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ОБЩЕСТВЕНО ЗДРАВЕ И АНАЛИЗИ
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#### REVIEW

by Prof. Dr. Krasimir Borisov Gigov, MD
a member of the Scientific Jury appointed by Order № RD-34/21.07.2022 of the Director of the
NCPHA

Subject: Competition for the academic position of a "Professor" in the field of higher education 7. "Healthcare and Sports", professional field 7.1 "Medicine", specialty "Social Medicine and Health Management", for the needs of the Mental Health Department, Directorate of Mental Health and Addiction Prevention, NCPHA, announced in the SG, No. 99 / 26.11.2021 and at http://ncpha.government.bg/ on 26.11.2021.

The sole candidate in the competition is Assoc. Prof. Dr. Hristo Ruskov Hinkov, DM.

#### Biographical and professional data

Assoc. Prof. Hristo Ruskov Hinkov was born on March 25, 1953. In 1980 he graduated with a Master's degree in Medicine, Faculty of Medicine, MA, Sofia. In 1987 he acquired the specialty "Psychiatry" - MA, Sofia, and since 2002 he received a master's degree in Health Management at Burgas State University. In 2011 Assoc. Prof. Hristo Hinkov obtained the educational and scientific degree "Doctor" in Medicine, specialty "Social Medicine and Organization of Health and Pharmacy" at the National Center for Public Health and Analyses, Sofia. Since 2013 he has been an associate professor in the scientific specialty "Social Medicine and Organization of Healthcare and Pharmacy".

During the period 1980-1987 Assoc. Prof. Hinkov worked as a general practitioner at the Municipal Hospital - Botevgrad, and later as a resident psychiatrist at the State Psychiatric Hospital in Novi Iskar. In 1987 he was appointed Research Fellow at the University Psychiatric Clinic, MA, Sofia, and from 1988 to 1997 - as Head of Psychiatric Counseling Office at National Institute of Emergency Medicine "Pirogov". From 1997 to 1999 he was Head of the Department "Projects, Programs and International Cooperation" at the Ministry of Health, and in the period 1999-2001 he was Deputy Director of the National Health Insurance Fund.

Since 2001, Assoc. Prof. Hristo Hinkov has been working at the NCPHA, namely as: until 2008 Chief Expert in the sector "Mental Health Policy, Programs and Projects", until 2009 - Head of the Global Mental Health Section, until 2011 - Deputy Director of the NCPHA, until 2014 - Head of the Sector Mental Health", and since 2014 he has been the director of the National Center for Public Health and Analyses at the Ministry of Health.

Assoc. Prof. Hinkov is an expert at national and international level, a member of national working groups, a number of advisory committees and scientific networks in the field of psychiatry and public health. He is a member of the National Commission for the elaboration of the National Health Map at the Ministry of Health in 2019-2021; a Chief Coordinator of the Expert Council on the Medical Specialty of Psychiatry at the Ministry of Health; Chairman of the Board of Directors of National Specialized Hospital for Active Treatment of Hematological Diseases EAD; member of the Bulgarian Medical Union, where for several years he was a member of the Board; member of the Executive Board of the National Scientific Program "Environmental Protection and Reduction of the Risk of Adverse Events and Natural Disasters"; member of the Bulgarian Psychiatric Organization and the Bulgarian Collegium of Private Psychiatry; member of the Scientific Council of the NCPHA; member of the Scientific Council at the Ministry of Environment and Water; member of the editorial board of the Bulgarian Journal of Public Health, published by the National Centre for Public Health; a guest editor of the International Journal of Mental Health Systems, ISSN: 1752-4458, Part of Springer Nature; member of the editorial board of the Mental Health magazine - STENO Publishing House.

The candidate has participated in a number of national and international projects and programs in the field of public health, including as a coordinator and lead implementer. After taking the position of "Associate Professor" he participated as a principal researcher in the project "Study of Health and Stress" EPIBUL 1 (from 2008 - until now) and as a senior researcher in the project EPIBUL 2 (from 2015 - until now). He is a member of the expert council at the Institute for Population and Human Studies at the Bulgarian Academy of Sciences in connection with the preparation of a report "Measures to overcome the demographic crisis in the Republic of Bulgaria"; senior researcher for the RECOVER-E project (Large scale implementation of community based mental health care for people with severe and enduring mental ill health in Europe) 2018-2020; he is the leader of the project "Improved mental health services", Program BG07 "Public Health Initiatives"; he participated in the development of the National Mental Health Strategy (2020-2030) and the Action Plan for it. He was a main participant in the development of the National Suicide Prevention Program 2012-2017, adopted by a decision of the Council of Ministers, implemented with funds from the Norwegian Financial Mechanism.

