STATEMENT OF OPINION

From: Prof. Todorka Ignatova Kostadinova, PhD, Vice Rector "International Relations, Accreditation and Quality" at the Medical University - Varna, Professor in the professional field "3.7 Administration and Management" at the Faculty of Public Health, Marin Drinov" St. 55, Varna 9002, tel. 052 677089, mobile tel.: 0889588408, e-mail: kostadinova@mu-varna.bg

Regarding: dissertation work on the topic "Circular migration of health professionals - attitudes, challenges and perspectives in Bulgaria"

with author Iliyana Ancheva Georgieva - doctoral student in full-time study.

For: awarding of the educational and scientific degree "Doctor" in professional field: 3.7 "Administration and management", scientific specialty "Organization and management outside the field of material production (in healthcare)"

Scientific supervisors: Assoc. Prof. Maria Rohova - Yordanova, PhD and Assoc. Prof. Veselina Slavova, PhD

Basis for drawing up the opinion: Order No. 109-479/16.11.2023 of the Rector of MU-Varna for determining the composition of the scientific jury and Protocol No. 1/28.11.2023 of a meeting of the scientific jury for determining reviewers under the procedure for acquisition of ESD "Doctor".

I. Data on the procedure and general evaluation of the dissertation work

According to the present procedure, all the necessary documents provided for in the Law on the Development of the Academic Staff of the Republic of Bulgaria, the Rules for its Application and the Rules for the Development of the Academic Staff of MU-Varna have been submitted.

Doctoral student Iliyana Georgieva has successfully passed the exams for doctoral minimums, completed the activities of the individual study plan and collected the necessary credits with positive attestation marks during the period of study in the doctoral program.

The development of the dissertation was completed on time and a defense procedure was opened before a scientific jury with order No. 109-479/16.11.2023 of the Rector of MU-Varna.

Iliyana Georgieva's dissertation examines a current problem related to the circular migration of health professionals in Bulgaria. The value and usefulness of the paper is enhanced by the PhD student's original approach to combine quantitative and qualitative research tools to explore in depth the issues of circular migration and its associated effects.

The presented dissertation is in a volume of 188 pages, of which 147 pages are the main text, structured in the following parts - introduction, three chapters and conclusion.

The scientific research and the obtained results are well illustrated with 29 figures and 29 tables. The reference to the literature used contains a total of 220 sources, of which 20 are in Bulgarian and 220 in English. The majority of the cited publications were issued within the last 10 years, indicating awareness of current developments in the field of health professional migration.

II. Characterization and evaluation of the content of the dissertation work

Doctoral student Georgieva clearly and correctly formulates the main research thesis, the purpose of the dissertation work and the tasks set to be solved. The object and the subject of the research have been defined, an adequate research toolkit has been applied.

From the beginning to the end of the dissertation work, her personal attitude to the problem and professional commitment to the subject is visible.

The **first chapter** of the dissertation examines the causes of migration and its consequences for sending, receiving countries and individuals. To a large extent, the factors influencing health care and the effects of migration movements are explained in general theories of migration. In this regard, the concepts proposed by representatives of various scientific fields are presented, different classifications of migration theories are derived according to the level of analysis (micro-, macro- and meso-level theories), according to their focus on certain fields (sociology, economics, geography) and according to whether they consider the causes and forms of migration or study the phenomenon as a recurring one. On this basis, the micro- and macro-level factors that guide the individual to the decision to migrate to a certain country or region are deduced. It is noteworthy that the results of the studies conducted over the years show similar reasons for migration, and the authors often combine them into two groups called "push factors" and "pull factors". The main push and pull factors in a WHO report on the migration of health professionals in the European region are also presented. The results of the research show that the factors that influence the movement of medical specialists are the most diverse, and economic motives represent the strongest incentive among them.

In the **second chapter**, the results of the study are presented in detail. The large-scale survey was conducted by a specialized sociological agency in the period May-June 2022 using a standardized online survey among medical professionals in Bulgaria (doctors, dentists, nurses and midwives). The criteria for their inclusion in the sample are as follows:

• to be Bulgarian citizens;

• to practice in their specialty.

The sample was planned using two criteria for representativeness – distribution of medical specialists according to the type of settlement (capital, regional city, small town, village) and according to the profession (doctors, dentists, nurses and midwives). Respondents were included in the sample based on random selection, and after removing the incomplete questionnaires, the number of surveys that were included in the analysis was 447.

The design of the questionnaire was developed based on the considered theories of migration and research conducted in this area.

The purpose of the qualitative interview study is to explore the experiences of medical professionals involved in the phenomenon. Within the framework of the qualitative study, health professionals were interviewed, who were selected purposefully, without respecting the principle of random selection. They were recruited through inquiries among acquaintances and on social networks. The study was conducted in the period November 2022 - June 2023 on three main topics related to goals and motives for migration of medical professionals; reasons for circular migration, difficulties encountered and perceived benefits and negatives of participating in the phenomenon; assessment of conditions in the country for the development of circular migration.

The studies were approved by the Research Ethics Committee at the Medical University - Varna with Decision No. 115/31.03.2022 and Decision No. 121/06.10.2022.

The perception of the circular migration of medical professionals as a suitable tool to deal with the challenges facing the health systems is presented and defended, mainly due to the ability of the phenomenon to generate tripartite benefits for the participants in the process (Triple Win Concept). This concept is defined as the movement of highly qualified professionals between receiving and sending countries, which generates benefits for all participants in the process. It makes a good impression that a good balance has been achieved both in the research and in the analysis of the results, as along with the benefits, some negative consequences that circular migration leads to are pointed out.

The **third chapter** presents the results of the survey regarding the attitudes towards migration of medical specialists in Bulgaria. In its formation, the type of settlement and the profession are of leading importance.

