

## REVIEW

by Prof. Yolanda Konstantinova Zografova, PhD, Institute for Population and Human Studies, BAS, (professional field 3.2 Psychology) on the scientific publications for participation in a competition for the academic position of associate professor, at New Bulgarian University, Master's Faculty, Department " Cognitive science and psychology", announced in SN No: 5/16.01.2024 (3.2 Psychology), with candidate assist. prof. Evgeniya Dimitrova Hristova, PhD.

Assist. Prof. Evgeniya Hristova, PhD. is the only candidate who participates in the announced competition for the academic position of "associate professor" at New Bulgarian University in the professional field 3.2 Psychology .

Evgeniya Hristova participates in the competition with a monographic habilitation work, with 15 articles and reports and 1 studios published in scientific publications, indexed and referenced in world-known databases with scientific information, with 7 articles and papers and 2 studies published in non-refereed journals with scientific peer reviewed or published in edited collective volumes. Dr. Hristova has also co-authored two published books.

Most of the candidate's publications are co-authored, with many as first author. There are 22 citations in refereed and indexed scientific publications or in monographs.

**The monographic work** " Life vs. Life Moral Dilemmas in Allocaton of Scarce Medical Resources " is structured in three main parts, dedicated to the theoretical ideas in the sphere of moral dilemmas, to the different scientific approaches and views towards the discussed issues, to the presenting of the experience in different countries and of the empirical own research. On the basis of an interdisciplinary approach, multifacetedness has been achieved in posing the problems of moral choice in dilemmas in the medical and health sphere, which allows Dr. Hristova to discuss and bring to public and scientific attention such essential, existential problems of the human life and its continuation.

The theoretical part covers classical theories and ideas from the point of view of philosophy, bioethics, medical ethics and psychology. Both classical and modern ideas in the field of utilitarianism, deontology, egalitarianism are presented. The ideas of the theory of rights, of justice as fairness, principlism, contractualism also lay a good basis for the subsequent concretizations in the field of ethical principles in the allocation of limited medical resources. The author presents the deeper philosophical ideas and principles of ethics, thereby outlining the complexity of research questions regarding the distribution of medical resources. It is expected, after all, that the societal contract express justice and ensure well-being and conditions for a longer life expectancy for everyone, and this requires consideration of many social, financial, legal, medical factors. It is necessary also adapting to the national context with its inherent peculiarities and limitations.

In the theoretical part or state of the art a high scientific competence and at the same time a very good and clear scientific style of the presentation are demonstrated.

The paragraph on ethical principles of scarce medical resources allocation presents different perspectives on how the medical resources can be allocated and the effectiveness of medical interventions evaluated. Medical standards for triage, which, based on the literature, are considered to be "allocation rules realizing ethical values and principles such as maximizing utility (saving the most lives, saving the most years of life, preserving most years of quality-adjusted life), equality (random selection by lottery, on a first-come, first-served basis), priority for the most needy'.

There is a clear trend in the literature that utilitarianism prevails - the ideas and principles according to which the goal is more lives saved, more years of life saved, etc. in the spirit of increasing prosperity and prolonging human life. But Dr. Hristova poses a valid question, "Which decision is moral - the one that maximizes utility, or the one that is based on the assumption that people have equal rights?"

In the next part two, the solutions are sought in a context of the situations of crises, pandemics, disasters and how in such critical situations ethical principles are followed, moral values are supported, but in accordance with the human right to life and the right

everyone to be saved if is necessary. It turns out that in Bulgaria there are no accepted principles for triage in crisis situations, but the various medical practices and ethical principles followed in different countries and proposed in the scientific literature are presented. The specific context is the recent years' Covid-19 pandemic. The pandemic posed many problems to the governments in the most countries, to experts, to medical specialists, to various social groups. The need for principles for the distribution of scarce medical resources has become particularly acute. The presented principles and rules of triage in different countries can also puzzle people who are not experts, although the principles are based on common moral values - the lives saved, specific rules are included - for example, priority to treat the younger people with longer life perspective and that the principle of "first come, first served" should not be respected. Serious questions arise - if moral principles take into account the common good and seek justice for everyone, then fact that the elderly patient, who has probably worked for dozens of years and has been continuously withheld from health insurance, does and should he receive timely care even in a critical situation? But it is also natural to believe that the young person should live more years, and would have a longer life perspective. Lawers, ethicists, psychologists should be engaged in discussing and resolving such dilemmas. Questions may continue regarding access as well – ie. the fact that the principle of first come first treated, is not accepted does it not contradict the whole accepted practice that everyone should be accepted, e.g. at the appropriate time to the doctor or according to his order? Of course, these are questions provoked by the substantive and vitally important text of the monograph. Later in the text we find some answers in the author's own research. It is necessary for experts to consider the complex context of crisis situations to reach a consensus in the social contract on such dilemmas. Indeed, normal and crisis times are very different, but the practices and values adopted in societies do not suddenly change in a crisis. This part of the work is highly informative and valuable with the current medical practices and standards in different countries, and it is the first similar experience in a scientific publication in our country. It also raises important questions for which there should be clear answers, accepted protocols in our medical practices. As it becomes clear from the analysis, medical standards follow the principles of utilitarianism in the name of the common good, but Dr. Hristova notes that

this still does not happen with the necessary transparency and communication at the public level.

