopedics and traumatology". According to the attached information, for the period 2017 - 2020 it performed 957 operations. (Information of UMHB "Sofiamed").

In conclusion:

The analysis of all administratively required documentation, based on the applied works, their quantitative and qualitative analysis as scientific production and their compliance with the requirements of the Law, give me a reason to vote "**positive**" and to offer the Honorable Jury, as well as the members of the Academic Council of Varna Medical University, the only one to submit the necessary documentation for the announced competition for occupying an academic position "Professor" in the field of scientific specialty "Orthopedics and traumatology"

13.08.2020

Prof. Dr. Dimitar Raykov DSc

