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CUPRINS – CONTENT – SOMMAIRE – INHALT

EDITORIAL

I. STUDIES * STUDII

STUDIA UBB BIOETHICA, LXV, 1-2, 2020 (p. 5-8)
(RECOMMENDED CITATION)

Editorial:

Ethics and responsibility in the 'fake news' times

Maria ALUAŞ

"Doubt is not a pleasant condition, but certainty is absurd"
(Voltaire, 1694-1778)

"Life is wasted on the living"
Nathaniel Sr., Six Feet Under (HBO, 2001–2005)

In March 2020 the COVID-19 a pandemic was declared by the World Health Organization (WHO) representatives, and governments adopted special laws and implemented restrictions measures for population, unimaginable and incredible before. As direct consequences people reacted, buying food supplies, and advancing apocalyptic scenarios about the pandemic and the goal of official measures. Population was divides in three categories: people who consider the pandemic a war, sustained by conspiracies; people neutral, thinking that every news deserve attention, but with reserve; and people who consider that we are living a period with the Coronavirus and if they are aware about the danger, they take care of them, pandemic will end soon.

In all this time the population faced a huge amount of news: sensational, contradictory, unbelievable news. And all social media supported the spread of all news, even the 'fake news'.

What are 'fake news' meanings?

According to Merriam Webster website, the 'fake news' is frequently used "to describe a political story which is seen as damaging to an agency, entity, or person"[1].

False or distorted news have always been disseminated, but the term 'fake news' is quite new. It appears at the end of the 19th century[2].

What is the role and meaning of 'ethics' in this period?

The term *ethics* comes from the Greek (*êthos*) and refers to habits, behaviors, rules of behavior. The ethics recommends people to respect the values in everyday behaviors, being a sort of "laic moral"[3].

The ethics is the study of the concepts related to the practical reasons: good, right/law, duty, obligation, virtue, liberty, rationality, choice[4].

Guy Durand[5] consider that *ethics* covers the more types of realities:

1. The research of norms and of rules of conduct, values analysis, the analysis of the fundamentals of the obligation or of values.
2. The systematization of the thinking of an author or of a school. It is talked about Se Kant's ethics or of Plato's ethics. Some Protestant theologians used the expression "Christian ethics" to refer to the values of the Christian Gospel and to their concrete translation in everyday life.
3. The concrete practice and the achievement of values.

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1 The Real Story of 'Fake News', available online at: https://www.merriam-webster.com/words-at-play/the-real-story-of-fake-news, last accessed on 12.07.2020.
2 *Ibidem*.
3 G. Durand, *La bioéthique*. *Nature, principes, enjeux*, Cerf/Fides, 1997, p. 16.
4 S. Blackburn, *Dicționar de Filosofie* , Ed. Univers Enciclopedic, București, 1999, p. 132.
5 G. Durand, *La bioéthique*…, p. 17.

The role of ethics in the time of Covid-19 pandemic was and is to advocate for moderation, the right measure of thinking of every one of us, no matter if we are governors, healthcare providers, or simply … people. We should have a critical opinion and consciousness of good and bad the actions, news, and behaviors.

It is obvious that the general knowledge and perception on what we live during these times cannot offer viable solutions for all the concrete situations encountered in the day by day life.

Bioethicists have nowadays the task to be courageous, prudent, and informed sentinel of human choices. The reality brought up by of Covid-19 pandemic opens to wider horizons, which raise more complex and demanding questions in terms of autonomy, communication, mobility, interaction, and responsibility of their choices.

It is difficult to distinguish real and fake news, as they have become spread through the same media. There emerges the need to elaborate and understanding of human life and human behavior in time of crisis and an attentive critical reflection on mass media and social media, contemporary culture, and the ensuing responsibilities.

This new issue of *Studia Universitatis Babeș-Bolyai – Bioethica* introduces new topics related to the reality we live in present, the Covid-19 pandemic, to research medical and clinical practice and topics related to bioethical debate on refusal of treatments. We believe that ethics needs more and more attention in day-by-day life, in order to understand and examine our moral life, our choices, preferences, facts and responsibilities.

*I. STUDIES * STUDII*

STUDIA UBB BIOETHICA, LXV, 1-2, 2020 (p. 11-20)
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ETHICAL CONSIDERATIONS ON THE CONNECTION BETWEEN BIOLOGICAL WEAPONS AND COVID-19 PANDEMIC

MARIA ALUAŞ[1], IONUŢ ISAIA JEICAN[2]

ABSTRACT. After the Covid-19 pandemic was officially declared by the United Nations Organization on 11 March 2020, this has been associated with the state of war and biological weapons. Could the Covid-19 pandemic, which caused hundreds of thousands of deaths worldwide, be considered a result of experiments? A simple search on search engines for the terms "biological weapons" and "Covid-19" retrieves approximately 10,200,000 results in 0.69 seconds, allowing to conclude that the two ideas and concepts have been frequently associated lately. During the periods of restrictions imposed on the population by authorities (emergency ordinances, state of emergency, lockdown measures, etc.), various apocalyptic scenarios have been advanced and debated, mass media and social networks being an unprecedented arena for raising topics and taking stands. The population has been assaulted with extreme information, and words such as war, weapons, insecurity, and control have been frequently expressed. This paper aims to highlight the ethical issues regarding the connection between the Covid-19 pandemic and biological weapons.

Keywords: *biological weapons, Covid-19, ethical considerations*

REZUMAT. Consideraţii etice cu privire la corelaţia dintre armele biologice şi pandemia Covid-19. După ce pandemia Covid-19 a fost declarată oficial de către Organizaţia Naţiunilor Unite, în 11 martie 2020, s-au făcut asocieri cu starea de război şi cu armele biologice. Ar putea fi considerată pandemia Covid-19, care a provocat sute de mii de decese în întreaga lume, drept rezultatul unor experimente? La o simplă explorare pe motoarele de căutare a termenilor „biological weapons" şi „Covid-19", motorul de căutare ne indică un număr de aproximativ 10.200.000 de rezultate în 0,69 de secunde, concluzionându-se că asocierea dintre cele două idei şi concepte s-a făcut de numeroase ori în ultima

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vreme. În timpul perioadelor de restricții impuse populației de către autorități (ordonanțe de urgență, stare de urgență, măsuri de carantină etc.), s-au avansat și s-au dezbătut diferite scenarii apocaliptice, mass-media și rețelele de socializare fiind arena care a provocat teme și luări de poziție fără precedent, populația fiind asaltată cu informații extreme, enunțându-se deseori cuvinte precum război, arme, nesiguranță, control etc. Obiectivul acestui articol a fost să evidențieze considerațiile etice cu privire la corelația dintre pandemia Covid-19 și armele biologice.

Cuvinte cheie: arme biologice, Covid-19, considerații etice

Calling things by the wrong name adds to the affliction of the world.
(Albert Camus, *The Plague*, 1947)

Introduction

After the Covid-19 pandemic was officially declared by the United Nations Organization on 11 March 2020, this has been associated with the state of war and biological weapons. Could the Covid-19 pandemic, which caused hundreds of thousands of deaths worldwide, be considered a result of experiments? The conspiracy theories massively disseminated by social media regarding the presence of a biological agent of military origin have led scientists to publish the genome of the causal agent, SARS-CoV-2, concluding that this novel coronavirus has its origin in the wild fauna[3]. The Wuhan P4 laboratory is not a military laboratory, SARS-CoV-2 is not a biological weapon, and China is a state that is part of the Convention on the Prohibition of Bacteriological Weapons and their Destruction[4]. This paper aims to highlight the ethical issues regarding the connection between the Covid-19 pandemic and biological weapons.

Before arguing the coordinates and characteristics of a biological war and the extent to which the Covid-19 pandemic resembles such a situation, we have to make some terminological clarifications.

[3] Kristian G. Andersen, Andrew Rambaut, W. Ian Lipkin, Edward C. Holmes, Robert F. Garry, "The proximal origin of SARS-CoV-2". *Nature Medicine*, 2020; DOI: 10.1038/s41591-020-0820-9.

[4] Nie JB. "In the Shadow of Biological Warfare: Conspiracy Theories on the Origins of COVID-19 and Enhancing Global Governance of Biosafety as a Matter of Urgency". *J Bioeth Inq.,* 2020; 17(4):567-574. DOI:10.1007/s11673-020-10025-8.

General considerations on the topic

Biological weapons consist of microorganisms (bacteria or viruses) or infectious substances derived from these organisms. They are weapons of mass destruction that propagate living organisms or infectious germs with the aim of causing disease or death of human beings, animals or plants[5]. The danger posed by these weapons is explained by the fact that germs are alive and can multiply, propagate and infect the population. Biological agents can mainly take the form of bacteria, viruses or toxins[6].

The term "virus" comes from Latin and means "poison". The infectious agent of which it consists was only identified in 1938, with the advent of the electron microscope, developed after World War II. This is what Pasteur called in 1885 the "anger virus"[7], to describe clinical symptoms and not its agent. When it is not active, the virus takes an inert form, termed virion, which has no metabolism and no capacity of reproduction or autonomous activity. A virion has neither cytoplasm nor nucleus, and presents a nucleic acid with proteins in a defined and constant structure. A virion contains one type of nucleic acid: DNA or RNA. It is capable of dividing itself only by using the cell machinery. It reproduces starting from its genetic material: DNA or RNA, and in the latter case, a reverse transcriptase will allow the transformation of RNA into DNA which can fit into the genome of the cell. The virus can then remain dormant or will divert the cell functioning to its benefit and will replicate. By diverting the protein mechanics of the cell to its benefit, there will be a production of virions which will cause an inflammatory reaction on the part of the living organism.

Coronaviruses (commonly known as CoV), RNA viruses with an extremely long single strand (several thousand nucleotides), belong to the subfamily of Coronavirinae within the Coronaviridae family[8]. The name Coronavirus, which means "crown virus", is due to the appearance of virions which, under the

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5 Bernard Massoubre, „Les défis de l'éthique face au bioterrorisme", available online at: www.Bioethique.com; https://bioethique.com/index.php/medecinedurgenceetdecatastrophe/bioterrorisme/152-les-defis-de-l-ethique-face-au-bioterrorisme, last accessed 12.06.2020.

6 Ministère de l'Europe et des Affaires Externes, „Lutte contre les armes biologiques", available online at: https://www.diplomatie.gouv.fr/fr/politique-etrangere-de-la-france/securite-desarmement-et-non-proliferation/desarmement-et-non-proliferation/lutte-contre-les-armes-biologiques/

7 Christian Arthur, „Virus, coronavirus, Homme, faune sauvage et Chiroptères : quelles (premières) leçons tirer de la pandémie sur notre relation à la nature ?". Mammifères sauvages n°79 - supplément - avril 2020. Available online at : https://www.sfepm.org/sites/default/files/inline-files/SFEPM_Virus_FauneSauvage_21-05-2020_0.pdf, last accessed 12.06.2020.

8 *Ibidem.*

electron microscope, appear as balls with a fringe of large protuberances that surround the envelope, taking the form of a solar crown.

Because all biological processes depend on chemical or psychochemical reactions, the distinction between chemical weapons and biological weapons can become blurred[9]. Thus, bacterial toxins (staphylococci, cholera, botulism) can be used independently of the organism that produces them and become "simple chemical agents" that can be synthesized in the laboratory – by classical or genetic methods, and can be employed on a wide scale. Any microorganism could be used as a biological weapon: viruses (yellow fever, encephalitis, viruses from tropical regions, flu, smallpox), rickettsiae (epidemic typhus), bacteria (plague, carbon due to bacillus anthracis, typhoid fever), Lyme disease caused by a Borrelia species, etc. These agents induce fever, nausea, gastrointestinal disorders, which may lead to death. It is not always necessary to kill one's enemies, disease can make them incapable of fighting or working, which is enough for the economy of a country, a continent or the world to be destabilized. Population groups can be the victims of biological weapons or weapons of mass destruction, similarly to chemical or nuclear weapons.

History of pandemics

Since the Antiquity, diseases have decimated entire populations[10] in a short period of months, spreading terror among the inhabitants facing an unknown evil. As a globalized epidemic, a pandemic is characterized by rapid propagation and a high mortality rate. Pandemics have made millions of victims over time.

The first pandemic known in history is *the Plague of Athens* (430-426 BC), which was probably typhoid fever[11]. Described by the historian Thucydides, who himself was affected by the disease, it manifested by high fever, diarrhea, redness and seizures. Coming from Ethiopia, it extended to Egypt and Libya, then to Athens during the Peloponnesian War. It was estimated that a quarter of the city's population, 200,000 inhabitants, died during this epidemic, which marked the beginning of the decline of Athens.

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9 Maurice Errera, „Armes Biologiques", In: *Nouvelle Encyclopédie de Bioéthique*, De Boeck Université, Bruxelles, 2001, pp. 67-70.

10 Céline Deluzarche, „Les grandes pandémies qui ont marqué l'histoire", In: Futura Science, available online: https://www.futura-sciences.com/sciences/questions-reponses/histoire-grandes-pandemies-ont-marque-histoire-13440/, last acccessed on 30.04.2021.

11 *Ibidem*.

The Antonine Plague (165-166 AD) was, in fact, the smallpox[12]. Its name is derived from the dynasty of Antonins; emperor Marcus Aurelius, who belonged to this dynasty, reigned over the Roman Empire at that time. The pandemic began at the end of the year 165 in Mesopotamia, during the war against the Parthians, and reached Rome in less than a year. According to estimates, this disease caused 10 million deaths between the years 166 and 189, considerably diminishing the Roman population. Smallpox, caused by a virus and characterized by reddish scabs, diarrhea and vomiting, was declared eradicated in 1980.

The black plague epidemic (1347-1352) caused between 25 and 40 million deaths in five years, a quarter of Europe's population[13]. After having raged in China, the black plague pandemic arrived in 1346 in Central Asia, among Mongolian troops besieging the port of Caffa on the Black Sea, held by Genoese merchants[14]. The disease manifested by horrible buboes, then spread to North Africa, then to Italy and France, where it arrived through the port of Marseille via Genoese ships.

In the 16th century, the conquistadors contaminated with smallpox the Mexican populations, causing the death of two million persons. In the next century, the British triggered a smallpox epidemic by sending contaminated blankets to the Indian population in America[15].

The Spanish flu (1918-1919) was caused by an extremely virulent H1N1 influenza A virus. In fact, the Spanish flu originated in Asia[16]. It reached the United States, then crossed the Atlantic, being brought by the American soldiers who came to help France in the war. It is called „Spanish flu" because this country, which was not under the war censorship, was the first to announce the disease. When it came to an end, in April 1919, its consequences were frightful. Between 20 and 30 million people died in Europe and there were up to 50 million deaths worldwide. It is estimated that a quarter of the world's population was infected with this disease.

Cholera (1926-1932) persisting for centuries in India, spread to Russia in 1930, then throughout Europe[17]. It manifested by diarrhea and vomiting, causing rapid dehydration, sometimes leading to death within a few hours. This epidemic caused the death of hundreds of thousands of people worldwide.

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12 *Ibidem.*
13 Maurice Errera, *op. cit.,* p. 67.
14 Céline Deluzarche, *op. cit.*
15 Maurice Errera, *op. cit.,* p. 67.
16 Céline Deluzarche, *op. cit.*
17 *Ibidem.*

Between 1940 and 1945, the Japanese experimented on human beings (Chinese and Russians) the germs of tetanus and carbon, under abdominal conditions[18].

The Asian flu (1956-1957) caused by the H2N2 virus was considered the second lethal flu pandemic after the pandemic of 1918. It caused 2 to 3 million deaths globally. The virus underwent mutations a few years later - H3N2, which triggered a new pandemic in 1968-1969, called the "Hong-Kong flu"[19]. This flu marked the beginning of anti-flu vaccinations.

In 1981, the United States were accused by the USSR of using toxic agents in the form of "yellow rain", which induced skin irritation, headaches, internal bleeding to refugees[20]. The skepticism of American scientists demonstrated that there was a natural explanation to this (swarms of bees that empty their digestive tract simultaneously, leaving yellow traces on the ground); the presence of toxins has never been confirmed. These allegations led to the maintenance of mistrust and cold war for years.

International legal frameworks on the matter

The Declaration of Brussels (1874)[21] and The Hague Conventions (1899 and 1907)[22] banned the use of poisons, the last two recommending compliance with the habits established by civilized nations; they limit the choice of means allowed for weakening the enemy and forbid the bombing of defenseless cities.

