STANDPOINT

by

Assoc. Prof. Victoria Svetlomirova Gatzova, PhD

Higher School of Insurance and Finance - Sofia

of a dissertation for awarding the scientific degree "**Doctor of Science**" in the field of higher education 3. Social, economic and legal sciences

Professional field 3.8. Economy

Author: Dr. Irena Brukwicka

Title: Economic aspects of the treatment of diabetic foot and their impact on the healthcare system in Poland

1. General description of the submitted materials

By order No. 816/12.12.2023 of the Rector of the Higher School of Insurance and Finance, Prof. Dr. L. Sc. Boris Velchev, I have been appointed as a member of the scientific jury to ensure a procedure for the defense of a dissertation work on the topic: "Economic aspects of the treatment of diabetic foot and their impact on the healthcare system in Poland" for obtaining the scientific degree "Doctor of Science" in the field of higher education 3. Social, economic and legal sciences, professional field 3.8. Economy.

The author of the dissertation is Dr. Irena Brukwicka - a candidate for the "Finance and Insurance" Department of VUZF.

In connection with the procedure, Dr. Irena Brukwicka submitted the following documents:

- Dissertation work;
- Abstract of the dissertation in Bulgarian and Russian;
- Reference on the fulfillment of the minimum national requirements for obtaining the scientific degree "Doctor of Science";
- List of scientific publications on the topic of the dissertation;
- Summaries of the publications on the topic of the dissertation;
- The full texts of some of the publications on the topic of the dissertation work;

- Reference for the contributions in the dissertation;
- Autobiography;
- Translation from Polish of the diploma for the acquired educational and scientific degree "doctor"

I accept the 13 publications on the topic of the dissertation work in non-refereed scientific publications indicated by Dr. Irena Brukwicka. The candidate has also submitted a published book based on the dissertation work for obtaining the scientific degree "Doctor of Science", which she mistakenly calls a "monograph".

2. Brief biographical data about the candidate

In 1996, Dr. Irena Brukwicka completed her nursing studies and obtained a master's degree from the Medical Academy in Lublin, and in 2000 she obtained the educational and scientific degree "doctor" from the University of Silesia in Katowice. After receiving a doctorate in sociology, she became a teacher at the State Higher Vocational School in Yaroslavl. In the period 2005-2015, Dr. Brukwicka was the director of the Institute of Health Care. From 2022 until now, she has been working as the director of the university's postgraduate training of nurses and midwives. In the period from 2004 to 2022, Dr. Irena Brukwicka participated in a number of scientific conferences.

The candidate undoubtedly has extensive professional and scientific experience in the field of health care and, accordingly, in the area of the issues presented in the dissertation work.

3. Characteristics and evaluation of the dissertation

The dissertation of Dr. Irena Brukwicka, which is a theoretical-empirical study, has a total volume of 258 pages, 20 of which represent a list of the literature used.

The dissertation work is characterized by a logical sequence in the unfolding of the researched problem. It is structured into an introduction, three chapters, discussion of results, conclusions, bibliography, appendix and list of tables, figures and graphs. My recommendation to Dr. Brukwicka is to include a conclusion as the main structural part of the work and to put the formulated conclusions in it. There is an imbalance in the volume of the chapters - it is noticeable that the second chapter is much shorter (34 pages) compared to the first (100 pages) and the third (70 pages).

The literature used consists of 300 literary sources in different languages, including a number of monographs, studies, articles and online sources, and a significant part of them are from the last 5 years and are characterized by relevance. The number of used literature is a sign of the author's desire to seriously and responsibly research the problem discussed in the dissertation. The theoretical information presented, combined with the in-depth analyzes, testify to the good awareness of Dr. Irena Brukwicka regarding the researched issues.

A positive impression is made by carefully designed tables, figures and graphs, which help to better structure and visualize the information.

The dissertation contains the following mandatory elements indicated in the introductory part - relevance of the researched problem, main objective, hypotheses and research methods. The object and subject of research, as well as the research tasks are missing.

The dissertation fulfills Dr. Brukwicka's main goal, namely to reveal the trends in the Polish system for reporting the treatment and care of diabetics in the treatment of diabetic foot syndrome (DFS). The author of the dissertation formulates three hypotheses, which she tests empirically. For an even deeper study of the problem, she raises three additional hypotheses.