In addition to the demographic and socio-economic characteristics, professional ones are also considered. Of the medical professionals included in the sample, the largest share is occupied by doctors with a recognized specialty and nurses, health professionals with more than 20 years of work experience and those of them who work in multidisciplinary hospitals.

The results show that the respondents are rather dissatisfied with the organization of the healthcare system (1.99) and the remuneration received in the medical facility where they work (2.28).

Based on the results of the analysis, PhD student Georgieva presents generalized factors with the strongest and weakest influence on the choice of medical specialists to work in Bulgaria. Determinants with a strong impact (with an average score above 2.50) are united in the group of factors that keep health professionals in the country (stick factors), and those with a weak impact (with an average score below 2.50) - in the group of push factors.

I highly appreciate the combined study of the reasons for emigration among respondents who have worked abroad and those who have not, or the so-called "pull factors". For this purpose, the average values of all factors were derived and compared, and the degrees of influence are presented in an ordinal scale (from 1 - no importance, to 4 - with a very strong influence). Main attracting factors on a macro level for medical specialists who have been professionally active outside Bulgaria are related to the higher standard of living abroad (3,62). At the level of a medical institution, the main reasons for emigration are financial, the most significant being the attractiveness of the remuneration received (3.70), and at the personal level - the higher recognition of the medical profession abroad (3.69) and the possibility of financial supporting the family as the leading reason for working abroad (3.59). Based on the results of the survey and the precise analysis, one of the research hypotheses was also proven, according to which the main reasons for migration are economic.

This chapter also presents a model for stimulating circular migration of medical professionals. It clarifies the factors that influence attitudes towards migration and remigration, the effects it leads to and the tools by which circular migration can be stimulated. At the heart of the model is the idea that, with the application of appropriate tools, the drivers of migration can be transformed into motivations for participation in circular migration. This presents the phenomenon beyond its conception of a spontaneous phenomenon, and the factors as a tool by which its effects can be modeled to some extent. The final results of the model are aimed at developing mechanisms to stimulate circular migration, through which to increase the positive and limit the negative consequences for the different participants in the process. Recommendations have been formulated at the national, regional and company level in this area.

The conclusion follows the logical structure of the dissertation and is formulated comprehensively and clearly.

III. Contributions and relevance of the dissertation to practice

I highly appreciate the consistency of the doctoral student and the in-depth analysis of the results of the large-scale study.

Results on the drivers of migration and the effects on countries of origin, countries of destination and on the health professionals themselves are valuable. They are based on an excellently chosen methodology, for which I congratulate PhD student Georgieva and her scientific supervisors.

I accept all contributions formulated in the abstract as follows:

- (1) As a result of the research and analysis of literary sources, the factors that lead to the emigration of health professionals, the factors that keep them in Bulgaria, as well as those that motivate them to come back after a specific period of time abroad (pull factors, stick factors and factors for remigration) are identified and synthesised.
- (2) Based on analysis and synthesis of scientific literature the main effects of migration on countries of origin, destination countries and health professionals themselves are systematised. Additionally, the potential for circular migration to enhance positive effects and limit negative ones is explored.
- (3) A methodological toolkit is developed to study the attitudes of Bulgarian health professionals towards migration, as well as the experience of those who have participated in circular migration.
- (4) Based on the results of the research, a model for promotion of circular migration is developed, including factors that influence the attitudes of health professionals towards migration and remigration, the impact of circular migration and instruments to facilitate periodic movements between two countries.
- (5) Recommendations for the promotion of circular migration at national, regional and health institutional levels are formulated.

IV. Abstract and publications

The abstract faithfully reflects the content of the dissertation and emphasizes the most important results and conclusions of the research. It is prepared in a volume of 54 pages. The abstract summarizes the content of the dissertation, describes the methodology very well and presents the most important results, conclusions and recommendations of the study in a convincing manner.

Doctoral student Georgieva also presents 5 publications (including 1 in English), which include a publication in a refereed and indexed scientific publication and reports at scientific

conferences. The minimum national requirements under Art. 2b, paras. 2 and 3 of the Law on the Development of the Academic Staff of the Republic of Bulgaria for the acquisition of ESD "Doctor" have been met.

Her participation in Bulgarian and international scientific forums shows that the topics and ideas of the dissertation work have been commented on in scientific circles and are visible in the public space.

V. Critical notes and recommendations

I have no critical remarks or questions for the doctoral student. I recommend Iliyana Georgieva to publish the results of the dissertation in a monograph by expanding the study with the effects of digitization of healthcare and the application of artificial intelligence in this field.

VI. Conclusion

The dissertation study offers a broad view of the circular migration of health professionals - attitudes, challenges and perspectives in Bulgaria. It is focused on the topic and is logically sound. I have known PhD student Iliyana Georgieva for many years through our joint work on projects. She shows serious commitment, excellent theoretical training and creativity in her work. These qualities are also manifested in the development of her dissertation, in which the doctoral student demonstrates in-depth knowledge, consistent search and extraction of practical solutions based on convincing and large-scale empirical analysis. There are opportunities to develop and continue the research, both theoretically and practically, which is an indicator of the sustainability of the results.

The dissertation meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria, the Rules for its Application and the Rules for the Development of the Academic Staff of the University of Varna.

All this gives me the conviction to give a positive assessment and propose the award of an educational and scientific degree "Doctor" in professional direction 3.7 "Administration and management", scientific specialty "Organization and management outside the field of material production (in healthcare)" to Iliyana Ancheva Georgieva.

15.01.2024

Member of the scientific jury:

jury: 2016/679

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС)

Varna

/Prof. Todorka Kostadinova, PhD/