The Geneva Convention (1925)[23] "bans the use of asphyxiating, toxic or similar gases, as well as bacteriological means". The protocol of this convention does not refer to banning chemical and biological weapons, but imposes the interdiction to use them during war.

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18 Maurice Errera, *op. cit.,* p. 67.

19 Céline Deluzarche, *op. cit*.

20 Maurice Errera, *op. cit.,* p. 68.

21 *Project of an International Declaration concerning the Laws and Customs of War*, Brussels, 27 August 1874. Available online: https://ihl-databases.icrc.org/ihl/INTRO/135, last accessed 12.05.2020.

22 *The International Hague Conferences of 1899 and 1907*, available online at: https://ehne.fr/en/encyclopedia/themes/europe-europeans-and-world/europe-and-legal-regulation-international-relations/international-hague-conferences-1899-and-1907, last accessed 12.05.2020.

23 *Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare*, Geneva, 17 June 1925, available online at: https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/INTRO/280, last accessed at 12.05.2020.

The Convention on the Prohibition of Bacteriological Weapons and their Destruction (1972)[24] is the main legal tool for fighting biological proliferation. Through its adoption, the convention created the legal foundations for banning the use of biological weapons.

The convention was negotiated in the context of Cold War on the initiative of the United States, United Kingdom and USSR (depository states), which renounced by common agreement the development of weapons of mass destruction and undertook to destroy biological weapons, except for humanitarian ones[25]. However, unlike the 1993 Chemical Weapons Convention, the 1972 Convention is not a control body.

The states parties of the Convention, which was adopted in 1972 and entered in force in 1975, undertake to never, in any circumstance, design, manufacture, store, purchase or transfer microbial or other biological agents and toxins that are not intended for prevention, protection or other peaceful purposes, such as weapons, equipment or vectors specifically designed for the use of agents or toxins for hostile purposes or in armed conflicts. They commit to destroy or convert for peaceful purposes all agents, toxins, weapons, equipment and vectors, this destruction or conversion requiring precautionary measures for the protection of the population and the environment. However, the agreement authorizes research on biodefense means (vaccines, protective equipment) and the production and storage of biological agents required for peaceful purposes. In the name of the imperative to be equipped against a natural epidemic or a bacteriological attack, the States are free to cultivate and manipulate pathogenic strains, to use new genetic manipulation techniques (in vitro fabrication of DNA fragments). Like in the case of chemical and nuclear substances, a structural constraint resides in the dual use of the materials concerned: bacteria or viruses cultured for prophylactic purposes which can also serve as ingredients for an "aerosol bomb"[26].

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[24] *Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction*. Opened for Signature at London, Moscow and Washington. 10 April 1972, available online at: https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/INTRO/450, last accessed at 12.05.2020.

[25] Korn Henri, Berche Patrick, Binder Patrice, « Les conventions internationales contre la prolifération des armes biologiques et leurs limites », In: *Les menaces biologiques. Biosécurité et responsabilité des scientifiques*, Korn Henri, Berche Patrick, Binder Patrice (eds.). Paris cedex 14, Presses Universitaires de France, « Hors collection », 2008, p. 57-66. Available online at: https://www.cairn.info/les-menaces-biologiques--9782130571599-page-57.htm, last accessed at 12.05.2020.

[26] Abdelwahab Biad, *La Convention sur l'interdiction des armes bactériologiques (biologiques) ou à toxines revisitée à l'ombre du Covid-19*, available online at: https://www.afri-ct.org/2020/thucyblog-n-56-la-convention-sur-linterdiction-des-armes-bacteriologiques-biologiques-ou-a-toxines-revisitee-a-lombre-du-covid-19/, last accessed 31.07.2020.

The 1972 Convention defines neither bacteriological weapons nor the militarizable biological agents or toxins in their ingredients. These are simply identified as "microbial or other biological agents, or toxins whatever their origin or method of production"[27].

Ethical considerations on the association between the Covid-19 pandemic and biological weapons

Even if evidence has been published which contradicts the fact that the Covid-19 pandemic was caused deliberately, biological weapons remain a serious concern regarding the future of mankind. These could be easily produced and there might be laboratories equipped for their industrial manufacture. They could also be used as aerosols and dispersed by airplanes, in cities, by spies or terrorists. The high interest in biological weapons is the result of the development of genetics, which leads to imagining huge possibilities in this matter[28].

Biological weapons have some shortcomings, such as difficulties in controlling their dissemination, which may depend on difficult to predict meteorological factors, including changes in the wind orientation and contamination risks. Two important aspects related to biological and chemical weapons raise increasing concerns in certain states, particularly in the United States: terrorism and the development of non-lethal weapons (NLW)[29].

Terrorism is expressed as a spectacular and mediatic act of protest against a situation deemed to be unfair or morally unacceptable (fanaticism). Terrorists might use slow acting biochemical products or biological agents. This scenario is not very credible, because the production and efficient dispersion of large amounts of carbon or salmonella bacilli, for example, or certain neurotoxic agents are technically difficult to perform. Experts rather fear attacks against individuals or localized actions.

NLW are part of American armament programs. They are aimed at overcoming the enemy's force equipped with lethal weapons by non-lethal means, in order to disperse the adversaries' human or material forces to the maximum. These weapons are theoretically intended to fill the "void" between diplomatic action and classical military action. Using modern technology, many scenarios can be imagined by which bacteriological, chemical or physical agents can be dispersed. There are different agents capable of changing the efficacy of fuels or explosives, resistance to metals. Psychological or physical aggression of

[27] Maurice Errera, *op. cit.,* p. 68.
[28] *Ibidem*.
[29] *Ibidem.*

persons can be caused by various types of electromagnetic waves (lasers). We can also imagine using genetics to make disappear ethnic groups whose genes contain specific DNA sequences or for crop destruction leading to famine. NLW are also used to maintain public order, for example tear gas[30].

Regarding the Covid-19 pandemic, the decisions of authorities[31] have been contested from the first days, in most countries of the world[32]. The most serious ethical issue derives from the massive dissemination of fake news and contradictory information which has led to the population's loss of confidence in science and in the representatives of the scientific and medical world. From an ethical point of view, this mistrust is detrimental to the scientific community in terms of time, energy and resources wasted by researchers[33]. The public's loss of confidence in scientists leads to the loss of financial support for research, with huge consequences for the population.

Conclusion

The Covid-19 pandemic caused by the SARS-CoV-2 virus highlighted the devastating effects of a pandemic on public health, economy, as well as national and international security. A lot of speculations and unverified information have been published and disseminated on a wide scale, leading to the fear and mistrust of the population in the scientific world and authorities. Despite the periodic warnings of the World Health Organization, starting with 2015, about the outbreak of a pandemic caused by an unknown pathogen ("X disease") such as Ebola or SARS, the pandemic demonstrated the unpreparedness of all states[34]. The population proved to be completely unprepared, which led to inadequate behaviors in response to the measures taken: mistrust, suspicion, fear, isolation, etc.

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30 *Ibidem.*

31 Emeline Han, Melisa Mei Jin Tan, Eva Turk, Devi Sridhar, Gabriel M Leung, Kenji Shibuya, Nima Asgari, Juhwan Oh, Alberto L García-Basteiro, Johanna Hanefeld, Alex R Cook, Li Yang Hsu, Yik Ying Teo, David Heymann, Helen Clark, Martin McKee, Helena Legido-Quigley, „Lessons learnt from easing COVID-19 restrictions: an analysis of countries and regions in Asia Pacific and Europe". In: *The Lancet*, Volume 396, Issue 10261, 2020, 1525-1534.

32 Kenneth Roth, „How Authoritarians Are Exploiting the COVID-19 Crisis to Grab Power" In: *The New York Review of Books*, April 3, 2020, Available online at: https://www.hrw.org/news/2020/04/03/how-authoritarians-are-exploiting-covid-19-crisis-grab-power, last accessed 16.05.2020.

33 Maria Aluaș, Ioana Roxana Bordea, „Integritatea în cercetare – dimensiunea integrală a excelenței academice", in vol: *Sănătatea, Medicina și Bioetica în Societatea contemporană: studii inter și pluridisciplinare,* Centrul Editorial-Poligrafic Print Caro, Chișinău, 2019, pp. 189-194.

34 Abdelwahab Biad, *op. cit*.

Despite the speculations, so far no use of a biological weapon has been demonstrated, even though there were some accusations and suspicions that the United States might have used biological weapons in Korea (1951) and Bolivia (1987)[35]. It is extremely difficult to ascertain the voluntary dissemination of biological agents, because these could be very close to the derivatives of the existing living organisms.

This article aimed to present a historical context of pandemics, the association of some of these with biological weapons, the international legal framework in this matter, and some ethical considerations resulting from the association between biological weapons and the Covid-19 pandemic.

[35] Maurice Errera, *op. cit.* p.67.

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ACCIDENTAL EXPOSURES TO BIOLOGICAL PRODUCTS – A RISK FOR MEDICAL STAFF AND PATIENTS[1]

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ABSTRACT. Hypothesis: While performing professional activities, the healthcare workers (HCW) can be exposed to blood and other potentially infectious materials from the patients they are taking care of. In order to minimize the risk of Hepatitis B virus (HBV), Hepatitis C virus (HCV) and human immunodeficiency virus (HIV) transmission, these accidental exposures should be reported and followed by post-exposure prophylaxis. If seroconversion of the injured person occurs, the healthcare unit intervenes by various methods to ensure that the infected HCW does not represent a source of infection for other patients [1]. **Objective:** Through this study we aimed to assess the perception of different categories of healthcare personnel about their testing for their carrying of HBV, HCV and HIV at the time of employment in a healthcare facility and their right to confidentiality regarding their health status. We also wanted to evaluate the opinion of the medical staff about the patient's right to be informed about the risk of HBV, HCV and HIV transmission, if there is an infected person in the medical team. **Method:** A multicentric cross-sectional study was performed, by applying an original pre-tested questionnaire to different professional categories of medical staff from different categories of healthcare facilities. **Results:** Over 20% of respondents declared they were not tested at the time of employment, but almost 40% claimed that they were tested every year since employment. Only 20% of the participants considered they have the right to confidentiality regarding the state of viral carrying, but ⅓ consider that there is no discrimination if a healthcare facility refuses to hire a HBV, HCV, HIV carrier. Out of all participants

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1 This study is part of the PhD thesis entitled "Study on the assessment of the main risk factors for incidents due to exposure to biological products in the health domain".

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questioned, ½ of the respondents agree that the medical staffs who are a carrier for a transmissible virus can be detached in a less dangerous healthcare department in order to avoid the transmission of the virus to patients. Almost equally, there were participants who believed that they could not be compelled to reveal their carrier status to the patient, and those who would have no hesitation in informing their patient about their status

Keywords: *Blood and other potentially infectious materials, exposure, healthcare workers, patient, confidentiality.*

REZUMAT. ***Expuneri accidentale la produsele biologice – un risc pentru personalul medical şi pentru pacienţi.*** **Ipoteză:** Personalul medico-sanitar (PMS) în timpul prestării activităţii profesionale este expus sângelui şi altor produse biologice provenite de la pacienţii asistaţi. Aceste expuneri sau accidente ar trebui raportate cu scopul aplicării unor măsuri de profilaxie postexpunere, pentru minimalizarea riscului transmiterii virusului hepatitei B şi C şi a virusului imunodeficienţei umane. Dacă totuşi se produce seroconversia persoanei accidentate, unitatea sanitară trebuie să intervină prin diferite metode pentru a se asigura, că personalul medico-sanitar infectat nu devine sursă de infecţie pentru alţi pacienţi îngrijiţi [1]. **Obiectiv:** Prin acest studiu ne-am propus evaluarea percepţiei diferitelor categorii de personal medico-sanitar despre testarea lor cu privire la portajul de virus hepatitic B (VHB), virus hepatitic C (VHC) şi virusul imunodeficienţei umane (HIV) în momentul angajării într-o unitate sanitară, dar şi despre dreptul lor la confidenţialitate cu privire la starea lor de sănătate. Am dorit să evaluăm şi părerea personalului medico-sanitar despre dreptul pacientului de a fi informat asupra riscului de transmitere a VHB, VHC sau HIV, dacă în echipa medico-sanitară există persoană infectată. **Metodă:** A fost efectuat un studiu transversal multicentric, prin aplicarea unui chestionar original pretestat la diferite categorii profesionale de personal medico-sanitar din diferite categorii de unităţi sanitare. **Rezultate:** Peste 20% din respondenţi au declarat că nu au fost testaţi la angajare, în schimb aproape 40% au susţinut că au fost testaţi chiar anual de când sunt angajaţi. Doar 20% dintre subiecţi au considerat că au dreptul la confidenţialitate privind starea lor de portaj viral, dar ⅓ nu cred că este discriminare, dacă o unitate sanitară refuză angajarea unei persoane cu portaj VHB, VHC sau HIV şi ½ din persoanele chestionate sunt de acord că personalul medico-sanitar purtător poate să fie mutat în sector mai puţin periculos din punct de vedere al transmiterii spre alte persoane. În pondere aproape egală au fost subiecţii care cred că nu pot fi obligaţi să-şi dezvăluie statului lor de purtător în faţa pacientului, şi cei care nu ar avea nici o reţinere în a-şi informa pacientul despre acest lucru.

Cuvinte cheie: *expunere la sânge şi produse biologice, personal medico-sanitar, pacient, confidenţialitate.*

Introduction

Accidental exposure to biological products is represented by any accidental exposure to blood and any other potentially infected material which may contain blood borne pathogens and involves damage to the skin (sting, cut), or splashing the mucous membranes or the damaged skin [2].

Healthcare workers' accidental exposure to biological products suggests a topic of great interest in all medical units, with or without beds, either public or private. This interest derives both from the frequency of these incidents and from their possible consequences on the health of the medical staff and indirectly on the health of the assisted patients.

A study was conducted between 2017-2018 on subjects of different professional categories from various types of health units, in order to collect information about the perception of HCW about the need to test them concerning the detection of HBV, HCV and HIV carrying. At the same time, they were able to express their agreement or disagreement about the right to confidentiality of the medical staff regarding their state of health at the time of employment in the health field or the right of the health unit to set conditions for hiring in relation to the candidate's health status.

They were also able to assert on the obligation of the carrier to inform their patients about this and the need for a clear legislation that determines exactly the rights and obligations of the employer, employees and patients in the event of the existence of HBV, HCV or HIV carriers among employees.

Method

The design of the study was multicenter cross sectional and included 541 participants representing HCW from different categories of public and private healthcare units and medical education units in Cluj County, Romania. An original pretested questionnaire was applied between October 2017 and June 2018 to different professional categories in these healthcare units. The questionnaire consisted of closed questions with single or multiple choices, the matrix question with single answer and open-ended questions.

The including criteria consisted in all the healthcare staff who perform healthcare activities having direct contact with the patient and/or with other potentially infectious materials and used medical devices in the selected units. The exclusion criteria were the administrative, technical and auxiliary staff that does not perform medical activity in the selected facilities.

The questionnaires were applied using paper printed materials, by the study leader or by a designated person from the cooperating health unit.

Data analysis was performed using statistical-mathematical methods (frequencies count, averages) using Excel 2010. The following variables were analyzed: testing of medical staff prior employment and periodically for HBV, HCV, HIV viral carrying, respondents' perception according to the right to confidentiality about their health status towards the employer and patients regarding a possible HBV infection, HCV and HIV.