In 1996, Assoc. Prof. Hinkov specialized in psychiatry in Japan (Japan International Cooperation Agency - JICA), and in 1998 he completed a three-month training in the

organization and financing of health care at the World Bank (Flagship Course) in the United States. He was trained in general medicine in Belgium, the Netherlands and Denmark, and then he was a lecturer in training courses for general practitioners organized by the Bulgarian Medical Association and the PHARE Program in 2003-2007. He is the author of numerous publications and interviews in various media in the country and abroad related to mental health, health policy and current issues of society.

He was the supervisor of two successfully graduated doctoral students.

### General description of the materials submitted in the competition

The materials and documents submitted by Assoc. Prof. Hinkov fully comply with the requirements for holding the academic position "Professor", specified in the Regulations on the Terms and Conditions for Obtaining Scientific Degrees and Holding Academic Positions in the NCPHA.

For the participation in the competition, Assoc. Prof. Hinkov has presented the required documents: CV in European format; diploma for scientific degree "doctor"; medical certificate; criminal record certificate; copy of employment record book; certificate from the last place of work (NCPHA); reference for the fulfillment of the minimum national requirements and the respective evidence / monographs, books and chapters from them, copies of the scientific publications and reports, referenced and indexed in a world-known scientific databases; citations or reviews in peer-reviewed and indexed scientific journals, in monographs and collective volumes with scientific peer-review, and in non-peer-reviewed journals with scientific peer-review; reference for the collected points by the indicators according to the minimum requirements for the "professor's" position (550 points); list of participations in scientific forums and copies of materials from participations in scientific forums; summaries of scientific papers (paper and electronic); extended habilitation reference of the scientific contributions; documents for taking the academic position of "Associate Professor"; diploma for acquired medical specialty "psychiatry"; reference for participations in editorial boards, membership in a scientific organization in the respective scientific field, reviews; supervision of doctoral students; participation in research projects; reference quality criteria

The presented materials and documents characterize the long-term work, the significant professional experience of the candidate and provide an opportunity for analysis and review of the scientific activity, the publishing activity and the scientific and creative achievements of Assoc. Prof. Hinkov.

Evaluation of the scientific works of the candidate for overall academic development

The scientific production and publication activity of Assoc. Prof. Hinkov is significant, mainly in the field of psychiatry and public health issues. 94 publications were presented, 49 of which - after obtaining the academic degree of "Associate Professor". Assoc. Prof. Hinkov has 65 publications in foreign magazines, 40 of which - after obtaining the academic degree of "Associate Professor".

Assoc. Prof. Hinkov's scientific activity includes 68 participations in scientific forums (9 of them after obtaining the academic degree of "Associate Professor"), of which 44 are in international congresses and conferences (3 after obtaining the academic degree of "Associate Professor"). He has participated in numerous discussions and expert consultations at national and international round tables, seminars and webinars.

The reference on the number of citations presented by Assoc. Prof. Hinkov shows a good reflection and publication image of the author, as evidenced by the declared interest of the scientific community, not only in Bulgaria but also abroad. 2463 citations are presented, according to a reference in the available databases (Scopus and Web of Science).

The presented reference for the scientific contributions of the works of Assoc. Prof. Hinkov covers the period from 2014-2021, including areas of scientific, scientific-applied and political-analytical nature. The included works are in Bulgarian and English and are mainly scientific articles in prestigious publications, participation in monographs and scientific and applied science reports, scientific communications and health policy analyses.

The scientific contributions of the publications are divided into four areas:

- Epidemiology of mental disorders and study of the psychosocial determinants of mental illnesses;
  - Comparative analysis of epidemiological databases;
- Research on the organizational, legal, informational and financial aspects of the provision of mental health services in Bulgaria;
  - Health policy and health reform, suicidology, the Covid 19 pandemic.

