

## REVIEW

**In connection with procedure for academic position of a "Full Professor" in scientific specialty "Social Medicine and Health Management", Department of Mental Health at NCPHA; Contest announced in State Gazette, Issue 99 of 26.11.2021.**

**Author: Acad. Prof. Dr. DROZDSTOY STOYANOV STOYANOV, MD, DSc, MU-Plovdiv, Head of Department of Psychiatry and Medical Psychology.**

By Order No. RD-34 / 21.01.2022 of the Director of NCPHA, I have been appointed a member of Scientific Jury in the above competition, and on the basis of Protocol No. 1/01.02.2022 from a meeting of the Scientific Jury I have been selected for a reviewer.

One candidate participates in the competition – Assoc. Prof. Dr. Hristo Ruskov Hinkov, MD.

### 1. Brief biographical data and career development of the candidate

The candidate was born in 1953. He graduated in Medicine from the Medical Academy in Sofia and majored in Psychiatry at the same university in 1987.

He worked consecutively at State Psychiatric Hospital "Novi Iskar" (1983-1987) and at UMHATEM "N. I. Pirogov" (1988-1997) as a consultative and liaison-psychiatrist. Since 1998 he has held expert-consultative and managerial positions in the healthcare system, as Head of Department in the Ministry of Health, Deputy Director of NHIF, Chief Expert, Head of section and sector, Deputy Director of NCPHA, and since 2014 – Director of NCPHA.

In 2011 the candidate defended his dissertation for PhD, and in 2013 he was habilitated to the academic position of "Associate Professor".

In 2002 he graduated with a master's degree in Health Management from Burgas Free University.

He is a member of the Editorial Board of Bulgarian Journal "Mental Health", among many others.

### **I. Quantitative indicators**

The candidate participates in the competition with a total number of scientific papers = **49**, of which 41 articles and reports in indexed and referenced in world-famous databases editions and 8 in non-refereed editions. The majority of the indexed publications have been delivered as project outcome within large-scale international consortia with more than 10 authors and / or organizations involved in them. The publications in which the candidate is in one of the first four positions in the author's team or independent are a total of 13, of which 7 in indexed journals and collections and 5 in other, non-indexed vehicles of publication. Associate Professor Hinkov has participated with reports in 68 scientific forums, 59 of which before his tenure. According to Scopus system, the papers with his participation have been cited 3,465 times, and according to Web of Science system – 2,811. The Hirsch index of Assoc. Prof. Hinkov after elimination of auto-citations amounts to 21 (WoS, Clarivate Analytics). That ranges Dr Hinkov among the top cited scientists in the field of mental health in Bulgaria.

In summary, it can be concluded that the quantitative criteria set out in Regulations for the Implementation of Act on the Development of the Academic Staff in Republic of Bulgaria as well as those set out in Regulation of NCPHA for Acquisition of Academic Position "Professor" are duly observed.

## **II. Qualitative indicators**

According to the presented reference on the scientific contributions of the works for the period from 2014 to 2021, candidate's scientific contributions are in the following areas:

### *1. Epidemiology of mental disorders and study on psychosocial determinants of mental illness*

Most of the publications in prestigious scientific journals are based on the collected international database by the World Consortium for Mental Health (WMH), led by the WHO and universities of Harvard and Michigan. Bulgarian database established in the period 2003 –2006 within the EPIBUL 1 Project continues to be included in international comparative studies of common mental disorders worldwide. The themes of publications vary widely depending on the scientific interest of the teams using the international database. The publications are on topics: therapy of common mental disorders (depression, generalized anxiety disorder, PTSD), influence of the organizational features of the psychiatric systems in the different countries of the consortium, addiction epidemiology, causes of domestic violence, relation between religiosity and mental disorders, influence of mental disorders on the degree of working capacity. The value of these studies, a result of collective work of sometimes numerous teams, is evident from the number of citations by other authors, which is presented in the relevant report. The possibility of international comparative analysis allows formulating of an essential hypothesis and the main scientific contribution of the candidate, developed in a separate monograph (see below).