Results

The participants to study were asked if they had been tested for HBV, HCV and HIV on employment. Almost 66% said that they had been asked for these tests and over 20% declared they had not been tested. (Figure 1)

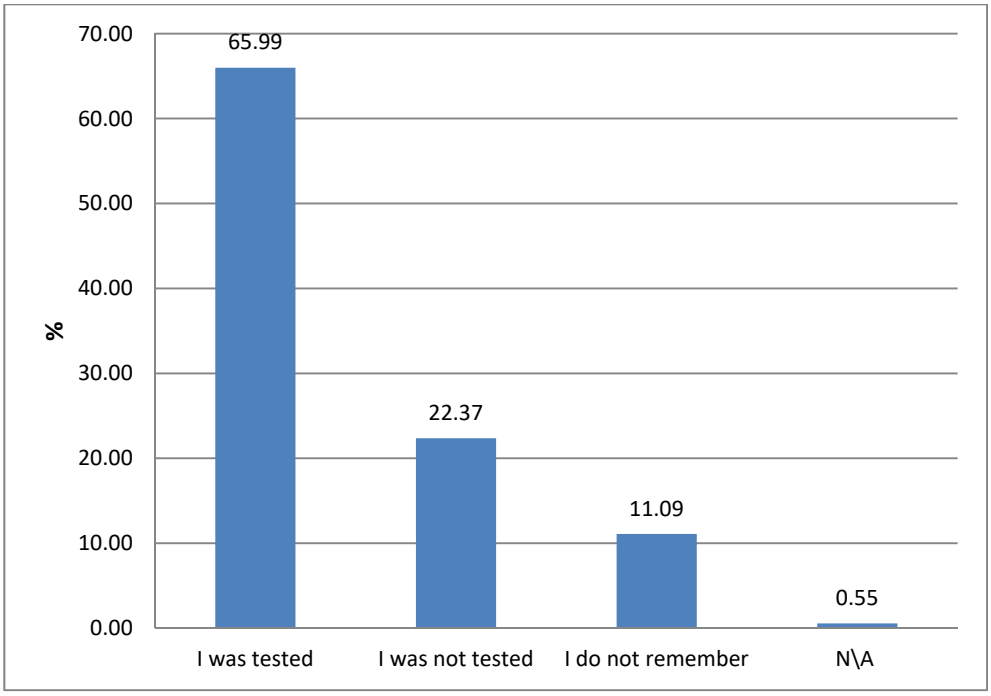

Figure 1. Percentage of tested medical staff prior employment for HBV, HCV and HIV carriers

The same participants claimed that after employment less than 40% were tested annually for HBV, HCV and HIV serology, about 10% were tested, but not every year and almost 37% were never tested again. (Figure 2)

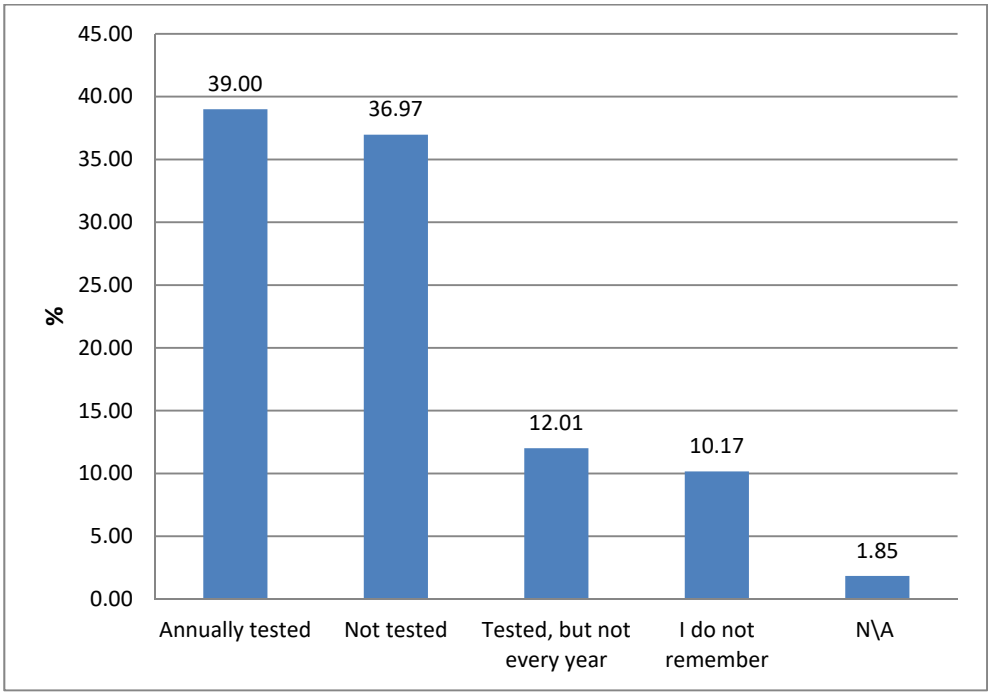

Figure 2. Periodical testing for HBV, HCV and HIV carrier status of medical staff after employment

Under ¼ of the subjects disclosed their total or partial agreement with the statement that the employer in the health sector should not know about the carrier status for HVB, HCV and HIV of the employee, all this information being confidential. Over 60% of the respondents, however, did not agree with the right to confidentiality of employees towards the employer. (Figure 3)

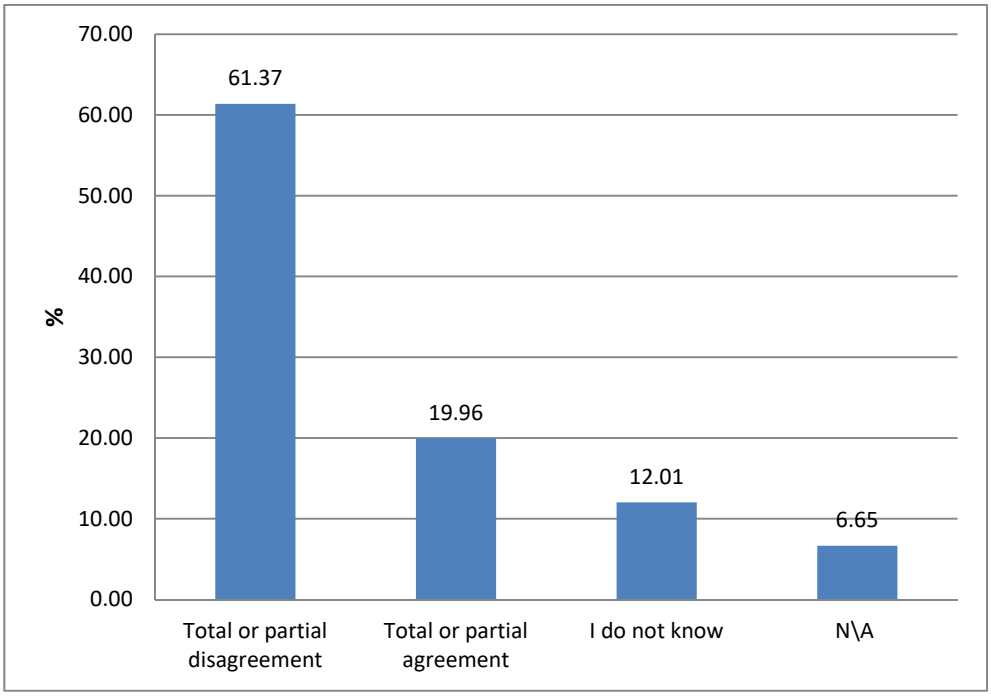

Figure 3. The employer in the healthcare sector should NOT know about the employee's carrier status for HVB, HVC, HIV, as these data are confidential

To the statement that the employer in the health sector does not have the right to condition the absence of hepatitis B or C virus and HIV, 43% of the respondents agreed that this attitude is discriminatory. However, ⅓ of the respondents consider that the health unit has the right to refuse the employment of a hepatitis B or C virus and HIV carrier and these selection criteria is not discriminatory. (Figure 4) According to ½ of the respondents, however, the employer has the right to remove the staff that has carrier status for hepatitis B or C virus and HIV from interventional medical activities, offering the HCW a safe position in terms of the possibility of transmitting the virus from staff to patient.

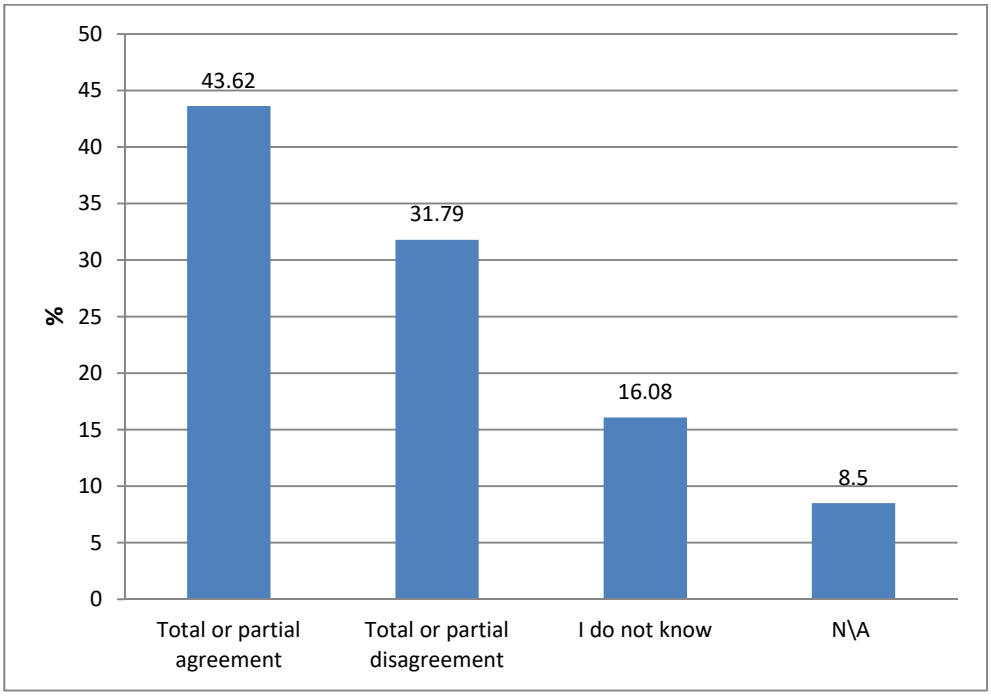

Figure 4. The employer in the health sector does NOT have the right to condition the employment by absence of hepatitis B or C virus and HIV, this attitude being discriminatory

Almost 40% of the medical totally or partially disagreed with the obligation to inform the patient about their HBV, HCV and HIV carrier status and the need to obtain the patient's written consent that they agree to receive medical care from HCW with carrier status. The same 40% totally or partially agreed that the patient should be generally informed about the possibility that there may be carriers of HBV, HCV or HIV in the medical team and the patient should sign a written consent that he or she agrees to be cared for by the team. However, a slightly lower percentage of 35% of respondents would agree to disclose to the patient their carrier status in order to obtain the patient's consent to be subsequently treated by the infected person. About ⅔ of the subjects consider that there is a need for a law regulating the rights and obligations of the employer staff and patients in the health domain concerning the HBV, HCV or HIV carrier status, given the risk of transmitting the virus from staff to patient during the medical care. (Figure 5)

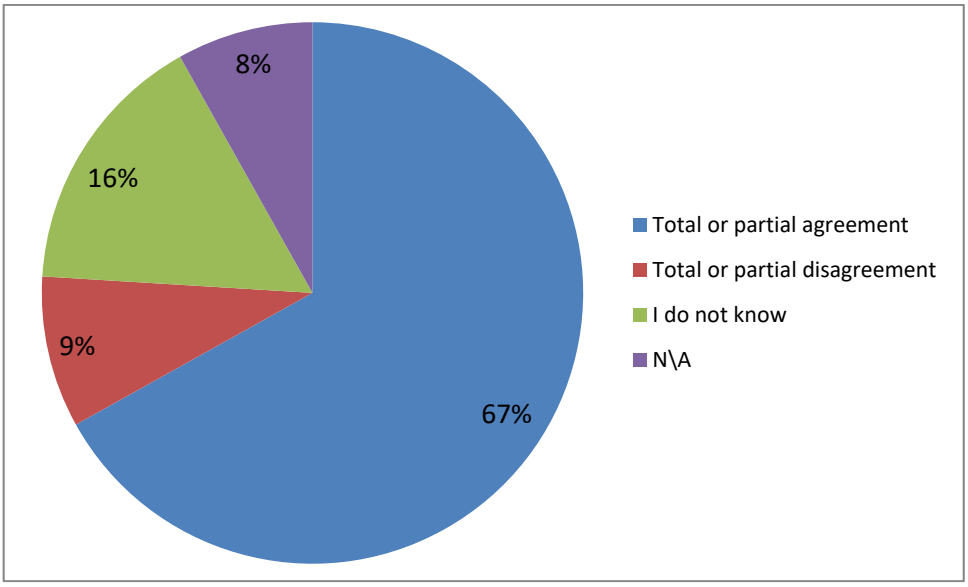

Figure 5. The need for clear legislation

Discussions

Out of all biological products, blood is the most important factor in transmitting hepatitis B or C and HIV. Different types of biological products may have a higher or lower load of pathogens, which determines the infectivity degree of the product, assuming that these products are not visibly contaminated with blood [2].

Worldwide, in 2000 alone, percutaneous exposures to biological products in healthcare professionals led to 66 000 hepatitis B cases, 16 000 cases of Hepatitis C and 1000 cases of HIV infection [3].

In a study conducted between 2004-2008 in South Korea, which is an endemic area for hepatitis C virus, HCV transmission was determined among healthcare professionals following percutaneous exposure to biological products. During the 5 years of study 1.516 accidents were registered, of which 327 (21.6%) were caused by HCV infected patients. Of those who were exposed to the HCV, 3 people had seroconversion, the transmission rate being very low (0.9%) [4].

Another prospective study which was published in 2000 estimated the transmission rate of blood-borne pathogens from infected patients to healthcare professionals. By percutaneous exposure to biological products, the average risk of HIV transmission was 0.3%, of HBV between 6-30% and of HCV of 1.8% [3].

The application of standard precautions is mandatory to prevent the transmission of hepatitis B and C viruses or HIV, but if blood accidental exposure has occurred, poste-exposure prophylaxis measures should be applied, which may significantly reduce the risk of seroconversion. The medical staff carrying the blood borne virus can become a possible source of infection for the patients they take care of.

Experts claim that the risk of transmission from healthcare professionals to assisted patients is extremely low in case of routine medical care, but increases considerably in invasive procedures.

According to a 15 year study in Germany, HCW infected with HBV and positive for HBeAg, have transmitted the virus on average to 4% of patients who underwent invasive interventions with a high risk of injury, but only to 1.5% of patients, is staff had undetectable HBeAg. In case of HCW infected with HCV, 0.15% of their patients acquired the virus during medical care [5].

A guide has been developed in Canada to prevent the transmission of viruses from infected HCW to patients through contaminated blood. They assessed that the risk of transmission from staff to patients is higher in HBV and lower in HIV [6].

Here, however, there are questions about the employee's right to confidentiality versus the employer's right to obtain information about the health of medical staff during the employment process and during collaboration, in order to assess the potential risk of transmitting these viruses from HCW to patients cared for, even if these medical examinations are carried out concordant with the enforcement law [7, 8]. In our study, based on the answers obtained from the participants, it appears that over 60% of them underwent serological tests on employment in a healthcare unit and 39% repeated these tests annually. Out of those who were surveyed, 20% believe that by requesting these tests for checking the carrier status for HVB, HCV and HIV at employment or annually, their right to privacy is disregarded, instead 60% of respondents agree that the healthcare employer should have access to this information. However, in the opinion of over 40% of respondents, the employer does not have the right to refuse to hire an HIV positive person, but can advise this person to perform medical activity in a department with less risky work in terms of transmitting viruses. A slightly lower percentage claimed that it would be no problem for them to inform their patients about their viral carrier status, in order to obtain the patient's consent to be treated by a person infected with HBV, HCV or HIV.

According to the relevant legislation, medical personnel who undergo an accidental exposure to biological products during performing medical activity, must report these events and follow the post exposure prophylaxis protocol [9,10], but other studies show that there is an underreporting if these events [11,12], one of the reasons may be the obligation for completing these post exposure tests for HBV, HCV and HIV.

Conclusions

There is a worldwide concern to ensure the safest possible working conditions for medical staff. However, accidents with exposure to biological products occur. These accidents frequently occur due to staff negligence or lack of employees training regarding the provisions of standard precautions. There is also the underreporting phenomena of these events either because the fear of repercussions, or because of the misconception about the risk of illness.

Although in Romania there is legislation that regulates the medical conditions at employment and the annual medical examinations performed by occupational medicine physicians, the medical staff is not very well informed about the rights and obligations they have at the time of employment and during the employment contract.

In Romania, there is a need for a very clear legislation that stipulates the attitude of the employer in the health field towards infected employees with HBV, HCV and HIV. However, it is a sensitive issue, if we balance the right to confidentiality of medical staff regarding their health, avoiding their discrimination in case of chronic communicable disease but also ensuring the patient's right to safe medical act.

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ETHICAL DILEMMA IN DENTISTRY PRACTICE DURING COVID 19 PANDEMIC

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ABSTRACT. The dental medical services were forced to follow the decisions of the various national governments that declared a state of emergency and consequently the dental offices were closed for long periods. The present theoretical paper focuses on the moral and ethical aspects related to the patients' access to dental services and to dentists' activity (from interdiction of practice to re-opening, with strict preventive rules to combat de spread of infection). The article presents the situation of Romanian dentists during the first six weeks of the pandemic, and it analyses the struggles of patients and doctors to access and to provide dental services during COVID 19 pandemic.