## Epidemiology of mental disorders and study of the psychosocial determinants of mental illnesses

Logically, the publications in this field are the most numerous (33). The scientific contributions in the field of mental health have a high degree of scientific representation and international significance. Most of them have been published in prestigious scientific journals. An international database of the World Consortium for Mental Health (WMH), led by the

WHO and Harvard and Michigan Universities, was used.

Within the EPIBUL 1 project, the Bulgarian database has been created, which has its contribution and continues to be included in international comparative studies of common mental disorders worldwide. The topics of the publications vary widely and concern the most common mental disorders (depression, generalized anxiety, post-traumatic stress disorder), organization of psychiatric systems in different countries, epidemiology of addictions, the causes of domestic violence, relationship between religion and mental disorders, impact of mental disorders on the degree of performance at work.

The epidemiological study of the anxiety, depressive, reactive, affective, etc. disorders, conducted by the Bulgarian team led by Assoc. Prof. Hinkov, is the only one in Bulgaria. The questionnaire used for this study includes a large number of variables, which allows for multiple comparisons and statistical analyzes. In the course of its implementation, a new term-"frequent" mental disorders was adopted, which became popular in the Bulgarian scientific psychiatric community. The results of the study are internationally comparable and are of great importance, the most significant being those of the various nosological units concerning the common mental disorders among the Bulgarian population. The collected data allow the assessment of the etiology of mental disorders, environmental factors, traumatic life events and social functioning disorders, as well as psychiatric care and psychiatric service's needs.

#### Comparative analysis of epidemiological databases

Within the framework of the Public Health Initiatives Program BG07, with the financial support of the Norwegian Financial Mechanism and the Financial Mechanism of the European Economic Area, a second epidemiological study was conducted - EPIBUL 2 (2016-2017). The same tools were used as in EPIBUL 1, but on a smaller representative sample. The new database was created with the active cooperation and supervision of the WMH team, using the modern CAPI survey technology, allowing for more expeditious interviews. The results of the study were published in two of the candidate's articles (43,45).

A significant contribution of the study is the dynamically tracked spread of frequent mental disorders over a ten-year period. The results show that their share does not change significantly, but there is an increase in additional diagnoses (comorbidity) accompanying the anxiety disorder. The tracking of this dynamics allows the candidate to build a unique hypothesis about the reaction of the Bulgarian population to stressful events, presented in the monograph "The Bulgarian anxiety". Based on an in-depth study of the phenomena of anxiety and psychosomatic dependence, a new vision for the reaction of the Bulgarian nation to

stressors in historical and philosophical contexts is presented. The hypothesis is based on a comparative study of the two databases of epidemiological data regarding the anxiety in Bulgaria and internationally.

# Research on the organizational, legal, informational and financial aspects of the provision of mental health services in Bulgaria

Some of the scientific developments in this direction include organizational schemes, information technologies and financial instruments in the practice of the provision of mental health services in Bulgaria, as well as the legal framework for their provision, with scientific and applied value (29,30,40). The established difference between the specifics of the organization of psychiatric care in different countries explains the difficulties in developing a comprehensive concept and plan for reform of the psychiatric system in Bulgaria.

Very interesting is the proposed model of mobile psychiatry in outpatient care, developed as part of an international project, which is a contribution to the scientific justification of the reorganization of psychiatric services in the country. The development of this idea creates a basis for the overall adoption of this concept and its inclusion in the Action Plan for the National Mental Health Strategy (2020-2030). A major contribution in this regard is the establishment of an evidence base for the application of new technologies in the care of people suffering from mental disorders (39).

A comparative analysis with neighboring countries in Central and Eastern Europe was conducted, covering various aspects of mental illness and the organization of psychiatric care, using consensus criteria (indicators) developed by the international research teams - (19,21).

#### Health policy and health reform, suicidology, the Covid 19 pandemic

A significant practical and scientific-organizational contribution of the candidate is his active participation in the development of the National Mental Health Strategy (2020-2030), with an Action Plan, justification, motives and management framework (42).

It should be noted the applied and scientific contribution in the creation of a team of professional psychiatrists involved in the development and promotion of modern concepts of psychiatric care.