After presenting the state of the art and different research, the third part of the book is devoted to the candidate's own research. There are four studies, but they contain variants, so they are like a connected series of studies in the conditions of the pandemic. These are significant studies because, unlike the usual use of hypothetical dilemmas, the author investigates the realistic situations and in doing so, the choices of variants of the moral dilemmas are studied in the different stages of the pandemic. Thus, there is a high probability that the participants have been into similar situations or at least know about them during the spread of the virus. Another important point is the fact that the participants in the studies are not experts in the field of medical practice and standards, nor in the field of medical ethics. They must choose how to solve the moral dilemmas of allocation of scarce medical resources among the principles most discussed in the literature and in practice - "preserving the most human lives, preserving the most years of life, preserving life with a higher quality, both between those assumed to be egalitarian—provision of resources on a first-come, first-served basis and random allocation.'

Much of the research has already been published, and for this reason the author presents the design and the most important results and conclusions from them. However, they are presented in detail and correctly. An important contribution is the fact that cross cultural studies on the choices in moral dilemmas among their representatives are included. Unfortunately, the samples are relatively small for some kind statistical analyses, as the author also notes, but the replication of the studies over time and the inclusion of different variants of the dilemmas ensure the validity of the results. In fact, they confirm some basic guidelines in the world literature, but also outline specifics regarding choices for scarce medical resources. Utilitarian principles dominate here as well, but unlike the experts, the subjects give their preference to the "first come, first served" principle, and reject the principle of random selection, i.e. on a layman's level, the principles of normal and critical situations are mixed.

The work is useful for both psychologists and ethicists, and especially for health professionals, and has the potential to provoke public debate about standards of care for

individual life and the common good of society. The challenges are also for justice and the legal system, because it is obvious that these aspects are essential both in crisis and in normal conditions of life and treatment.

**In other publications** of the candidate, research are presented in the sphere of the moral judgment of dilemmas, conducted in recent years, and they are of the type "Trolley dilemma". Publications of these research present investigations on various factors influencing moral judgment. Along these lines, the Hristova's approach also combines psychophysiological indicators such as skin conductance, the relationship of emotional processing and moral judgment. The inclusion in this kind of research of artificial cognitive agents is also a contribution.

The classic Prisoner's Dilemma is a subject of a long-standing scientific interest of the candidate. Such attempts are almost absent in Bulgarian psychological literature, with the exception of prof. M. Grinberg's works. Thus, it also represents a significant contribution to the development of experimental psychology.

A new level of development along these lines is represented by experimental studies using eye-tracking apparatus for the study of attention and information processing. A group of publications presents the application of the method in the study of cooperation in the game "Prisoner's Dilemma" and other relevant perceptual processes regarding various objects, as well as in reading by children with dyslexia.

Dr. Evgeniya Hristova used, for the first time in Bulgaria, equipment for registering physiological data in the study of affective reactions in moral judgment, decision-making and cooperation, as well as in interaction with artificial agents.

It cannot be noted that such complex, experimental work is based on the interaction in a very good research team and collective work, which is another indicator of the need for the candidate's work in the department and the transition to the academic post of associate professor.

Regarding **the teaching activities**, Dr. Hristova leads courses in BP "Psychology" (in English), MP "Cognitive Science", and also courses in experimental psychology; courses for using the eye tracking method, which is held only in the NBU /for Bulgaria/. Another

course, which is not offered at other universities, was developed together with Prof. Maurice Grinberg - "High-tech tools for complementary and alternative communication. Assistant Professor Hristova has also lectures at various international universities.

Dr. Hristova's activity is also in the line of various research and applied projects, **together with students and doctoral students**. He is the supervisor of 25 graduates, and also supports the participation of students in various national and international forums.

The **administrative activity** of Hristova is serious - she held various positions as program director - MP "Cognitive Science", program director at the Department of "Psychology", director of the Laboratory of Neurosciences, and is currently the director of the Laboratory for Decision and Behavior Research.

**In conclusion**, on the basis of the overall scientific production, as well as the outstanding contributions to the interdisciplinary development of areas of cognitive science, bioethics, psychophysiology, I would like to strongly suggest to the respected Scientific Jury to vote for the acquisition of the academic position of "Associate Professor" from assist. prof. Evgeniya Hristova.

6.05.24.

Prof. Y. Zografova