For Bulgaria, this study is the only one of its kind and before it there is no significant epidemiological study of anxiety, depression, reactive, affective, etc. disorders that are usually associated with stress and adverse life events. In English-language literature, these disorders are denoted by the adjective "common" in contrast to the other group of psychotic and affective disorders,

which are called "severe". Of course, this division is not so much scientific as operational. It distinguishes the relatively smaller group of disorders with psychosis or affective disorders from the large group of disorders without serious social dysfunction or in the past called "neurotic" disorders. During the EPIBUL study, the Bulgarian team led by the candidate found and imposed in Bulgaria usage of the term "common" mental disorders, which gained popularity in the Bulgarian scientific psychiatric community. Questionnaire used for this study is unique in its scope and possibilities for studying a huge number of variables, which provides opportunities for a variety of comparisons and statistical analyzes. The most significant results of this study are the relative shares of the different nosological units included in the questionnaire. For the first time in our country it was possible to declare with scientific certainty that the so-called frequent mental disorders occupy a significant share among the Bulgarian population - about 19% or in other words every fifth Bulgarian has suffered once in his life from one or more of the nosological units included in the questionnaire. The collected database made it possible to assess various aspects of the etiology of mental disorders, environmental factors, traumatic life events and disorders of social functioning.

## *2. Comparative analysis of epidemiological databases*

In the framework of a major project related to mental health in Bulgaria (Program BG07 "Public Health Initiatives", with the financial support of the Norwegian Financial Mechanism and the Financial Mechanism of the European Economic Area) was created an opportunity to conduct a second epidemiological study EPIBUL 2 in the period 2016-2017, and using the same toolkit and a smaller but nationally representative sample, a new database was collected. As is known from the previous study, the EPIBUL 1 database has more than 5,000 respondents, which allows comparisons of the disease with

other countries included in the study and to make a real assessment of the needs of mental care and psychiatric services and their usability. The new database collected within the EPIBUL 2 survey contains 1509 completed interviews with a response rate of respondents  $RR = 61\%$ . (EPIBUL 1 has a response rate of 72%). The new database was created with the active cooperation and supervision of the WMH team, using modern CAPI survey technology, which allowed for much more expeditious interviews. A special contribution here is the ability to compare dynamics of prevalence of common mental disorders over a ten-year period. Results showed that over a ten-year period the distribution of the relative shares of common mental disorders remained the same, with a slight decrease for some of them. For example, regarding to anxiety disorders, there is an increase in the percentage of additional diagnoses accompanying anxiety disorder (so-called comorbidity) from 21.2% to 28%, which indicates that concomitant mental disorders are diagnosed and manifested along with underlying anxiety disorder. Tracking this dynamic enabled the candidate to build a unique hypothesis for the reaction of the Bulgarian population to stressful events. This hypothesis is presented in the monograph "Bulgarian anxiety".

The latter ("Bulgarian Anxiety" ed. Context 2022; Reviewers Prof. Georgi Popov and Prof. Vaska Stancheva-Popkostadinova) is a large-scale and in-depth study, built in two directions. The first one is conceptual and covers historical and ethno-cultural discourses of identity, through which anxiety is formed and developed as a socio-psychological construct. There is presented a comprehensive study of the phenomena of anxiety and psychosomatic dependence in a new vision of the Bulgarian response to stressors in historical and philosophical context.

The second one is empirical and presents the epidemiological picture of anxiety in its many dimensions at the public health level, supported by facts

from the comparative study of the two databases with epidemiological data on anxiety in Bulgaria and internationally.

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

The value of these studies is both fundamental and applied. The scientific developments cover a wide field of organizational schemes, information technologies and financial instruments in the practice of offering mental health services in Bulgaria. Some of the publications present analyzes of the systems for providing medical and mental health services, their information and financial support, as well as the legal framework for providing mental health services in Bulgaria. A contribution that is not small in this regard is the establishment of an understanding of the specifics of the organization of psychiatric care in different countries and cultures, which explains the emerging periodic difficulties in developing a comprehensive conception and plan for reforming the psychiatric system in Bulgaria.