Keywords*: ethics, dentistry, Romania, pandemic, medicine, COVID 19.*

REZUMAT. ***Dilema etică în practica dentară în timpul pandemiei COVID 19.*** Serviciile medicale dentare au fost nevoite să urmeze deciziile diferitelor guverne naţionale care au declarat starea de urgenţă şi, în consecinţă, cabinetele stomatologice au fost închise pentru perioade lungi de timp. Prezenta lucrare teoretică se concentrează pe aspectele morale şi etice legate de accesul pacienţilor la serviciile stomatologice şi la activitatea stomatologilor (de la interdicţia practicii până la redeschiderea, cu reguli preventive stricte pentru a combate răspândirea infecţiei). Articolul prezintă situaţia medicilor stomatologi români în primele şase săptămâni ale pandemiei şi analizează luptele pacienţilor şi medicilor de a accesa şi de a oferi servicii stomatologice în timpul pandemiei COVID 19.

Cuvinte cheie: *etică, stomatologie, România, pandemie, medicină, COVID 19.*

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Introduction

The outbreak of the COVID 19 pandemic has caused multiple transformations in the social, economic, educational, and medical terms. The negative effects of the pandemic were suddenly felt on all levels and in all types of countries, regardless of their socio-economic level or the severity in which they were affected.

Medical services were overwhelmed by the number of patients, and the media presented numerous cases with strong emotional and moral impact: situations in which doctors had to choose to which patient they should give a chance at life and provide mechanically assisted ventilation.

Manufacturers of medicines and medical equipment were also overwhelmed. And in this case, the supply of materials, medicines and medical equipment provided a real media crusade. The export of sanitary materials was partially stopped and the chase after the purchase of medicines to fight the Coronavirus infection became a real issue of national importance.

While some medical services were overwhelmed by the infected patients, other branches of medicine were forced to stop working. The dental medical services were forced to comply with the decisions of the various national governments that declared a state of emergency, and, consequently, the dental offices were closed for long periods, for months in a row, in the attempt to diminish the spread of the virus. For example, in China, routine dental care was suspended in January 2020 and three months later it started to get back to normal. (Meng et al., 2020)

Few scientific data on the speed and extent of the spread have led health professionals and health policy-makers to reconsider the decisions and indications of preventive behaviours. For example, wearing a surgical mask has been a hotly debated topic, not only at the level of medical institutions or researchers but also at the level of the *World Health Organization*, which has repeatedly returned to the recommendations, as data from various research were emerging.

Dental consultations were discontinued, and emergency services operated only to assist in serious cases. The fear of infection, especially among dental services was extremely high. Private offices and clinics, however, remained closed. Patients undergoing dental treatment were forced to postpone it until an unspecified date. The role of dental professionals in preventing the transmission of COVID-19 was evaluated as being critically important. While all routine dental care has been suspended in many countries experiencing high rates of COVID-19, there was a need for an urgent reorganization of the activity of dental teams, so that they be provided with appropriate personal protective equipment. The purchase of effective protective equipment in dental activity has become a priority, as well as the training of medical staff on how to sort patients, procedures to combat

infection, how to undress protective equipment, the efficiency of disinfection of the workspaces and behaviour, if dentists are suspected of showing signs of disease. In dentistry, doctors are well trained in what concern the transmission of infection and they are remarkably familiar with occupational health issues, such as hepatitis B and hepatitis C, and risk assessment. (Moodly et al., 2018) But many studies which have been developed and published since January 2020 showed that COVID-19 may be airborne through aerosols formed during medical procedures or indirectly through saliva and blood. So, these possible ways of transmission of COVID 19 infection put dentistry specialists at the highest risk among medical services providers. (Coulthard, 2020a)

Financial loss

The suspension of the activity had dramatic consequences on the financial situation of the dental clinics but also on the dentists. Dentistry education was also affected. While students enrolled in dentistry faculty were banned to develop practical stages in clinics, even the continuation of the education was suspended. Whereas in the case of dental education, both at the bachelor's degree and the continuous training levels, the activities were quickly reorganized and the theoretical activity moved to the virtual environment, the practical activity of both students and dentists continued to suffer.

The primary moral response in case of a pandemic is to save lives. All healthcare providers have a moral obligation to care for their patients. Human life has priority over the economic collapse. But, after several weeks and months of severe lockdown and financial and economic disaster – on the familial, social, and sometimes national level – governments had to reorganize the economic activity and to diminish the severity of restrictions. Huge amounts of money were invested in health services and immense costs were associated with medical services provided for each infected patient. So, therefore, the chain between the medical, social, and economic fields cannot be broken. The right of the sick patient to health must be respected as well as the right of the healthy patient to have access to normal life in society.

Many healthcare regulatory bodies all over the world took a stand on the increased risk of dentists losing their income. The governments from different countries with financial power along with dental regulatory bodies proved that they have understood the gravity of the situation and have offered support to dental practices. The Canadian government set up an Economic Response Plan on 18 March 2020, including dentists' support. (Department of Finance, Canada, 2020) The British Dental Association also declared the support for losses due to the suspension of routine dental care. (British Dental Association, 2020).

On the other hand, re-opening the clinics under the new conditions imposed by the guidelines (special sanitizers, medical equipment, and more protection rules) burden the clinics, hospitals, and dentists even more, from the financial point of view. (Farooq, 2020)

Professional associations and guidelines

Policy-makers and leaders from dentistry services sustained the need for continuing the activity: "the need to engage in a spirit of collaboration, looking out for each other, our patients, especially our vulnerable patients, our staff and our referrers (…) the need to take seriously our own mental health and well-being and plan to support others in our oral surgery community. Keep calm, but plan ahead, and use appropriate personal protective equipment" sustained Coulthard (2020b), president of *British Association of Oral Surgeons*.

American Dental Association (ADA) proposed key steps to be taken by dentists and nurses in addition to the standard universal precautions. Among the guidelines were the following ones: a complete anamnesis about the patients' recent travel history; assessing signs and symptoms of RTI; recording patients' body temperature; mouth rinsing with 1% hydrogen peroxide prior to the commencement of any dental procedure; using a rubber dam and high volume suction during procedures in order to diminish the risk to be in contact with blood and saliva; and frequently cleaning and disinfecting public contact areas including door handles, chairs and washrooms, considering the virus resistance as it was revealed by several studies in the very recent literature focusing on COVID 19 infection. (Ather, 2020) Currently, dental regulatory authorities such as the ADA are urging dentists to conduct only emergency dental treatments. (Peng et al., 2020)

UK General Dental Council developed some guidelines for remote consultation and prescription. It was suggested that patient safety must be the priority, and the identity of each patient must be checked and verified. Dentists should be able to collect sufficient information regarding the patient's health and conditions to be able to prescribe the medication safely.

European Federation of Periodontology (EEP) proposed a protocol – a dental management protocol for dentists highlighting precise steps that must be followed: initial phone triage in order to assess the patient's risk profile, the need to organize the clinical agenda and waiting lists accordingly. The EFP also

suggested a strict protocol on patients' arrival and additional protection equipment for both patients and the dental team. Also, the organization recommends that disinfection of the working field via mouth rinse should be carried out for each patient. (EEP, 2020)

Patients inform consent during COVID 19 pandemic

In their article, Dave et al (2020) mentioned the necessity to reorganize dental interventions and treatment strategies taking into consideration the new pandemic period. The authors proposed that patients with substantial swellings can progress to life-threatening emergencies, which can increase risks in the setting of reduced healthcare availability. For such patients, "extractions of the causative pathogenic teeth should be prioritised over the restorative rescue, and input from dedicated oral surgery and oral and maxillofacial services and close follow-up should be instigated as locally appropriate. This approach has many benefits, including stewardship of antimicrobials, but is a deviation away from routine dentistry that should be thoroughly discussed with patients. Decisions on undertaking treatment should therefore be made with appropriate patient consent".

On the other hand, the confidentiality of data about patients determined a dilemma. Does the patient always declare the truth about their physical health, travel, and personal contacts? Is the patient always aware of the necessity of disclosure of the truth about their physical symptoms in order to protect also the dentist? So, both patients and dental health professionals (dentists and nurses) are at a bilateral risk of being exposed to viruses that can be transmitted through the oral cavity and respiratory tract during dental visits.

Both *asymptomatic* and *presymptomatic* patients that are in contact with the dentist could be a source of infection for the medical staff. "*Asymptomatic patients*" were reported in scientific literature as individuals who test positive but do not have any of the hallmark symptoms of being infected with COVID-19 at the time of the test. On the other hand, some patients may never show physical symptoms, but others may develop symptoms later and are more accurately defined as "*presymptomatic*" (Kimbal et al., 2020) Both categories of *asymptomatic* and *presymptomatic* patients are major sources of virus transmission, as they are covert and show no warning signs to dentists and nurses at the time of contact.

Caring for the physical and mental health of dentists during COVID 19 pandemic

Empirical, biological, and clinical evidence supports that oral mucosa is an initial site of entry for SARS-CoV-2 and that oral symptoms, including loss of taste/smell and dry mouth, might be early symptoms of COVID-19 before fever, dry cough, fatigue, shortness of breath, and other typical symptoms occur. Loss of taste and smell were identified as appearing in the early symptom of COVID-19 before fever. In a study by Chen et al 92020) it was proved that self-reported loss of taste and smell is much stronger in predicting a positive COVID-19 diagnosis than self-reported fever. Other symptoms support the hypothesis that the oral cavity, particularly tongue mucosa might be an initial site of infection by SARS-CoV-2. Dentists and dental researchers could play a more active role in the early diagnosis, prevention, and treatment of COVID-19 and its related research.

In a recent study conducted by Ahmed et al (2020), the authors conducted an online survey addressed to dentists from 30 countries. The results presented by the researchers proved that there were high levels of anxiety and fear related to infection with COVID 19 among dentists. The authors found that the majority of dentists from all countries were afraid of getting infected with COVID-19 from either a patient or a co-worker and while treating a patient who was coughing or a patient suspected to be infected with COVID-19, 90% they were anxious. Almost ¾ of dentists felt nervous when talking to patients in close vicinity and were afraid of getting quarantined if they got infected. Almost all respondents declared that they were afraid of carrying the infection from dental practice to their families. The anxiety rate concerning the cost of treatment if they got infected was 73%, while 86% felt afraid while they learnt about the consequences of infection and mortality rates because of COVID-19. Also, the study showed that more than half of the participants wanted to close their dental practices until the number of COVID-19 cases starts to decline. The results of this study presented the impact of the pandemic on dentists' personal and professional life.

Current situation of dental services in Romania

In Romania, according to current norms, there are two types of dental practitioner offices: private practices organized under different forms, and public practices, which can be found within schools, university campuses, public health institutions and dental emergency practices within emergency departments of hospitals.

Out of the total number of dental offices, the public ones make up approximately 5%. This number is relatively insignificant when compared to the total number of the country's population, particularly in rural areas where dental practices are almost non-existent. (INSSE, 2020)

We can find two types of services within the public health system. The first category, where medical services are free of charge, are represented by medical offices within schools and emergency wards and the second category consists of „personal contribution – co-pay" services where we can find medical offices on university campuses and public health institution medical offices. (INSSE, 2020)

In regards to the quality of dental labour, there is a big difference between private practices and public dental offices, mainly because dental services offered in schools and emergency wards, which are free of charge, are very limited in scope and are also limited to a certain number of procedures. School dental offices only treat children who are enrolled in that institution while emergency wards offer solely emergency treatments which are meant to calm the pain, stop any bleeding, and urgently treat any existing traumas.

Considering these aspects and because the earnings of the general population are well below the European average, with a significant percentage of the population living at the subsistence level, the access to quality dental services is limited.

Aspects related to dental offices during the COVID-19 pandemic

Once the State of Emergency was instituted through Presidential Decree 195/14.03.2020, certain restrictions were imposed in Romania in an attempt to slow down the spread of COVID-19 infection. Later, through Military Ordinance No 2/21.03.2020, dental offices within the country were shut down because the COVID-19 virus has an aerial way of transmission and dental work is a constant generator of aerosols, therefore making dental practices one of the most vulnerable areas in regards to the risk of disease transmission. However, the ordinance did not apply the same restrictions in the case of emergency dental offices within the hospital's emergency wards. Because these public wards would not have handled the large number of people that needed dental help and because they are not present in a sufficiently large number nationally (some areas of the country not benefiting from such emergency dental wards at all), certain dental offices which were able to comply with supplemental hygienic and sanitary measures meant to stop the spread of the virus were reaccredited to serve the general population. Subsequently, The Dental Medical

College in Romania came up with a number of recommendations regarding the manoeuvres which can be safely practised within the dental offices, as well as the necessary equipment for adequate protection which became mandatory through the Health Minister's Order No 767/2020. All these measures were taken in accordance with existing legislation and firmly respect the recommendations made by international health organizations that aim to stop the spread of COVID-19.

After the state of emergency was lifted and was replaced by the state of national alert, these regulations remained unchanged, the only difference being related to dental manoeuvres which can be undertaken with certain limitations.

Violating the right to oral health by banning the functioning of dental offices

The right to health is ensured through the Constitution of Romania but, due to the current context of a global pandemic, this right was sadly infringed upon, and not only in the case of dental practitioner's offices. The rapid closure of these establishments left thousands of patients with unfinished dental work and dental treatments which can later lead to tooth loss and an unfavourable evolution of treatment. For example, a periapical tooth abscess needs sustained treatment because of the high risk of reinfection while unsupervised orthodontic equipment can lead to unwanted adverse effects.

The right to oral health during the two months of the state of emergency was also violated through the lack of emergency medical practices. In this field there are certain areas in the country such as Brasov, Satu-Mare, Bistriţa-Năsăud, Buzău or Teleorman where there are no such dental offices within the emergency wards of local hospitals and where, during the first weeks of the state of emergency, there were no or very few working dental practices which treated a limited number of patients, leaving others to travel hundreds of kilometres to neighbouring counties in order to continue their treatments, mainly because not all dental afflictions can be treated through telemedicine using general drug treatment.

Later, because of these shortages, certain private dental offices could open if they disposed of the necessary sanitary materials and equipment to safely offer dental assistance to patients. These private offices could function only after receiving approval from the local Public Health Directorate. The number of such open dental offices was relatively small because, being private practices,

the exorbitant costs entailed in the acquisition of supplemental protective and disinfectant equipment, as well as the limit placed on certain procedures, made them economically unfeasible.

The small number of dental offices, the mandatory scheduling of all patients, respecting strict disinfection times, offering assistance only in cases of major emergencies (pain that will not go away under medication, bleeding and traumas) as well as the closure of dental radiology laboratories through which a presumptive dental diagnosis was confirmed during clinical examination have all led to a part of the population not to have access to dental medical services, with the people often being angry and aggressive towards the medical personnel.

Violating the vulnerable people right to oral health

Because the earnings of the population are not evenly distributed and because most dental practices are private, a part of the population does not benefit from dental medical services. To help them, school or university dental offices, as well as practices set up by non-profit organizations, came in, even if this was observed in a small percentage.

Once the state of emergency was instituted and the teaching activities were suspended along with the medical activities of school clinics, this category of the vulnerable population was perhaps the most affected because the only places where they could ask for dental help were the public ones which either did not exist in their localities or did not cope with the very high demand.

From the point of view of receiving dental medical assistance in this category of the vulnerable population, we can include, along with people with low income, all the people living in rural environments. Many rural areas within Romania are faced with a severe deficit in both public and private dental practitioner's offices. We can go as far as to say that public dental health offices are non-existent in most rural areas of Romania.

This category of people also had to suffer during the state of emergency, mainly the elderly, who were unable to easily travel to cities where emergency dental offices existed. These people mostly benefited from telemedicine and were prescribed several drugs for pain management or infection reduction. Many times, though, these drugs were not efficient and resulted in an increased mental and physical effort which put people at risk for contacting COVID-19 by reaching cities where they could benefit from the proper dental treatments.

