REVIEW

by Prof. Galina Stamova Tchaneva, PhD
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FPH "Prof. Dr. Tzekomir Vodenicharov, DM"
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Appointed as an external member of a scientific jury by Order No. R-109-51/15.02.2024 of the Rector of the MU "Prof. Dr. P. Stoyanov" city of Varna

Regarding: procedure for obtaining the educational and scientific degree "Doctor" with candidate Ivelina Dragieva Dobreva - doctoral student in independent form of study in the doctoral program "Health Care Management" in professional direction 7.4. Public Health, with the topic of the dissertation: "Social-psychological and diagnostic approach of the medical laboratory technician as part of a multidisciplinary team for the treatment of patients with SARS-COV-2" with scientific supervisors Assoc. prof. Emilia Georgieva, Ph.D.; Assoc. Prof. Dr. Tsvetelina Turpomanova, PhD.

Actuality of the dissertation

The dissertation examines the role of the medical laboratory technician as part of the multidisciplinary team in the conditions of KOVID - 19 - a newly emerging infectious disease, highly contagious, caused by an unknown agent, with an unclear course, treatment and prognosis. The resulting pandemic put all medical professionals and society in general in an extreme situation, and medical laboratory technicians were among the specialists who met on the front line with infected patients. It is essential to assess the socio-psychological and emotional state of health professionals during a pandemic, as well as that of patients, in order to propose effective ways to overcome the negative effects of the disease. It is necessary to continuously increase the professional competences of medical specialists in various settings in order to be able to deal

quickly and promptly with the problems that have arisen, as well as to support patients and families in general.

Structure of the dissertation

The dissertation is structured in four chapters: first chapter - The Covid pandemic - challenges to public health; second chapter - methodology and organization of scientific studies; third chapter - results of own research and discussion; fourth chapter - approaches to improving and maintaining the mental health of medical laboratory workers.

The volume of the dissertation includes 160 standard pages, and the results are graphically presented in 52 figures, 16 tables and 3 appendices. The literature used covers 152 titles, of which 66 are in Cyrillic and 86 are in Latin.

In the literature review, the doctoral student describes chronologically the emergence of the Covid epidemic and the decisions made on a global scale. According to the data presented, at the end of 2021, the number of people who died from the virus infection was 24,454. Social and psychological problems of patients with SARS-COV-2 are reviewed. Data from a number of studies on the impact of communicable diseases on mental health are presented. The influence of the hospital environment on the mental state of patients diagnosed and treated with Covid-19 is described. The topic of the impact of the pandemic on the mental health of medical professionals is also discussed.

The doctoral student pays special attention to the professional responsibilities of medical laboratory workers in the process of clinical-laboratory research, and the laboratory indicators and clinical pathways in the treatment of patients with SARS-COV-2 are examined.

The activities of the medical laboratory technician as part of the multidisciplinary team in the diagnosis and treatment of patients with Covid are described, characterizing the professional relationships with the other specialists of the team - the nurse and the attending physician.

The aim and tasks of the dissertation work are clearly and concretely formulated, corresponding to the topic chosen by the doctoral student and aimed at researching the need for a socio-psychological and diagnostic approach of the medical laboratory technician in patients with SARS-COV-2 for full and effective participation in the multidisciplinary team. Methodologically, three working hypotheses, subject and object of the research are defined. A total of 200 respondents were included in the study, who were divided into three groups: first group - doctors and nurses; second group - medical laboratory workers and third group - patients. The study was carried out in medical facilities on the territory of the city of Stara Zagora. The doctoral student presents the stages of the research, which include a description of: the activities, the tools, the place and time of conducting the research.

The methods used are: documentary method; sociological methods - survey; statistical methods – descriptive and evaluation methods, hypothesis testing methods. Three questionnaires were developed: for medical laboratory workers; for doctors and nurses; for patients who have recovered from Covid-19.