An information portal on suicidal actions has been set up as part of a project funded by the Norwegian Financial Mechanism. The data concern various aspects of suicidal behaviour among Bulgarian citizens. The established system for online data collection is unique for Bulgaria, compared to the countries in the region and the EU. Moreover, the data on methods, motives, marital status and other demographic characteristics concern not only the suicidal acts that ended in death, but also suicide attempts, serving as a basis for building an adequate preventive strategy (46).

Some of the publications also cover aspects of the performance at work and the participation in the labor market of mentally ill persons, based on extensive statistical evidence from the two databases of EPIBUL 1 and 2, which is done for the first time in our country. A peculiarity of the Bulgarian behavior in seeking professional help through somatic specialists neurologists, GPs, etc. has been identified. This is largely due to the influence of stigma regarding mental disorders, but also to a new phenomenon - the strong degree of somatization of mental problems among the Bulgarian ethnic group (the monograph "The Bulgarian anxiety").

A topical issue is the impact of the Covid 19 pandemic on the mental health of the Bulgarian population covered in two of the articles (44,47). The scientific contribution consists in a new vision of reality, which should explain the emerging disturbing mental phenomena caused by the pandemic on the mental health of the population and propose adequate measures to be developed to address them.

General assessment of the candidate's compliance with the mandatory conditions and mandatory quantitative and scientometric indicators according to the Regulations on the Terms and Conditions for Obtaining Scientific Degrees and Holding Academic Positions in the NCPHA

The publications presented by Assoc. Prof. Hinkov show his excellent knowledge in the field of public health, including mental health, his capability to perform in-depth analyses of scientific data, independent development and application of scientific and applied research methods and programs. Reference of the collected points by indicators, according to the minimum requirements for the position of professor (550 points), as follows:

Indicator group	Indicator	Number of points for Professor
Α	Dissertation for the award of educational and scientific degree "Doctor"	50
В	3. Habilitation thesis monograph	100
Ċ	7. Publications and reports published in scientific journals referenced and indexed in world-known databases with scientific information	239.4
	8. Publications and reports published in unreferred journals	13.75

	with scientific review or published in edited collective volumes	
	9. Published chapter of a collective monograph	9
	7+8+9	262.15
D	10. Citations or reviews in scientific journals, referenced and indexed in world-known databases with scientific information or in monographs and collective works	2463 x 15 (Web of science – from 2014 until 2021)
	11. Citations in monographs and collective volumes with scientific review	
	12. Citations or reviews in unreferenced scientific peer-reviewed journals	
	10+11+12	36945
E	14. Supervision of a successfully graduated doctoral student	40 +20 =60
	15. Acquired medical specialty	40
	16. Participation in a national scientific or educational project	15
	17. Participation in an international scientific or educational project	20
	18. Management of a national scientific or educational project	30
	14+15+16+17+18+19+22	165
TOTAL	50+100+262.15+36945+165	37522.15

The career development of Assoc. Prof. Hinkov and the presented documents, scientific publications and materials give me every reason to confirm that he is a complete professional, skilled and competent scientist in the field of public health and psychiatry. Assoc. Prof. Hinkov's scientific activity complies with all mandatory conditions and requirements for holding the academic position "Professor", specified in the Regulations on the Terms and Conditions for Obtaining Scientific Degrees and Holding Academic Positions in NCPHA, as well as in the Development of Academic Staff in the Republic of Bulgaria Act for holding the academic position of "Professor".

#### CONCLUSION

The analysis of the presented documents about the research and publication activity of Assoc. Prof. Hristo Hinkov gives me every reason to confirm that the candidate's career development meets the mandatory and specific conditions and scientometric criteria for holding the academic position of "Professor" in "Social Medicine and Health Management" in the field of higher education 7. "Healthcare and Sports", professional field 7.1 "Medicine",

Based on the above, I am confidently voting "in favour" of awarding Assoc. Prof. Hristo Hinkov, MD, the academic position "Professor" in "Social Medicine and Health Management", in the field of higher education 7. "Healthcare and Sports", professional field 7.1 "Medicine", for the needs of the Mental Health Department, Mental Health and Addiction Prevention Directorate at the NCPHA.

Prof. Dr. Krasimir Gigov,