The sudden interruption of dental treatments

Oral health is an important part of human health, contributing to the general well-being of a person. A precarious state of dental health has an important impact on physical and mental health as well as an impact on the social integration of the population. (Holden et al., 2020)

The sudden interruption of dental treatments and not following them up for a period of three months due to the closure of dental practices within the country from March 2020 onward has had short term consequences but, perhaps more severely, it caused medium and long term adverse effects. All categories of patients had to suffer due to these interruptions, both physically, because of developing complications, and mentally, because of the discomfort caused by not receiving the proper treatment. There were certain cases, for example, such as prosthetic treatments of the oral cavity which were interrupted in the final laboratory stages that increased the level of discomfort of patients because of the lack of teeth in the oral cavity. Lack of treatment in such a case can lead to dental migration and bone resorption which make any future prosthetic work difficult. Endodontic treatments, necessary in affections of the pulp, can hardly be delayed because these delays often cause complications of the disease and lead to dental infections and orofacial abscesses which then require specialty treatment and can lead to tooth loss. Periodontal treatments can also lead to tooth loss due to lacking patient monitoring as well as professional treatment offered within a dental surgery. Long-time unsupervised orthodontic treatments in children and young adults can also lead to serious side effects.

Apart from these consequences we also need to take into consideration the socio-economic ones because the appearance of abscesses often leads to patient hospitalization and this, in turn, entails supplemental costs for the public health system and the impossibility of patients to have a normal day-to-day life. (Hoden, A.C. et al., 2020)

Reopening of private dental surgeries and the taken measures

A breath of fresh air in regards to dental medicine and the pandemic's effects on this domain was given through the lifting of the state of emergency on May 15th 2020 and the enforcement of the state of national alert through Government Decision No 24/14.05.2020.

In order to prevent the spread of COVID-19 in what was now a state of inter-community transmission, the measures taken during the state of emergency were maintained but were now applied to all dental offices. These measures

were written into law through the Order of the Ministry of Health No 828/ 15.05.2020, which was then consolidated with Order No 873/2020. (Official Monitor).

Dental medicine is considered to be among the most vulnerable medical specializations, together with ICU medicine, gastroenterology and emergency medicine in regards to infection and transmission of COVID-19, mainly because of the large number of generated aerosols and the fact that a vast number of patients could transmit the disease through the air with their saliva and can be completely asymptomatic, pre-asymptomatic or even mildly symptomatic. Therefore, the imposed measures on this field meant that every possible patient is considered to be a COVID-19 suspect. (Guidice A. et al., 2020)

Certain measures were imposed, such as epidemiological triage done through the telephone, measuring patients' temperature before a consultation, banning access of other people in the waiting room, scheduling of the consultation through telephone or e-mail, the mandatory wearing of mask by the patient in all areas of the dental office until he/she is asked to remove it, proper hand disinfection, equipping the patient with supplemental means of protection such as disposable overalls and shoes etc. In addition to these measures that patients needed to respect we can also mention the measures applicable for doctors, such as rigorous disinfection of all equipment with nebulizers, UV lamps and proper solutions, wearing protective equipment at all times, ventilating the dental office as often as possible, using dental dams as isolating systems, banning sonic and ultrasonic tartar removers as well as recommendations concerning the use of hand instruments, high-volume aspiration instruments and surgical type instruments.

Other measures imposed by this Order were the limitation of radiographic procedures to OPG radiographs or CT scans as well as special entrance-exit corridors for patients and medical or auxiliary personnel. (Order of Ministry of Health No 828/2020)

Limiting the number of patients and procedures

Over time, several studies have shown that undertaking manoeuvres that generate aerosols leads to viral or bacterial particles being present in the air for at least 30 minutes within dental offices. (Bennett et al., 2020) Although studies about COVID-19 are not well cemented now in this regard it seems like the virus can remain active on surfaces between 72 hours and 7 days. That is why, in order to limit the transmission of the virus, rigorous disinfection of all

working surfaces and the aero microflora is recommended for at least 30 minutes, which will, in turn, push back patient scheduling by at least 30 minutes between each other. (Volgenant et al., 2020)

To be able to respect these measures, doctors are always mandated to schedule patients because, within a normal working day, a doctor cannot see more than 5-10 patients, according to their own schedule. This fact, corroborated with the restriction in undertaking certain dental procedures lead to a delay in implementing proper dental treatment in patients and, in turn, to side effects of the already instituted treatment or irreversible complications such as tooth loss.

The importance of protective equipment

Infection control in dentistry has been a much-debated subject over time. Due to the close contact with the patient and the multiple ways in which a virus could be transmitted, be it blood or saliva, dental medicine wishes to calculate risks because of their impossibility to be eliminated. (Volgenant et al., 2018)

Therefore, wearing protective equipment in the current COVID-19 pandemic and for a certain amount of time also afterwards is mandatory and not simply a recommendation. However, the high rate of virulence of this virus has led to the recommendation that the entire medical personnel wear protective equipment (PPE) especially suited for high-risk infection situations, leaving no portion of skin unprotected. Because the way of transmission is centred around the upper respiratory tract, the recommendation of WHO is that special protective masks (type NK95, FFP2, FFP3) be used, with their efficiency being much greater than in the case of a simple surgical mask, especially in the case of medical personnel that are constantly in contact with COVID-19 patients or for dental personnel that execute manoeuvres which generate aerosols. It is, thus, mandatory that during all dental procedures, all personnel present in the dental office wear proper masks. (Long et al., 2020) Studies have also shown that viral transmission can take place through the conjunctival mucosa of the eye, making it mandatory to protect the eyes and the conjunctival mucosa during all dental procedures with protective goggles or visors. (Adhikari et al., 2020) Viral transmission because of contamination of clothing can be avoided through the usage of disposable medical swaps or surgical robes on top of the usual medical equipment. PPE standards must also contain disposable caps for head and hair protection, disposable shoe covers and two pairs of gloves: one to be used during the procedures and another one to be used for removing equipment.

In order to avoid the risk of contamination, it is mandatory that all medical personnel be instructed in regards to the proper way to equip and remove clothing and other equipment because generally, dentists and dental personnel are not used to such PPE standards. The competent authorities in this situation - Ministry of Health, Dental Medical College - should organize such instructing sessions and later check if the measures are being correctly applied.

Because dental medicine entails undertaking manoeuvres in a small cavity with good visibility and because the instruments used are reduced in size and precisely applied, using these PPE standards will make dentists activities more difficult and impact the quality of the medical act. This could lead, in turn, to some of these protective standards and rules being ignored.

Socio-economic and moral aspects regarding private dental medicine

The closure of private dental offices during the state of emergency, the limitation of the procedures, the number of patients and the enforcement of supplemental protective measures through the mandatory acquisition of special, scarcely available, expensive machinery have put a large number of dentists in the situation of not being able to survive financially. This problem has been encountered all over the world, with dentistry being one of the most affected medical specializations from a socio-economic standpoint.

Because over 90% of dental offices are private and are run like a business, many have forgotten the basic principles of morality and ethics and have broken the rules.

International associations such as the American Dental Association have composed ethical codes, the principles contained in them being recommended for all dentists. One of the main current recommendations from the *American Dental Association* was that „this is not the right moment to make a profit".

In a world that is severely affected from an economic standpoint, some doctors have applied a principle of over-taxation and an increase in prices in order to make up for the expenses incurred through the acquisition of specialized protective equipment and machines. This has led to patients skipping certain oral rehabilitation treatments which would have helped them in the long term and a focus from most patients towards immediate emergencies in cases of pain. Other doctors, while trying to keep costs low, have bought poor quality equipment opting to re-use them several times after undergoing a process of disinfection although they were always intended for single use. Along the same line, some doctors insisted on scheduling more patients than their schedules

could bare through a reduction in disinfection times which were considered to be too long, while others have chosen to use ultrasonic or rotary instruments in order to save time.

All these deviations from the rules have a boomerang effect because, alongside the serious risk posed towards infecting patients there is also a significant risk of the doctors infecting themselves, along with the medical personnel, with possibly serious repercussions on their level of health and finances because of the suspension of all medical activities for a period of minimum two weeks. Patients could then choose to never return and ask for their medical services, leading to a financial deficit that is perhaps greater than what supplemental protective items and machines would have cost.

Conclusions

Dental medicine, especially within the private sector, needs to adapt to current conditions caused by the COVID-19 pandemic and undergo a serious risk-benefit analysis. Deciding factors, both political and professional associations should elaborate clear legislation and practical guides which can be used by dentists. Professional associations could also organize training courses for the proper use of supplemental protective gear and machinery as well as inform medics about everything related to the COVID-19 infection.

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DUAL-QUALITY FOOD. THE NEED FOR A SOLID HEALTH EDUCATION IN SCHOOLS

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ABSTRACT. In the last two decades, both politicians and health officials have drawn attention to foods with a double standard of quality that are marketed in various European countries. Identifying the same brand that sells a product with the same packaging but with a different composition has provoked various disputes, including in the European Parliament. Imposing quality standards has proven to be one of the solutions. But, until their implementation, a good education of the young generation in terms of food quality, reading labels and promoting healthy products remain some of the effective solutions.

Keywords: *health, food industry, education, nutrition, ethics, double standard.*

REZUMAT. ***Calitatea dual㠠a alimentației. Necesitatea unei educații serioase cu privire la sănătate în școli***. În ultimele două decade, atât politicienii cât și responsabilii din domeniul sănătății au atras atenția asupra produselor alimentare cu dublu standard al calității care sunt comercializate în diferite țări europene. Identificarea aceluiași brand care vinde un produs cu același ambalaj dar având compoziție diferită a provocat dispute diverse, inclusiv la nivelul Parlamentului European. Impunerea unor standarde de calitate s-a dovedit a fi una dintre soluții. Însă, până la implementarea și respectarea lor, o bună educație a tinerei generații în ceea ce privește calitatea alimentelor, citirea etichetelor și promovarea produselor sănătoase rămân unele dintre soluțiile eficiente.

Cuvinte cheie: *sănătate, industria alimentară, educație, nutriție, etică, dublu-standard.*

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Introduction

Food safety and security as well as nutritional quality vary widely around the world. Achieving these three goals is one of the major challenges for the near future (Lairon, 2011). Due to technical and demographic changes, in recent times, food chains for human consumption have undergone considerable changes. Consumers and public authorities place more value on quality attributes, such as nutritional content, safety, functionality, social and environmental impact. The increase in the number of quality assurance schemes has been the result of the efforts to ensure food safety and quality both in the EU and internationally.

Following the model of society described by George Orwell in his famous novel "Animal Farm", BREXIT introduced the idea of a two-speed Europe and the idea that all European countries are equal, but some countries are more equal than others. In most cases, the equality of countries is measured based on GDP per capita. Since the 1990s, multinational companies have "adapted" their product offerings based on the financial potential of the target market but keeping the same name and visual identity of the product. In a single European market, where products and citizens move freely, differences in standard have been observed by the authorities in countries whose markets have delivered products of different qualities than the original ones, asking for explanations from the transnational producers. To describe the phenomenon, newspapers introduced the term double standard or double quality. This neologism comes from English and describes an unequal treatment, preferably applied to a standard, which should obviously be unique. Can we talk about a deception of the consumer or a lack of morality of the producer towards the consumer? EU rules only cover those aspects of food safety, so far not involved in the quality policy of producers. Thus, Member States have the possibility to regulate these issues with strict reference to their own markets (Pădure et al., 2019).

Dual quality of foods in Europe

The problem of the dual quality of goods in Europe has existed for almost 30 years. As early as 1989, after the transformation of the economies of Central and Eastern Europe, people in the former countries of the Soviet Union noticed a strange phenomenon. Although brands of international products that were not on the shelves of local stores until then were traded, their quality was poorer compared to the same products purchased from abroad. This phenomenon was first observed in cosmetics: it seems that cosmetic products bought abroad had a more pleasant smell, which lasted longer, had a different consistency and color,

and in terms of detergents, it seems that they had other washing effects on laundry. Later, people in the former countries of the Soviet Union began to notice that some characteristics of particular products (e.g. soft drinks, coffee or fish croquettes) are different in their country compared to products sold under the same brand and with identical or very similar packaging in other European countries (Bartková, 2019). In this way, there are companies that sell the same brand of coffee, in identical packaging, but with different content in different countries- e.g. in Eastern European countries, coffee has less caffeine and more sugar. Moreover, children's food not only has a different content, but can be up to 35% more expensive in countries such as Bulgaria (Pavlova, 2018).

In fact, after the Eastern enlargement in 2004, eight Central and Eastern European countries became fully legitimate members of the European Union. Along with many different privileges of the new statute, these countries have become part of the European single market. However, what Eastern consumers are now facing is far from equal because the quality of food traded in the West is significantly higher than that of products marketed under the same brand in the East. This issue has attracted a lot of attention, as this model has been shown by well-known international food companies (Diadiun, n.d).

The problem of the double standard is especially relevant for food products. Dietary risk factors are recognized as the leading causes of serious illness and even global mortality, leading to important care interventions to support healthy eating (Bartková, 2019). In this regard, the first large-scale research on food quality in the West and East was already conducted in 2011. The Slovak Consumers' Association tested beverages, coffee, chocolate, and other products with the same labels in Germany, Poland, the Czech Republic, Hungary, Romania, Austria and Bulgaria. The double quality of foodstuffs under the same brands has already been confirmed. However, the European Commission has called these allegations unfounded, saying that this is how companies adapt to different markets. For example, in a study of Bartková et al (2018) it was shown that some tests performed in Slovakia revealed that the products sold as identical under the same brand and the same packaging had a double composition or quality and, in most times, their worse version were offered on the Czech and Slovak markets.

Dirk Jacobs, Deputy General Manager and Director of Consumer and Food Information at Food Drink Europe (FDE) informed stakeholders that different recipes do not necessarily mean double quality. However, fish croquettes sold in Slovakia, the United Kingdom, the Netherlands, and Portugal have lower fish content (58%) than the same product, with the same brand, in Austria (65%). The Coca-Cola soft drink has significant differences in taste between the two countries: in Slovakia, the taste is slightly sweet, while in Austria it is sweet.

Differences are also included on the label, so fructose-glucose syrup is used in Slovakia, while sugar is used in Austria. At the same time, regarding Earl Grey black tea, in Austria tea bags are made of aluminum, while in Slovakia they are made of paper. Moreover, Emmental cheese from Slovakia does not have the usual structure, with a light-yellow color and a different texture, while in Austria it has a normal color, texture and appearance. And the examples can continue (Pădure et al, 2019).

According to research on Czech consumers, up to 90% of them are not satisfied with the existence of a dual quality. The voice of the EU's angry population is becoming stronger, so the European Commission has begun to address this issue by developing a unified testing methodology and is also preparing legislative changes (Bartková, 2019). After years of research and struggle, this issue has finally been addressed by the European Commission President Jean-Claude Junker. He called this situation unacceptable in the "Union of Equals". Clearly, this was a message of equality, called for by Sustainable Development Goal 10 (SDG10) - reduced inequalities.

Commissioner for *Justice, Consumers and Gender Equality* Věra Jourová said it was essential to eliminate discriminatory practices and "make sure that all consumers are treated equally". One of the goals of SDG10 is to create social protection policies, which would contribute to achieving greater equality. Following this call, the Commission has published a set of guidelines, which aim to provide Member States with all the necessary information on the implications of the EU food and consumer law. The Commission's Joint Research Centre has also published the EU's harmonized testing methodology. It aims to create a system aimed at monitoring whether food laws are enforced to eliminate unfair commercial practices. Thus, this action will eliminate the dual standards between East and West and Europe will be one step closer to reaching SDG10 (Diadiun, n.d).

At the same time, food safety legislation is amended in the light of information obtained from scientific studies by national and European agencies on factors that may affect the health of people, animals, and plants. However, quality is an extremely subjective notion when it is not related to a baseline analysis. The manufacturing standard used by the manufacturers and reported to the control authorities when performing physic-chemical, organoleptic, nutritional analyses, etc. is a reference example for an objective analysis of product quality parameters. Violation of the parameters mentioned in these manufacturing standards is considered a misdemeanor and is punishable under consumer protection law. The question is how to act when the product meets all the safety and quality parameters present in the manufacturing standard, but the analyses made on identical products taken from different countries show variations

greater than 2%? An example would be the percentage of fat content for sausages: the maximum limit is 50%, but analyses show that in Western Europe the percentage is 20%, while in Eastern Europe the percentage increases to 49%. Or what to do when in Germany a producer uses pork as a raw material for a canned product, while in the Czech Republic mechanically separated meat from poultry is used? (Pădure et al, 2019).

