

## OPINION

From: Assoc. Prof. Dr. Zhivka Karagiozova, PhD  
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Department of Obstetrics and Gynecology

**Regarding:** the dissertation of Dr. Zhivko Stoyanov Zhekov on the topic:  
"Methods of termination of pregnancy in obstetric and gynecological practice"

I present this opinion, according to order № P-109-83 / 11.03.2021г. of the Dean of MU-Varna, as a member of the scientific jury under the procedure for obtaining the educational and scientific degree "Doctor" to the candidate Dr. Zhivko Stoyanov Zhekov.

### **I. Summary data on the applicant**

Dr. Zhivko Stoyanov Zhekov was born on October 26, 1961 in Varna. In 1987 he graduated Medicine at the Medical University - Varna. In 1993 acquired a clinical specialty in Obstetrics and Gynecology at Medical University - Varna and since 2018 is enrolled as a doctoral student in independent training at the Department of Obstetrics and Gynecology at MU - Varna. Since 2016 until now he holds the position of Head of the Gynecology Department at SBAGAL - Varna.

Dr. Zhekov has conducted numerous courses and specializations in the field of endoscopic gynecological surgery.

**The dissertation** of Dr. Zhivko Zhekov contains 150 pages and is illustrated with 72 graphs and 25 tables. Attached is a reference for scientific contributions, a list of publications related to the topic of labor. The cited bibliography covers 270 literary sources, of which 174 in Latin and 33 in Cyrillic. The dissertation is structured according to the established requirements.

### **II. Relevance of the topic**

Abortion is the most commonly performed gynecological procedure, with more than 56 million abortions performed worldwide each year, the largest percentage of which is in developing countries. In recent years, the efforts of physicians have focused mainly on improving the conditions and techniques for performing abortions, as well as in terms of

efficiency, safety and reduced risk of complications. The Ordinance №2 of the Ministry of Health in force in the Republic of Bulgaria of 01.02.1990 has been revised and updated in the Draft Medical Standard in Obstetrics and Gynecology and is to be presented for public and professional discussion, introducing the boundary between abortion and birth and the place and type of the techniques used, including surgical and medical, and also those off-label. So far, no guideline has been presented for the surgical and medical termination of pregnancy at different times by experts of the Bulgarian Society of Obstetrics and Gynecology. Dr. Zhekov has focused his attention on the applied surgical manipulations.

**In the literature review**, Dr. Zhekov has systematized and discussed current discussion opinions. The analysis of the literature data clearly emphasizes the relevance of the treated problems. The formulation of the set goals and objectives on the basis of the performed analysis of the literature data are the basis for the analysis and interpretation of the obtained results.

The **aim** setting and **objectives** are clear. The aim is to perform a comparative analysis of the methods used for abortion (surgical and medical) in modern obstetrics and gynecology, optimizing the criteria for the application of procedures during the I and II trimesters of pregnancy. The formulated objectives are 6 in number.

In the section "**Materials and methods**" the main groups of the working material are specifically and precisely separated. The dissertation is prepared on the basis of research conducted in SBAGAL "Prof. Dr. D. Stamatov "- Varna and MHAT" St. Anna "- Varna for the period from 2013 until 2018. The study is of a retrospective and prospective nature. The author distinguishes very precisely the inclusion and exclusion criteria, which is an approach that guarantees exactly the maximum reliability of the subsequent conclusions. Statistical processing is based on primary data processing, statistical analysis and graphical representation.

The section "**Results and discussion**" is presented in 6 subsections in accordance with the set tasks of the dissertation, which brings clarity to the presented data. The results are summarized in simplified tables and graphs, which illustrate the conclusions made by the author. The correct algorithm of application of a certain method for termination of pregnancy, in terms of success, safety and complications is a key factor for the success of the method.

**In conclusion**, Dr. Zhekov emphasizes that the treatment of patients should be individualized according to specific features, offering an optimized approach to the selection of patients for abortion, but at the same time subject to the rules imposed by modern evidence-based medicine.

As a result of the performed analysis, 8 conclusions are formulated in the proposed dissertation.

The dissertation points out a number of **contributions**, divided into two categories - contributions of a confirmatory nature and contributions of an original nature. From the contributions of original character, the dissertation emphasizes contribution number 3 "Algorithm for application of Topogyne in medical abortion in the II trimester is being implemented"

#### **Notes and recommendations:**

The bibliography covers 207 literary sources arranged in alphabetical order, of which 33 in Bulgarian authors in Cyrillic and 174 in Latin. It is noteworthy that the Bulgarian experience in the field of abortion in its different terms and with different methods has been well studied and cited. The dissertation shows a broad overview of the experience on the topic in world literature. This is a serious basis for the correct formulation of the goals and objectives of scientific work, as well as the interpretation of the results.

A valuable quality of the dissertation is the research method, which includes retrospective and prospective material.

**As contributions of an original nature**, I consider that the following should be highlighted:

1. For the first time in the country a study was conducted, which measured the relative risk of early and late complications of medical and surgical abortion in the I and II trimesters of pregnancy.
2. The relative risk of early complications of vacuum aspiration is found to be two to three times lower than that of medical abortion in the first trimester, and the use of medical abortion in the second trimester is associated with a reduced risk of infertility and late complications.
3. The economic expediency of the methods for termination of pregnancy - abortion in the I and II trimesters of pregnancy is clarified.

The other contributions indicated by the dissertation are of a confirmatory nature.

### **III. Conclusion**

The dissertation presented by Dr. Zhekov fulfills the criteria for scientific work with clinical and practical orientation in the way of development, methods of implementation, content and form of presentation.

The author's conclusions are well illustrated in the text with figures, diagrams and tables.

The assessment is that the dissertation has successfully coped with the tasks.

In general, it follows from the above that:

1. The set aims and objectives of the considered problem have been solved successfully.
2. The elaboration, summarization and conclusions in the dissertation work in many points are theoretically and practically useful.
3. The end result of the work is undoubtedly positive and represents a serious scientific and practical contribution.

The presented dissertation on "Methods for termination of pregnancy in obstetrics and gynecological practice" has the qualities of a research paper, which is why I give my completely positive assessment.

I propose to the esteemed Scientific Jury to vote positively for the award of the educational and scientific degree "Doctor", in the scientific specialty "Obstetrics and Gynecology" to Dr. Zhivko Stoyanov Zhekov.

13.04.2021.

PREPARED THE OPINION: .....

/ Assoc.Prof. Dr. Zh. Karazyozova, PhD /