The results are presented graphically and analytically in the third chapter. According to the data received, the average age of medical laboratory technicians is 40 years, and more than half of them - 62.00% - contracted the coronavirus during the performance of their official duties. Respondents' levels of stress, worry and anxiety were explored, with more than half worried about the risk of infecting the family. Medical laboratory technicians believe that they were not prepared to communicate with patients and above all when informing patients about the results of tests for Covid. More than half of the doctors and nurses surveyed said that they did not feel worried about the fact that they had to work on the front line with patients sick with Covid. Doctors who were infected the virus are less than half of the respondents, and nurses - more than half -

58.62%. Almost all surveyed medical professionals point to the need for a multidisciplinary team in the treatment of patients with Covid and the application of a special behavioral approach. A demographic characteristic of the patients who recovered from Covid was made, the signs of anxiety and the feelings experienced during the pandemic were analyzed.

In the fourth chapter, approaches to improving and maintaining the mental health of medical laboratory workers are described, and strategies for coping with occupational stress are proposed. Based on the research results, a model for the prevention of mental health of medical laboratory workers was developed. The model includes an algorithm of 7 stages, ensuring the good professional training of medical laboratory technicians. The doctoral student has also developed "Clinical-laboratory constellations in patients with Covid".

The dissertation uses a scientific style and language to reveal the problems that arose during the Covid-19 pandemic and, more specifically, the impact of the viral infection on the mental health of patients and medical professionals.

Dissertation Contributions

The contributions of the dissertation have a theoretical-cognitive and practical-applied nature:

- An in-depth study of the opinion of medical laboratory technicians regarding the introduction of a psychological approach to patients was conducted, as well as to determine the place of medical laboratory technicians in multidisciplinary teams.
- The leading factors influencing the mental health of medical professionals in the diagnosis, treatment and care of patients with Sars-Cov-2 are identified.
- The need for a psychological approach of medical laboratory workers to patients diagnosed with Covid-19 was analyzed.

- A clinical-laboratory constellation for patients with Covid was developed, including the thematic plan of the curriculum of the students of the "Medical Laboratory Technician" specialty.
- A model for the prevention of mental health of medical laboratory workers and an implementation algorithm were developed.
- Topics for postgraduate training of medical laboratory technicians are proposed, on the basis of which they will be able to build a specific socio-psychological approach to patients during laboratory control.

The conclusions are analytically and synthetically presented, defining the main problems of medical laboratory technicians in the conditions of the Covid-19 pandemic. The doctoral student has skills for correct use of scientific data and information, their processing, analysis and presentation.

The abstract of the dissertation work includes the main elements of the conducted research. The doctoral student presents 2 publications related to the topic of the dissertation.

Biographical data for the doctoral student

In 1990, Ivelina Dobreva graduated in the specialty "medical laboratory technician" at PMI - Plovdiv. In 2011, she completed the Bachelor's program in "Health Care Management" at the Faculty of Medicine of Trakia University - Stara Zagora, and in 2015 - the Master's program in "Health Care Management" at the Medical University - Plovdiv.

Ivelina Dobreva's professional career began as a medical laboratory technician in the Hospital of Stara Zagora. From 1996 to 2006, she was a medical laboratory technician at the Central Clinical Laboratory of UMBAL «Prof. Art. Kirkovich», Stara Zagora. Since 2006, she has been a medical laboratory technician at the Rhythm Center, Stara Zagora, and since 2012, a medical laboratory technician at the Clinical Laboratory of the Beroe Medical

Center. Since 2011, I. Dobreva has been a teacher at the Medical College of Trakia University, and from 2016 to the present moment she is a senior teacher of students from the specialty "medical laboratory technician".

Conclusion

In conclusion, I believe that the dissertation work on the topic: "Social-psychological and diagnostic approach of the medical laboratory technician as part of a multidisciplinary team for the treatment of patients with SARS-COV-2" fully meets the requirements of the Regulations for the Development of the Academic Staff of the MU - Varna, which is why I give a positive assessment and propose to the members of the scientific jury to make a decision to award the educational and scientific degree "doctor" to Ivelina Dragieva Dobreva in professional field 7.4. Public health and scientific specialty "Management of health care".

25.04.2024

Заличено на основание чл. 5, §1, 6. "В" от Регламент (EC) 2016/679 Prof. G. Tchaneva, PhD

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