Most consumers are calling for local governments and the European Union to ban the procedure. According to them, that practice should be banned and closely monitored in order to comply with the ban and, in the event of a breach, to impose sanctions. In fact, many consumers consider the issue of dual quality of daily consumer goods to be economic, but even more of them consider it a legal issue, which not only local governments but the EU institutions should focus on (Bartková, 2019). In addition, most people prefer the legislative ban on dual quality as the ideal solution to this problem. Lyliana Pavlova, Minister of the Bulgarian Presidency of the European Union, attaches great importance to protecting and improving the rights of all European citizens. It states consumers deserve the same level of quality no matter where they are in the EU. It is not just about the ingredients, it is about the quality. Consumers need clarity about the amount of sugar in their drinks, the number of fish in their bites, and so on. It has become clearly disturbing that some food companies believe that they can move away from offering sub-standard products in the Central and Eastern European markets. This is a completely unacceptable double standard (Pavlova, 2018).

At the same time, increasing the transparency of product information by increasing the volume of data written on the label can be another beneficial measure to eliminate this double standard. However, sometimes this is not enough and therefore all manufacturers should publish the manufacturing standards for the traded products either on their own website or on the authorities' websites in the countries where they trade the products. In this way, consumers, either directly or through their representatives, can find out before buying the product. Also, the actions of small and medium-sized producers at regional or national level, who will try to capitalize on their own products through fair comparative information for consumers, will not be neglected. In addition, the market will be adjusted, and the consumer will penalize the lack of morality by the lack of purchase, while companies using these unfair practices will be forced to properly inform consumers either by selling identical quality products or by changing the names of different poor-quality products. Another solution is to encourage small and medium-sized regional or national producers to apply for national or European quality systems, thus ensuring that product designations are

set to a single standard. Voluntary quality certification guarantees the conformity of consumers by the manufacturer with a public quality standard. Therefore a fair price will be set for a fair product (Pădure et al, 2019).

In the context of food overproduction in Europe, it is crucial to ensure sustainable production and consumption. If consumers in Eastern European countries were educated on sustainable living, they would react differently to the injustice of the quality of food they have faced all these years. Through the Sustainable Development Goals, this situation can be turned into an opportunity to improve the quality of life for millions of people who have been marginalized before. In addition, governments could encourage people to boycott both low-quality and unhealthy foods. This could be a way for the population of Eastern Europe to be brought to a better quality of life, while ensuring sustainable development for the entire region (Diadiun, n.d).

National and international nutritional programs

Medical pathologies related to nutrition, resulting from inadequate quantitative and / or qualitative intake (malnutrition or overeating) and / or metabolism (malabsorption syndromes, enzymatic defects) of nutrients can directly induce changes in the skin or the whole body (Babilas, 2020). From this point of view, non-communicable diseases - resulting from tobacco use, physical inactivity, unhealthy diet, and harmful alcohol consumption - are the more important killers in the world, with 38 million deaths annually, of which 16 million are premature- under the age of 70 (https://www.who.int/activities/preventing-noncommunicable-diseases).

Children's food choices as well as their consequences are a global concern (Jones & Kervin, 2011). Direct exposure to certain types of food, such as processed foods or snacks, which are generally high in fat and sugar and have a higher energy density, can contribute to the development of obesity in children (Jackson-Leach & Lobstein, 2006). Many studies indicate that the prevalence of childhood obesity is increasing (Halford et al, 2004). In 2016, over 340 million children and adolescents between the ages of 5 and 19 were overweight or obese, and 40 million children under the age of 5 were overweight or obese in 2018. Also, in 2016, over 1.9 billion adults over the age of 18 were overweight, of whom over 650 million were obese (https://www.who.int/news-room/fact-sheets/detail/ obesity-and-overweight). The prevalence is increasing in almost every country to the point where overnutrition competes with malnutrition as the main food problem, even in developing countries (Harris et al, 2009).

There are many ways and options to prevent, and even tackle, obesity and chronic non-communicable diseases. The first step in combating these problems is the personal choice: people have to decide whether to spend the rest of their lives being obese or to fight to overcome this health problem, to improve their lives and to feel healthy. Secondly, there should be population education programs that address this issue and inform people how serious it is, and then provide the population, especially children, with a way to learn about obesity and how to prevent it (Schwartz & Ridgeway).

Decreasing the incidence of obesity among children and adolescents involves first and foremost paying special attention to their diet and daily physical activity. According to data from the Health Behavior in School Aged Children (HBSC) study conducted in 2014, the percentage of 11-, 13- and 15-year-olds students who report physical activity in the last week according to WHO criteria is alarmingly low (29% boys and 16% girls). Regarding eating behavior, the same study reveals that less than half of Romanian students aged 11, 13 and 15 serve breakfast; daily fruit consumption decreased between 2004-2016 (only 1/3 of boys and 41% of girls consume fruits daily), and daily vegetable consumption is reported by only 1/3 of students.

Thus, to maintain and improve the health of the population, to facilitate the adoption of safe behaviors for health and to make the authorities accountable for the development of public policies favorable to health, it is necessary to carry out health promotion activities in accordance with recommendations of the Regional Office for Europe of the World Health Organization. These activities aim to: promote lifestyle change, environmental and social behaviors and conditions, in order to facilitate the development of a "culture of health and well-being" among individuals and communities; educational and social communication activities designed to promote healthy conditions, lifestyle, behaviors and environments; reorienting health services to develop models of care that encourage health promotion; intersectoral partnerships for more effective health promotion activities; assessing the impact of public policies on health; risk communication; awareness and interventions on social determinants and for equity in health (Integrated Multiannual Plan for Health Promotion and Health Education).

In an age of over-consumption and obesity, healthy eating habits are essential to keep away a wide variety of chronic diseases. Obesity, cardiovascular diseases, high blood pressure, diabetes, arthritis, cancer, and many other conditions have at least one etiological factor in common: inadequate nutrition. Even if other determinants are more important for these diseases, it is the diet that can be influenced on a personal level and with huge consequences. Unfortunately, changing already established habits is difficult, so it is particularly important to

create the characteristics of proper nutritional behavior from an early age. In addition, parents are extremely influential factors for their children in various fields, including eating habits. As a result, it is necessary to set up educational programs on adequate nutrition targeting important demographic groups, such as women with children. Programs must be adapted to different levels of understanding, to reach all women, overcoming differences in training and education and must provide solutions for a healthy diet even in a low-income household (Zugravu, 2012).

Nutritional education programs - successful examples

1. Adopted by the World Health Assembly in 2004 and recognized again in a 2011, the policy statement on noncommunicable diseases (NCDs), the "**WHO Global Strategy for Diet, Physical Activity and Health**" describes the actions needed to support healthy diets and regular physical activity. The strategy calls on all stakeholders to act at global, regional, and local levels to improve diets and physical activity patterns in community.

The overall goal of the strategy was to promote and protect health through healthy eating and physical activity. The global strategy has four main objectives:

• reducing the risk factors for chronic diseases arising from unhealthy diets and physical inactivity, through public health actions.

• increasing awareness and understanding of the influences of diet and physical activity on health, the positive impact of preventive interventions.

• developing, strengthening, and implementing global, regional, national policies and action plans to improve diets and increase physical activity that are sustainable, comprehensive, and actively involve all sectors.

• monitoring and promoting scientific research on diet and physical activity.

Creating changes in physical activity habits and eating patterns will require the combined efforts of many public and private stakeholders, over several decades. A combination of sound and effective actions is needed at global, regional, national, and local levels, with careful monitoring and impact assessment. The Global Strategy outlined the responsibilities of those involved and provided recommendations for action to key stakeholders, including: Member States, the World Health Organization, international partners, civil society and non-governmental organizations and the private sector. The implementation of the strategy by all those involved will contribute to major and sustainable improvements in people's health (https://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf)

2. **Childhood obesity prevention program - Healthy bag** was launched in Iasi, in 2012. It is an educational program dedicated to children and their families, which promotes a healthy lifestyle, respecting local traditions. It is based on scientific evidence and is coordinated by experts from the Grigore T. Popa University of Medicine and Pharmacy in Iasi. It is internationally recognized, being included in the largest organization for the fight against childhood obesity, the EPODE International Network (EIN), along with programs from 30 countries.

The program's activities include original educational materials, films for parents and children, campaigns for a healthy lifestyle, professional nutritional research, conferences for the prevention of obesity, and school competitions. The educational package "Healthy Bag" includes an innovative collection of boards, worksheets, stories, and attractive games, which addresses students in primary and preschool, being an excellent support in creating positive attitudes towards nutrition and physical activity. The book and the CD promote an original idea, that of a traditional bag in which children will put everything that is healthier for them.

The message of the program, based on the educational package "Healthy bag - healthy eating behavior in children" and stories with the three kids, *Subțirel, Mijlocel* and *Voinicel*, have a great educational force, children acquiring knowledge based on games and stories. In this program, children will discover everything that is best for their health: healthy food, clean water and lots of play (http://www.traistacusanatate.ro/index.php).

3. In March 2011, the PRAIS Foundation officially launched the national movement **"I live healthy too!" - SETS**, which has as main objectives the prevention of childhood obesity and the promotion of a healthy lifestyle among families in Romania, through extra-curricular programs dedicated to primary school students. Since its launch, the SETS movement has become an active member of the EPODE International Network - EIN, the largest global obesity prevention network. In 2012, the EIN network, of which SETS is a part, was designated by DG SANCO as the "Best health promotion European project", and the interventions on physical activities within the "I live healthy-SETS" movement were appreciated as a model of good practice.

The SETS national movement is based on the long-term public-private partnership, which includes multinational companies, renowned medical and sports organizations, ministries, academics, and opinion leaders. In all primary schools involved in the SETS movement, the PRAIS Foundation provides free extra-curricular educational materials to students and their staff. Through these materials, they want to promote the benefits of daily exercise and

balanced nutrition, Olympic sports - values and models to follow, along with other informative materials, based on which, during the school year, teachers give lessons during extracurricular hours.

A new phase has begun since last year - SETS 2020. The new direction of the SETS project aims at a 3-year program based on existing SETS benchmarks and a new approach: promoting a healthy lifestyle, balanced nutrition, physical activity and sports, the importance of quality sleep, moral values, and hydration, with an emphasis on general well-being, diversity, social inclusion, self-respect and respect for others.

The results of the national movement "I live healthy too-SETS", from 2011 until now, are visible - the implementation of the project in 252 schools in Bucharest, Cluj-Napoca, Otopeni, Ploieşti, Roman and Timişoara; over 179947 students in preparatory classes up to the 4th grade, actively involved in the project; 3000 teachers and approximately 360000 parents. The national movement SETS had as partners the Faculties of Physical Education and Sports from Bucharest and Cluj, with which it conducted 624 open lessons in the schools involved, attended by 591 volunteer sports students and over 34,790 students.

Through the large number of children, but also parents involved, intervention programs at school level can increase children's knowledge about healthy foods and a healthy lifestyle. In addition, children are very excited when they actively participate in any activity that involves them, whether it is cooking, experimenting or running, which makes them feel important, appreciated. Parents are also extremely happy that their children are participating in health-beneficial activities that help them form a healthy lifestyle. Moreover, what most health education programs aim for, and some of them even succeed, is to increase the level of information, awareness, motivation, and education of the whole family about the importance / benefits of adopting a healthy lifestyle.

Conclusions

Some food products of a brand may have a different composition, in different countries, for example, the aroma of the product may be conditioned by the habits or preferences of the population for a certain taste. However, this should not affect the quality of the food. Numerous studies in Eastern Europe have shown that there is a difference in the quality of the food, using ingredients of different quality from those used in Western countries. Therefore, imposing guidelines for the food industry but also educating the population to consult product labels and their components is an important step in ensuring the health of the population.

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PRESERVING THE PATIENT'S DIGNITY AND AUTONOMY IN THE CONTEXT OF ADVANCE PLANNING OF THE MEDICAL CARE

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ABSTRACT. Advance planning aims at a time, considered specific for the life ending stages, when the patient will no longer be able to express his/her desire about the medical care performed on the own person. By the history of its introduction through the medical legislation, this document is closely related with the euthanasia concept or the right to put an end to the life that is no longer worth living. From a medical approach, this may suppose the withdrawal of the futile treatments. The patient has the possibility, by elaborating an advance directive, to mention his/her refusal for certain medical treatments and procedures. The purpose of its implementation in the clinical practice is to preserve the patient's dignity and autonomy for the moment when he/she will no longer be able to express his/her will: this person can choose to end the suffering of an inhuman life. The patient will become, therefore, responsible for giving up to the futile medical care, limiting, in somehow, the actions of the medical staff. Thus, advance planning could be assimilated with the idea of medical non-compliance. The efforts of preserving the patient's dignity will inevitably bring in our attention the concept of the human being's value. Does an intrinsic value of the human being really exist or is it just built by the role played by the person in the social context? Is it fair to create moral pressure on someone to take a certain decision in that context? However, what if the advance directives were not at all associated with the idea of a *Living will* (*Life testament* – the Romanian name for this paper)? Even if the advance planning had the primary purpose to protect the healthcare professionals in their decision to withdraw the futile treatments, this document should be in favor of the patient and not against his/her deepest desires.

Keywords: *advance planning, dignity, autonomy, human being value, quality of life, life without dignity.*

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REZUMAT. ***Prezervarea demnităţii şi a autonomiei pacientului în contextul planificării în avans al îngrijirii medicale*****.** Planificarea în avans vizează un moment, considerat specific pentru etapele de final ale vieţii, în care pacientul nu va mai putea să-şi exprime dorinţa cu privire la îngrijirea medicală efectuată asupra propriei persoane. Datorită istoriei introducerii sale prin legislaţia medicală, acest document este strâns legat de conceptul de eutanasie sau de dreptul de a pune capăt vieţii care nu mai merită trăită. Din perspectivă medicală, acest lucru poate presupune retragerea tratamentelor inutile. Pacientul are posibilitatea, prin elaborarea unei directive anticipate, de a menţiona refuzul său pentru anumite tratamente şi proceduri medicale. Scopul implementării acestora în practica clinică este de a păstra demnitatea şi autonomia pacientului pentru momentul în care acesta nu va mai putea să-şi exprime voinţa: această persoană poate alege să pună capăt suferinţei unei vieţi inumane. Pacientul va deveni, prin urmare, responsabil pentru renunţarea la îngrijirea medicală inutilă, limitând, cumva, acţiunile personalului medical. Astfel, planificarea în avans ar putea fi asimilată cu ideea necomplianţei medicale. Eforturile de conservare a demnităţii pacientului ne vor aduce inevitabil în atenţie conceptul de valoare a fiinţei umane. Există într-adevăr o valoare intrinsecă a fiinţei umane sau aceasta este construită doar de rolul jucat de acea persoană în contextul social? Este corect să creezi o presiune morală asupra cuiva pentru a lua o anumită decizie în acel context? Totuşi, dacă directivele anticipate nu ar fi deloc asociate cu ideea unui document de *Testament de viaţă* (cum este numit în limba română acest document)? Chiar dacă planificarea prealabilă avuse scopul principal de a proteja profesioniştii din domeniul sănătăţii în decizia lor de a retrage tratamentele inutile, acest document ar trebui să fie în favoarea pacientului şi nu împotriva dorinţelor sale cele mai profunde.

Cuvinte cheie: *planificare în avans, demnitate, autonomie, valoarea fiinţei umane, calitatea vieţii, viaţă nedemnă*

Introduction

The patient can write, in the presence of witnesses, a document called *Advance directives* for planning[2] ahead the treatments to be received or not in the case of losing his/her legal decision making capacity. By talking with his/her family and with the medical doctor, he/she may decide to refuse treatments that are either unnecessary or dangerous (according to his/her own believe), or this person

[2] Jonsen, Albert R., Mark Siegler, şi William J. Winslade. *Clinical Ethics. A practical Approach to Ethical Decisions in Clinical Medicine.* Seventh Edition. New York: McGraw Hill Medical, 2010, p. 81.

just does not want some medical procedures based on his/her personal values.[3] Due to the history of this legal procedure introduction, the *Advance directives* are often associated with the idea of *Living will*. Therefore, this is merely the planning ahead of a stage associated with the life ending moments. If *Advance directives* are the most common type of advance planning, this kind of document may take different forms. In United States, for example, the standard model is used with prevalence, often mandatory, for the *Medical Directive*. The medical doctor has the duty to know the legal aspects of the state where he/she practice medicine. The second form is, indeed, the *Living will*– having a less formal aspect – which is a personal address to family, friends and medical doctor regarding the treatment options for the end of life. This type also includes the *Living wills* elaborated by some religious groups with a particular view on some medical interventions concerning that context. [That] paper may also mention lists of medical interventions preferred by the patient or to be avoided for various reasons. *The Five Wishes,* a *Living will* type of paper*,* has unique elaboration characteristics by mentioning the following: will be the one to make decisions[4] for the patient, what kind of medical treatments he/she wants, how comfortable he/she wants to be, how he/she wants to be treated by people in that life' stage and – not less important – what information will be given to his/her loved ones by the medical staff. In addition to the two main types of directives in advance, some states may also consider personal notes or letters which do not follow any conventional drafting standard. Lacking any standardization, personal notes and letters will be often vague and difficult to provide a good interpretation. Therefore, the process of making medical decisions will be complicated.[5]

Although there are states where a distinction was made between the *Living Will* and the *Advance Directives* by the existence of slightly different elaboration criteria; many countries – as well as Romania – doesn't have a clear distinction between those two types. It is really important for the patient have assurance that in the final life's moments, his/her wishes will be respected. This approach will offer to the patient the assurance of maintaining his/her personal dignity[6]. However, a patient can also live for a number of years in a medical condition that would not allow him/her legally to make a decision about the treatment received. The recent medical practice and the evolution of medical

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3 Aluaș, Maria. *Bioetică Medicală.* Cluj-Napoca: Medicală Universitară "Iuliu Haţeganu", 2016, pp. 65, 68.