The first chapter of the work is devoted to clarifying the essence of type II diabetes, presenting the causes of the disease and considering the complications resulting from it, such as the diabetic stage. These problems are presented in an economic context in terms of treatment costs for both the health care system and the individual sufferers.

In the second chapter of the work, the socio-economic losses for the treatment of the diabetic foot are discussed. The differences between the three types of treatment - conservative, surgical and interdisciplinary - are presented from an economic point of view.

The third chapter, which is empirical, represents an economic and financial analysis of the benefits of treating the diabetic foot in Poland. An analysis was made of the available data regarding the services provided in the medical facilities in Poland. A forecast of the number of benefits provided during the treatment of diabetes mellitus in Poland is presented. Treatment procedures that end in amputations are also reviewed. The chapter concludes with an analysis of the indirect and intangible losses of diabetic foot treatment.

The main conclusions, reached by Dr. Brukwicka as a result of the research, are clearly formulated.

4. Scientific contributions and significance of research results for science and practice

A half-page author's report on the contributions of the dessertation is presented to the materials of the procedure. I recommend Dr. Brukwicka to make a more detailed list of contributions and formulate them more clearly and concretely.

The contributions of the dissertation can be summarized as follows:

- A large volume of information relating to type II diabetes and diabetic foot syndrome has been systematized and analyzed in an economic context.
- The first empirical study was conducted in Poland, revealing the importance of economic considerations when choosing a diabetic foot treatment.
- The results of the conducted research and the conclusions, formulated based on them, contribute to making informed decisions regarding the treatment of diabetic foot.

5. Evaluation of publications on the dissertation work

In the list of publications on the topic of the dissertation, Dr. Brukwicka has indicated 13 publications in non-refereed scientific publications. All 13 publications on the topic of the dissertation are co-authored, 10 of them are in English, and the rest are in Polish. Among the materials for the procedure, the candidate included a published book based on the dissertation work for obtaining the scientific degree "Doctor of Science".

In the reference to the minimum national requirements, Dr. Brukwicka has listed a large number of publications that are not on the topic of the dissertation, again all co-authored. This rich scientific production is a testimony to the serious research potential of Dr. Irena Brukwicka.

6. Assessment of compliance with minimum national requirements

According to the presented materials, I can conclude that Dr. Irena Brukvitska fulfills the minimum national requirements for acquiring the scientific degree "Doctor of Science" in the professional field 3.8. Economy.

7. Abstract

An abstract in Bulgarian and Russian is attached to the dissertation work. It has a volume of 30 pages and correctly reflects in a concise form the structure and the content of the dissertation work. I recommend that the PhD student add a table of contents and a list of the contributions according to the good academic practices.

8. Critical remarks and recommendations

Along with the merits of the work, I have several critical remarks and recommendations to the dissertation and the materials presented to it:

- In the introduction, the object and the subject of research, as well as the research tasks should be formulated.
- According to the good academic practices, it is necessary to include in the abstract a list of the contributions of the dissertation work.
- It is necessary to present information about the publications on the topic of the dissertation more precisely, as there are discrepancies in the abstract, the list of publications and the reference to the minimum national requirements, which create confusion.
- The scientific publications and their summaries are on the topic of the dissertation, not the habilitation, as Dr. Brukwicka has written in several places.
- I recommend Dr. Irena Brukwicka to make independent publications because a very large part of her scientific production is co-authored.

CONCLUSION

The dissertation contains scientific and scientific-applied contributions and meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for the Implementation of ZRASRB.

The dissertation shows that the candidate, Dr. Irena Brukwicka, possesses in-depth theoretical knowledge and demonstrates qualities and skills for independent research.

Due to the above, I give my positive assessment of the conducted research, presented by the above-reviewed dissertation work, abstract, achieved results and contributions, and I propose to the honorable scientific jury to award the scientific degree "Doctor of Science" to Dr. Irena Brukwicka in the field of higher education 3. Social, economic and legal sciences; professional field 3.8. Economy.

05.01.2024 **Reviewer:** (s)

(Assoc. Prof. Dr. Victoria Gatzova)