A contribution to the scientific substantiation of the reorganization of psychiatric care is the development of a model of mobile psychiatry in outpatient care in the framework of an implemented international project, as the data are analyzed in a comparative plan. The idea of introducing mobile teams in outpatient care for people with mental disorders is not new – it dates back at least 2002 to the first mental reform program in our country in which the candidate also has a leading role. The development of this idea and the publications on the topic (before 2014) created the basis for the overall adoption of this conception and its inclusion in the action plan in the latest mental health strategy (2020-2030). A significant contribution in this regard is the construction of an evidence base for the application of new technologies in the care of those suffering from mental disorders.

Other publications are a comparative analysis with neighboring Central and Eastern European countries of various aspects of mental illness and the organization of psychiatric care based on consensus criteria (indicators) developed by international research teams. The research of teams with the participation of Associate Professor Hinkov is the basis of the analytical part of National Strategy for Mental Health of the Citizens of Republic of Bulgaria, adopted by Decision of Council of Ministers No. 388/23 April 2021. Associate Professor Hinkov is the chairman of the working group of Ministry of Health, which drafts this document. This is a magnificent example of a direct transfer of public health research to cross-sector policies.

#### *4. Health policy and health reform, suicidology, pandemic of COVID-19*

The candidate has a serious applied and scientific contribution to the creation of a team of professional psychiatrists engaged in the development and promotion of modern concepts of psychiatric care. The constant efforts over the years of the candidate to strengthen the team of professionals led to the creation of a directorate for mental health and addictions within the NCPHA, which after the changes in the 90s of the last century is a great achievement given the fact that this structure has no analogue in the country.

Various aspects of suicidal behavior among Bulgarian citizens are also considered and the data are collected in an information portal for suicidal actions as part of the implementation of a project funded by Norwegian Financial Mechanism. The established system for collecting data online is unique for Bulgaria compared to the countries in the region and even outside the EU due to the fact that data on methods, motives, marital status and other demographic characteristics are not only for the implemented suicidal actions that ended in death, but also for suicide attempts, which is a very important basis for building an adequate preventive strategy. The established system for collecting data

online is unique for Bulgaria compared to the countries in the region and even outside the EU due to the fact that data on methods, motives, marital status and other demographic characteristics are not only for realized suicidal actions with lethal outcome, but also for suicide attempts, which is a very important basis for building an adequate preventive strategy.

Separate publications also address aspects of psychiatric illness related to work capacity and labor market participation. Not for the first time in scientific literature in our country effects on the economic status of the population caused by mental illness have been studied, but for the first time this is done on the basis of such extensive statistical evidence as the two databases EPIBUL 1 and 2. In the course of these studies, a peculiarity of the Bulgarian behavior in seeking professional help in the direction of this to be done through somatic specialists – neurologists, GPs and others. This characteristic of the Bulgarians is explained simultaneously with the influence of stigma regarding mental disorders, but also with a new phenomenon mentioned in the cited monograph, namely the strong degree of somatization of mental problems among the Bulgarian ethnic group.

Of course, the impact of the pandemic of COVID-19 on the mental health of Bulgarians is also reviewed in the current plan. The scientific contribution to these publications is in the fact that a new perspective is sought for the emerging disturbing mental phenomena caused by the pandemic in the public mental health of the population and to outline possible ways to cope with them.



## **CONCLUSION**

Based on the above review of the candidate's contributions, it can be concluded that he meets all the statutory quantitative and qualitative requirements for holding the Academic position of "Professor" in this direction. On this basis, I give my positive assessment and propose to the esteemed scientific jury to endorse the candidate for the academic position of "Full Professor" Hristo Ruskov Hinkov.

**March 14th, 2022**

**Reviewer:**

A handwritten signature in blue ink, appearing to read 'D. Stoyanov', written in a cursive style.

**Prof. Dr. Drozdstoy Stoyanov Stoyanov, MD, PhD, DSc**

**Full member of the Bulgarian Academy of Sciences and Arts**