4 Avery, G. "Advance decisions to refuse treatment: a prescribing dilemma". *Practice Nurse* (Business Source Complete, EBSCOhost) 39, 8 (2010): pp. 29-31.

5 Jonsen, Siegler & Winslade, *op. cit.*, pp. 84-85.

6 Van Der Graff, Reike, & Johannes JM Van Delen. "Clarifying appeals to Dignity in Medical Ethics from an historical perspective." *Bioethics* 23, nr, 3 (2009): pp. 151-160.

technologies that may prolong and greatly improve the quality of life of the patient with a serious medical condition bring us to the following question: How do we establish with certitude that there is an end-of-life condition and for what period of time this condition may last? How can we determine, on what medical conditions, life is no longer worth living? What defines the quiddity of the human being and what can be altered by some serious medical conditions with the result of an inhuman life or without dignity for the patient? Some thinkers even say that the dignity concept is improper used in the medical context because it refers to the autonomy of the patient.[7] What would be the connection between the concept of *human dignity* and the abandonment of an adequate medical support? Who determines this kind of correlation in a particular case? Is it a medical reality, a subjective individual perception or a social construct? The answers to those questions will generate favorable behaviors or it may even alter of the patient's perception about his/her intrinsic values. Some approaches concerning the concept of human dignity may create moral pressures on the patient to elaborate an *Advance directive* with the purpose to give up on living, based on the present impressions about the future circumstances. In some cases the patient will even feel a moral obligation to take a certain decision, which may contradict his/her own beliefs and desires.

But how did the healthcare institutions arrive at the necessity to debate these issues and what would be the key ethical aspects in drafting an *Advance directive*?

Historical and legislative framework *Advance planning* use

The framework of *Advance planning* is based on the legal introduction of the informed consent in physician-patient collaboration and the obvious progress of the resuscitation techniques. At the same time, the medical system could not overlook the limits of the resources available to be used for each patient. Thus, the development of the legislation on the *Advance directives* was influenced by the following two decisive issues:

(1) In 1969, the concept of "living will" was the first time used in the text drafted by the North American lawyer Luis Kutner, "Due process of euthanasia: the living will, a proposal".[8] He proposed the elaboration of a document by which the patients could ask medical doctors to suspend the treatment received in the context when they would be unable anymore to express their will.

[7] Van Der Graff & Van Delen, *op. cit.*

[8] Kutner, Luis. "Due process of euthanasia: the living will, a proposal." *Sematic Scholar.* 1969. https://pdfs.semanticscholar.org/8054/7a8d645a98a9cfba33ffeb463a7ee7a2f59d.pdf (seen on 10 20, 2020).

(2) The effective introduction of the *Living wills* in the medical practice was realized due the publicity and controversy that surrounded the Quinlan (1976) case[9] from the North American region. "After a long legal battle, a Supreme Court decision in New Jersey, in March 1976, allowed the appeal of Karen Ann Quinlan's parents (1954-1985) who was in a vegetative state, ordering the suspension of treatments likely to prolong her life".[10] California was the first American state which established the use of the *Living will* in the medical practice in October 1976 by adopting the *Natural Death Act*[11]. The European Council Meeting happened in the same year (1976) when the *Patient Charter* was elaborated. The major concern was for "a death in dignity and integrity" and for the limitation of the futile medical interventions. In 1970s it became evident, especially in United States, the necessity to have a satisfactory legal criterion for the possible non-intervention of the medical professionals, if the patient had previously expressed this desire. However, just in 1985 the *Uniform Rights of the Terminally Ill*, revised in 1989, was adopted to standardize the legal status of *Living wills*. In this context, the American movement, militant for their implementation, was initiated by hospital administrators and physicians to be armed against the proliferation of lawsuits. It was necessary to have legal protection for medical workers and to justify the cessation of the resuscitation. Some regulations were lately adopted gradually in almost all regions of the United States, but also in Canada, Australia, Europe, and others. [12]

After the Congress of the 1990, the United States passed the *Patient Self-Determination Act*[13], implemented from December 1 of the following year. This document states that individuals receiving medical care - especially those financed from public funds - are informed from the beginning of their hospitalization about their rights to accept or refuse medical and surgical treatments. The patients are asked if they have already signed a directive in this regard. If this document doesn't exist at that moment, the patient may provide his/her signature for the withdrawal of certain medical interventions or for a complete non-intervention in some circumstances.

But how does the patient perceive the request, from the beginning of the hospitalization, concerning the elaboration of a document for *advance planning*? From the public debates about the introduction of *advance planning*

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9 Mankus, Mary K. "Karen Ann Quinlan (1954–1985)." *Civil liberties of the United States.* 21 08 2012. http://uscivilliberties.org/biography/4334-quinlan-karen-ann-19541985.htm (seen on 08 05, 2020).

10 Aluaș, *op. cit.*, p. 67.

11 "Natural Death Acts." *Encyclopedia of Death and Dying.* n.d. http://www.deathreference.com/Me-Nu/Natural-Death-Acts.html (seen on 02 24, 2021).

12 Aluaș, *op. cit.*, p. 67.

13 Jonsen, Siegler & Winslade, *op. cit.*, p. 82.

as a *living will* until the elaboration of the *Patient Self-Determination Act*, clarifying the patient's right concerning the mentioned aspect, passed two decades without any direct or explicit connections with the *end of life*. Previously, the focus was on the futile treatments' refusal and the abandonment of resuscitation. However, the present use of the patient self-determination principle in *Advance directives* takes the appearance of a favorable argument: this approach may have a good contribution in the improvement of the medical staff – patient communication as long as the elaboration of this document may reduce of the worries of the patient and his/her family about making difficult decisions in stressful contexts. Moreover, the health professionals will also be relieved from the psychological stress concerning the decision about the medical intervention.

At the European level, the fundamental legislation on patient's right to self-determination was elaborated just in 1994: the *Declaration on the Promotion of Patients' Rights in Europe*. This text was developed by WHO and it refers to any medical act performed on the patient. The paragraph 3.3 of the present document states that if an act is required as a matter of urgency, the consent is presumed. Yet the existence of a paper on the patient's refusal of some medical interventions will be taken into account in a medical condition presupposed by the act.[14] The *Oviedo Convention* of the European Council on *Human Rights and Biomedicine* states in the 9th article: "The wishes previously expressed, by a patient who at the time of the intervention is not in a state that allows him to express his will, regarding a medical intervention will be tacked into account."[15] Later, the Parliamentary Assembly of the Europe Council adopted – in January 25, 2012 – the resolution R1859, which calls for the avoidance of euthanasia by generalizing the use of advance directives in all the European states.[16] But the following aspect still remains in debate: how could be changed the ethical nature of an act (positive or negative) by the prior consent of the patient; or does it remain the same kind of act from the moral approach? Is it admissible to take any decision if someone obtained the patient's consent previously? Do the health professionals have an objective responsibility related to the society as a whole and conditioned by the intrinsic value of the human being?

[14] European Consultation on the Rights of Patients (WHO). "A declaration on the promotion of patients' rights in Europe, European consultation on the rights of patients Amsterdam 28 - 30 march 1994." *WHO.* 28 June 1994. http://www.who.int/genomics/public/eu_declaration 1994.pdf (seen on 08 05, 2020).

[15] Council of Europe. "Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine (Oviedo)." *Council of Europe.* 4 IV 4.04.1997. https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/090000168007cf98 (seen on 02.02, 2021).

[16] Aluaş, *op. cit.*, p. 68.

In this paper, our concern is about the Romanian clinical practice where was introduced the *advance planning*, but still not well regulated by laws. The elaboration of this kind of document, in Romania, still encounters some ambiguity that will be present also in its implementation and its interpretation; even if ratified some international laws were ratified here, relying also on existing legislation at European level and some cases found in the literature. One of the European legislative texts ratified, by the *Law no. 17/200*[17], is the *Oviedo Convention of the European Council on Human rights and biomedicine*.

Law no. 46/2003 on patients' rights[18] and *Code of Medical Ethics*[19] are the only national legislative texts in Romania, still based on the international legislation, with a brief reference to the *Advance directives*. Both of them pay special attention to the presumed consent. Both of them express the importance to follow a previously elaborated document on the patient's desire to refuse certain medical interventions for the emergency cases and when the patient is unable to express his/her will. The legal framework stipulates that this kind of document can be written by an individual legally able to make a decision: having the age for legal decisions and the reacquired mental abilities. Besides, the patient must have been free from any constraint and well informed to have the ability of elaborating the document in an appropriate manner for its interpretation. That paper will be applied just in a case of a medical condition of the patient relevant for the prescription, when he/she will not be any longer able to take legally a medical decision.

Ethical principles of biomedical practice

Even if the consent is presumed for any collaboration between the medical doctor and the patient, any patient is informed on the personal duty to express the consent for the serious medical interventions. On the other hand, there are contexts and countries where the patient is informed from the beginning of his/her hospitalization about the possibility to write in that moment an *Advance directive*, refusing some disproportionate medical treatments. Thus, to

[17] Parlamentul României. „Legea nr. 17/2001 privind ratificarea Convenţiei europene pentru protecţia drepturilor omului şi a demnităţii fiinţei umane faţă de aplicaţiile biologiei şi medicinei, Convenţia privind drepturile omului şi biomedicina, semnată la Oviedo la 4 aprilie 1997." *Monitorul Oficial al României nr. 103 din 2001-02-28*, 02 2001.

[18] Parlamentul României. „Legea nr. 46/2003 drepturilor pacientului." *Monitorul Oficial al României nr 51 din 2003-01-29*, 01 2003.

[19] Colegiul Medicilor din România. „Codul de dontologie medicală." *Colegiul Medicilor din România.* 06 01 2017. https://www.cmr.ro/new/wp-content/uploads/2017/01/COD-DEONTOLOGIC.pdf (seen on 09 20, 2020).

what extent is this person indeed guided by the health professionals in the elaboration of the *Advance directives* without pushing him/her toward an undesirable decision? Another serious objection to the elaboration of the *Advance directives* concerns the interpretation of this kind of document. With the advance of the medicine, it will be possible that some medical paradigms will be changed in a few years.

As we mentioned before, the fundamental condition of advance planning is a patient having his/her fully legal capacity to write this document. However, we may think about a person with innate disabilities: it will not be allowed legally for him/her to make any medical decision. Moreover, this person may be unable to bring practical benefits to his/her community. How this kind of context will be regarded? How to use a certain amount of resources to sustain his/her life by some costly medical procedures? The use of the community's resources for a person with an innate disability could be regarded as being futile? How is it possible to find justifiable ethical arguments to consider the life of that human being as an existence without dignity? It is true that this patient never had the chance to write an *Advance directives* paper. Any medical decision will be made by his/her family in accord with the laws. As an analogy, in the case when a similar medical condition will occur later in life, the patient still has the right to enjoy and live his/her own life without any given label from the society – from those who never went through the same experiences. What kind of criteria can be used to determine whether or not a life has dignity? Does it have something to do with the happiness that may be acquired having that medical condition? Are the people without awareness of their own identity and lacking legal decision-making capacity deprived of happiness?

The *advance planning* papers are valid just for a period of several years, depending on the country's legislation. The shortness of this period is based, firstly, on the alert progress of the medical knowledge and biotechnologies. Secondly, the life circumstances of an individual could be changed dramatically in a few years, the priorities and values can also be very different. The criticism for the *Advance directives* use is based on the following issues:

> "The limits of its application, terminological inaccuracy, the previous existence of the right to refuse the treatments, implemented in most countries of the world, danger of slipping to claim euthanasia or medical assisted suicide, the alteration of the relationships between medical field professionals and patients as a consequence of the legalization of the death moment".[20]

[20] Aluaş, *op. cit.*, pp. 71-73.

It is not possible an absolute freedom for any act or decision, neither the existence of a right to die. But the focus of the debates can be on the ethical principle of freedom that is based on receiving correct information for being able to make well papers for a future interpretation. Otherwise, the existence of this kind of document will lead to more problems and concerns. The periodical updates are also important because on their absence, this document may be an incomplete one and an inadequate one in rapport with the real desires of the patient. Even if someone decides to write his/her *Advance directives* to plan for a certain medical condition, it still exist a huge risk of misunderstandings. A poor written paper will lead to more work for the medical professionals and the obligation update their knowledge about all the legal changes on the topic.

As a hypothetical case, we may think about a woman who elaborated an *Advance directives* paper asking to not be resuscitated[21], but she has a heart attack at the age of 30 when she is mother of 2-3 small children, also employed and having many other social responsibilities. The physician may think that the document was written for completely different circumstances and he may not follow the recommendation to not resuscitate her. But this physician still may consider as being the most important to follow the paper's instruction, with all the costs. From a legal point of view, this health professional has all the rights and justifications to act in this way. Is this decision, in the same time, the right one from a deontological or moral approach? What will give a real assurance to this physician about good ethical standards and moral value of the medical decision taken? There are cases when not the lack of medical means puts the end to the life of the incurable patient or in a vegetative state, but the medical staff – the society as a whole are those who label a treatment as being futile based on the costs / benefits balance. Therefore, for the same context, physicians from a different geographical area would arrive even at an opposing decision based on other principles that are important in their own community. The medical progress also brings different approaches on the same medical condition: nowadays we have solutions for many cases that in the past where doomed to a life of torment. Is it ethical to consider as a priority to avoid any resources consumption for futile treatments or rather to invest more resources on research with the purpose of providing a meaningful life to those patients? The society is confronted with a conflict generated by the irreversible intrusion of biotechnologies, with a growing perfectionism, in the management of human life and health. The rapid progress of medical biotechnologies puts the man in the

[21] Sherynn, Perry J. "Legal Implications for Failure to Comply with Advance Directives: An Examination of the Incompetent Individual's Right to Refuse Life-Sustaining Medical Treatment." *Behavioral Sciences and the Law* 20 (2002): 253–269.

impossibility of managing all the consequences of this invasion[22] and to make a decision without real doubts or questions from a moral approach. A decision that today may appear as the best one from the ethical approach tomorrow could be blamed as an act of rushing in the decisional process with significant negative consequences: the evolution of the medical ethics is adapted to the fast development of the medical biotechnologies and of the knowledge in the medical area.

On the other hand, the criteria for the moral value of a medical act in this context are difficult to be established because of the plurality of the variables involved in the ethical issue concerning the *advance planning*. For the simplification of the decisional process, in the last decades, the field's literature mentions the *quality of life* concept which is, in the same measure, difficult to define and controversial[23]. With all the confusion concerning this new concept, it is used by many medical professionals with the hope to find some standards to define when a life could be or not worth living. Having the guidelines provided by the *quality of life* concept, the health professionals may determine when is desirable (from a practical approach) withdrawing the medical support for a suffering life.

Nowadays, the tendencies in medical practice are favorable to the interruption of the futile treatment, but in the past decades this kind of decision made by a medical doctor or the family was regarded, at the community level, as a type of euthanasia (passive euthanasia in most of the cases) and incriminated: "Passive euthanasia consists therefore in the lack of application or the interruption of a treatment which may prolong life."[24] That early approach on *advance planning* rise the following question: how did we come to consider the withdrawal of medical treatments morally acceptable?

The *slippery slope* argument, which may also lead to a logical failure of the argumentation, promote the idea that a first case that won a process concerning a particular bioethical issue, seen as unacceptable before, will become a reference case for the following similar requests in the Court. This behavior will lead to the proliferation of the type of medical decisions and acts, pushing the legally accepted limits further. Once accepted a thing, this will entail later consequences seen as unacceptable at the present moment. The use of *slippery slope* argument is still not always relevant or morally justifiable; it can hide many decisional errors.

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[22] Anders, Günther. *L'obsolescence de l'homme : Sur l'âme à l'époque de la deuxième révolution industrielle (1956).* Edition de l'Encyclopédie des nuisances. Paris: Ivrea, 2002.

[23] Aluaş, *op. cit.*, p. 31.

[24] Oprea, Liviu, şi Cristina Gavrilovici. *Bazele comportamentului individual în sănătate.* Bucureşti: Pro universitaria, 2015, p. 224.

The fundaments of the medical doctor – patient relationship[25] are the principle of life inviolability[26] and the necessity to maintain and to strengthen the trust through their collaboration[27]. *Beauchamp* and *Childress*[28] proposed four ethical principles for the medical practice: autonomy, non-maleficence, beneficence and justice. Considering the *slippery slope* argument, the use of *advance planning* may lead to social pressures in favor of the proliferation of euthanasia and medically assisted suicide and, later, to acts that take place without the consent of the patient / relatives; or the agreement may be obtained by the use of force[29]. In this kind of context, the consulting session on the *Advance Directives* or the *Living Will*, from the beginning of the hospitalization, would implicitly put a pressure on the patient to give the consent for morally unacceptable acts, performed with the legal protection. The patient will be convinced concerning the unwritten rules of the society concerning the avoidance of the irrational consumption of the medical means. This attitude is based on the stigma of the terminal stage sickness and of the people lacking the self-determination capacity, without awareness of their own identity. When the legal framework exists on patients' right to self-determination, the society may push the citizen's decision toward an action that will end the unnecessary sufferings. Finally, some voices will support with arguments the medically indicated euthanasia.[30] However, different groups and communities don't have the same views on the ending period of life, even in the context of the suffering. From a Christian theological approach, the last period of the individual's life is considered to bring him/her closer to God. Those moments may also provide relieve for the family to accept the irreversible came in the life of the loved one: a grieving period when they detach their feelings and emotions from the presence of the loved one in their life.[31]

Regarding the euthanasia, in general, three different actions are on debate: not starting a treatment that is considered futile, interrupting it or actually taking someone's life.[32] The nowadays international agreement on the

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[25] Oprea, Liviu, Cristina Gavrilovici, Mihaela-Cristina Vicol, & Vasile Astărăstoae,. *Relația medic-pacient.* Iași: Polirom, 2013.

[26] The Danish Council of Ethics. *End of life. Ethical challenges and problems.* Traducere de Tim Davies. London, 2006, p. 122.

[27] Ibidem, pp. 128-129.

[28] Beauchamp, Tom L., & James F. Childress. *Principles of Biomedical Ethics.* seventh edition. Oxford: Oxford University Press, 2013.

[29] Beauchamp & Childress, *op. cit.* pp. 131-132.

[30] Ibidem, p. 160.

[31] Croitoru, Ioan Marian. "Abordarea suferinței prin dimensiunea spirituală a credinței în Dumnezeu." În *Influența valorilor creștine asupra bioeticii europene*, de Mircea Gelu Buta, 291-302. Cluj-Napoca: Editura Renașterea, 2015.

[32] The Danish Council of Ethics, *op. cit.*, p. 150.

topic of euthanasia proposed the use of this term just for the active actions of the physician with the goal to end someone's life. Critics of euthanasia warn that this practice may become as common as today is the withdrawal of life ending treatments. The history of *advance planning* is a proof of the slippery slope model: since the first case that won in the Court, the internationally unwritten principle concerning the topic was drastic changed with the introduction of new laws. In some cases, the health professionals had the tendency to withdraw the futile treatments in some cases even before having the any legal framework in support of this action.[33]

Even if many debates are made around the life ending decisions, the context demanding a written paper may be very different from one case to another one. It can be, indeed, a case of a terminal illness or an irreversible stable medical condition as an advanced dementia or a persistent vegetative state, the individual being kept alive by machines. The approach for each case is completely different due to the patient's distinct condition and because of the specific type of medical care required. By consequence, when the patient elaborates the *Advance directives* paper, he/she must be aware about all of these distinctions and their different medical implications. Moreover, the individual may choose between the complete refusal of medical care and refusing few specific ones like the following: the palliative care, the artificial life maintenance and others. The patient may refuse the medical interventions which are in contradiction with the personal values and preferences – demanding instead an alternative medical care. A good example would be, in this case, the individuals who, based on religious views, will refuse blood transfusions, but they still require medical procedures with the use of blood substitutes.[34]

Although the international documents highlight the need for talks with the patient on *advance planning*, some studies mention that the medical doctors are still reluctant and avoidant on talking with their patients on the topic.[35] By consequence, the preferences of the terminally ill patients are poorly meet: the medical care for the end of life is still very aggressive. The issue about the *Living Will* thus remains one of the most expressive images of the existing gap, in Günther Anders' view, between the fragile human being and the medical biotechnology with increasing possibilities that comes with the risks to govern our life. The intrusion of these new technologies on the human life and body request deep reflections on the personal identity, the personal values: on the personal views

[33] Ubel, Peter A. *Critical decisions : how you and your doctor can make the right medical choices together.* 1st ed. EPub Edition: Scribd, 2012, pp. 64-66.

[34] Legal advisors committee. "The Right to Refuse Treatment: A Model Act" *American Journal of Public Health* Vol. 73, No. 8, (August 1983): pp. 918-921, p. 918.

[35] Jonsen, Siegler & Winslade *op. cit.*, p. 82.

concerning the relationship with the advancing medicine in the management of someone's health. Without having a good advance planning, the cost of prolonging someone's life can be painfully, very expensively and against his/her will. With a prior declaration, it is consider that the patient will gain some control over the medical treatment received by avoiding the technological imperative to make whatever is possible to save his/her life.[36]

Firstly, the patient may have or not the desire to prolong his/her life, depending on the personal perception of his/her medical condition. We assume, in this case, that his/her health cannot be improved; or the costs and risks, at the moral/ethical level, for its possible improvement are very high for the patient: this individual will have to give up on the personal values. And, secondly, it is about the views of the community where he/she belongs on that medical condition, but also about the medical principle of justice: the necessity to distribute righteously the medical resources to the patients. The resources to be allocated for one patient are limited and some other patients would have a higher need for them or they have better chances to live a life with a good quality after their recover. Therefore, the healthcare system may be encounter divergent views on the topic: despite of the previous considerations, the patient may express the preference to preserve his/her life in any medical conditions. In a society with the justice as the highest value, this context will find an ending point in the depletion of the resources that are allowed to be used with one patient: the medical care is based on the principle of increasing the number of the patients helped / recovered by the use of the medical means. The community has an analogical approach on the topic: the individual has value as long as he/she is productive and can be medically recovered as a productive agent. Society still keeps an approach based on productivity-consumption construct.[37] Is it morally acceptable or not to not allocate medical resources to an individual who will never be recovered – a person who continuously needs important resources for living without even being able to fully enjoy his/her life? According to Kant's moral approach, the human being must always be treated as a purpose and not as means.[38] Therefore, from a moral approach, the value of the human being will not be the result of his/her ability to have a positive contribution to the community where he/she belongs. This ethical approach will not consider justice to be the most valuable principle, but the autonomy.

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[36] Legal advisors committee, *op. cit.*, p. 918.

[37] Hirsch, Emmanuel, ed. *Ethique, médicine et société. Comprendre, réfléchir, décider.* Paris: Vuibert, 2007, p. 863.

[38] Kant, Immanuel. *Critica raţiunii practice.* Traducere de Niculae Bellu. Bucureşti: Ed. Ştiinţifică, 1972, p. 46.

What leads the patient to elaborate a paper to express his/her refuse for certain medical interventions? Is it due to the physical pain felt, to his/her respect for justice as the highest moral value or to the psychological suffering generated by the personal perception of the community's approach? The patient and the health professional are prone to have a bias concerning the patient's own life quality after performing a medical procedure or concerning the apperception of the incurable medical condition's embodiment. Most of the patients with some undesirable medical procedures, seen as having a major impact on the quality of life had a quite well the accommodation with their new condition: that living conditions becoming the new normal. The patients had the tendency to forget about the past, not being so drastically affected by their lost as expected previous. Moreover, despite the negative perception of the aging at the society level, many older people reported a fairly good quality of life and higher satisfaction. If the patient has a misperception or misunderstands concerning the life that he/she may experience in certain medical conditions that may occur someday, this person would make a completely wrong decision.[39] This issue could be a topic with a good research potential in the bioethics – at the intersection of humanities and theology with the medicine. Even if the society lives with the permanent risk of the scarcity of the medical resources, the mentioned fields above still have a mission in empowering the patient to believe that a life with some serious medical conditions may still be enjoyable and worth living. This positive attitude toward life and living may have a positive contribution in building trust between the patient and the health professionals for finding the best medical decisions possible at that moment with the respect of the fundamental values and principles of the medical care.

In this context, the professionals with deep interests in the bioethics will have to pay attention to the following questions: How will the issue of advance planning be addressed to the patient, in what moment and by whom, in order to not make this person perceive a certain pressure in the decision making process? How do the patients feel about the request of writing papers for *advance planning*? Is it possible that the patients have in their mind the following statement "I do not want to be a burden for others"[40]? Who may determine, from an ethical approach, when a life is no longer worth living? What are the grounds in establishing the uselessness of a person for the society and the futility of the medical care? Does the human being have an intrinsic, unalterable, value – the same in any medical condition – or is it changed in some cases? How

[39] Ubel, *op. cit.*, pp. 146-156.

[40] Lemmens, Christophe. "A New Style of End-of-life Cases: A Patient's Right to Demand Treatment or a Physicians Right to Refuse Treatment? The Futility Debate Revisited,." *European Journal of Health Law* 20 (2013): 167-183.

does society approach the value of the human being as a concept? The individual autonomy, set by Stuart Mill, is a principle built on the request to avoid any interference with the personal choices: on the contrary, the necessity, in the present society, is for actions with the clear purpose to improve its exercise.[41] Therefore, the following question is fundamental for the present topic: how and when will the health professionals present *advance planning* to the patient in order to not create implicit pressures for considering decisions and actions that are actually against his/her deepest desires?

Conclusion

From an ethical approach concerning the patient's autonomy, the *Advance directives* paper is not elaborated just with the purpose to protect the healthcare professionals in the court for their decision to withdraw the medical support. *Advance planning* should, foremost, meet the patient's will: it may provide the assurance of the fulfillment of the autonomy principle by giving to the patient the chance to choose those medical interventions which are in accord with his/her personal values. Therefore, the patient will have the conviction that he/she will receive a medical care as good as he/she would still be able legally to make a decision at that critical moment.

Thus, some good information about the *Advance directives* offered to the patient in a proper moment may really help this person to exercise his/her autonomy; but if this knowledge is provided improperly (concerning the chosen moment and the attitude of the presenter), it will create implicit pressures for the patient. This attitude toward the patient may have a negative effect on his/her trust in the medical professionals – also affecting deeply the clinical collaboration.

The dialog with the patient on the topic of *advance planning* may become a serious issue in a country like Romania, where the specific legislation is still on development: mass-media brings in attention the concerns about the meaning of the *Advance directives* in the common language, the formal aspects of the paper and the rules followed in their interpretation. The patient may become a subject to the social pressures in accepting decisions in opposition with his/her personal will. His/her decision-making capacity may become a kind of pseudo-autonomy: this person will lose the personal freedom, not through his/her medical condition, but because of the views of the society on what decision would be honorable and good[42]. Inspired by the society's views, the patient will, probably,

[41] Sandu, Antonio. *Etică și deontologie profesională.* Iași: Editura Lumen, 2012, p. 102.
[42] Hirsch, *op. cit.*, p. 863.

remain with the illusion of exercising his/her decisional ability until the last moment by choosing to put the end to his/her life in some well-established circumstances. Autonomy is, of course, a fundamental value of the human existence, but to what extent is it a real one or just an illusion created by the decision to walk the path established by the society?

The history of *advance planning* brought a correlation made between the idea of *Advance Directives* and Living will (*Life testament* being the literal translation of the Romanian expression often used for this document) that may create in the patient's mind a distorted image about the purpose of this kind of paper. In the common language of Romanian people, the word "testament" refers to an unavoidable life ending condition that may last for a short period of time. Will the healthcare professionals be interested in making this person aware about inalienable intrinsic value of the human being or will they behave in a way that may create the impression that the value of the individual is grounded just on his/her active involvement in the community? The language used in the elaboration of that document may recall, in the mind of the patient, the irreversible condition of death. What kind of language should be used to inform the patient without making any implicit pressure on him/her? What behavior would be ethical in this context? How will the risk of the medical resources scarcity be presented to the patient?

By a good attention given to the language used to address the issue of *Advance directives*, the information offered to the patient may just point the necessity of planning in advance for a possible future context. The message should empower the patient by explaining the need to elaborate this paper to have the assurance of receiving the best medical care preferred in a context of decisional inability. The *advance planning* should be presented as the warrant for the preservation of the human being's autonomy, value and dignity in any medical condition.

Despite any supposition came from the relatives, medical staff or community concerning quality of life of a certain patient, his/her intrinsic value and dignity should not be undermined by undesirable actions of other people. Even if the patient is unable, at that moment, to make a medical decision, that person may not get actively involved in the community, he/she still disserve to have the community's support to live the best life possible for that medical condition in a society built for its citizens, based on well balanced moral views.

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ONLINE MEDICAL LEARNING AND ETHICAL BEHAVIOUR DURING THE COVID-19 PANDEMIC

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ABSTRACT. The practice of unethical behaviours has been shown to be closely related to previous experience in adopting such behaviours. Many studies have identified that the observation of unprofessional behaviours in peers by the lack of reaction from teachers encourages students to adopt such behaviours that will be maintained throughout life. That is why the need for ethical training of medical students is necessary, especially since the adoption of online activity during COVID-19 pandemic that facilitates unethical behaviours, such as simulating attendance at classes, cheating the assessments, etc., which are much more difficult to prove.

Keywords*: medical students, ethics, medical education, COVID-19, pandemic, teachers, university.*

REZUMAT. ***Învăţământul medical online şi conduita etică în timpul pandemiei Covid-19*****.** Practicarea comportamentelor lipsite de etică s-a dovedit a fi strâns legată de experienţa anterioară. Multe cercetări au identificat faptul că observarea, participarea la unele comportamente neprofesionale sau asistarea la practicarea lor de către colegi dublate de lipsa de reacţie din partea profesorilor încurajează studenţii să tolereze şi chiar să adopte astfel de comportamente care se vor menţine de-a lungul vieţii. De aceea este absolut necesară formarea etică şi morală a studenţilor, mai ales în perioada particulară a restricţiilor determinate de pandemia de COVID-19. Studiile arată că activitatea online facilitează practicarea comportamentelor lipsite de etică precum simularea prezenţei în timpul cursurilor, trişarea evaluărilor etc, comportamente neetice care sunt mult mai dificil de dovedit.

Cuvinte cheie*: studenţi medicinişti, etică, educaţie medicală, COVID-19, pandemie, profesori, universitate.*

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Introduction

The unique context of the COVID-19 pandemic caused major changes in healthcare system and in medical education in universities all over the world and determined important processes of restructuring and reorganization of activities. In a noticeably short period of time, the educational activity had to adapt to the new conditions imposed by the pandemic, to ensure social distancing and prevention of COVID-19 infection. According to UNESCO, by the end of April 2020, a number of 186 countries have implemented nationwide closure, affecting about 73.8% of the total enrolled learners. (UNESCO, 2020)

Medical students did not have access to medical clinics to carry out their internships and interact with patients. They have enlisted as volunteers in various clinics to work with the medical staff and offered supplementary medical support for patients in the fight against Coronavirus infection.

Across many countries and many medical specialisations (general medicine, dental medicine, nursing, or pharmacy) medical education programmes have been disrupted. The continuous spread of the pandemic, strict isolation measures, interruptions and then, delays in starting schools, across the countries were expected to influence the mental health of medical students and their professional activity. There have been reports on the psychological impact of the pandemic on the public, patients, medical staff, children, and older adults, in general. (Yang et al, 2020)

For some countries, this disruption of medical education is not a new experience. Some studies already presented the experiences of doctors during SARS pandemic. Separate medical units have been specially set up to work with infected patients. (Jervis & Brown, 2020) Medical personnel were relocated to ensure continuity in these units. On the one hand, intensive work, and overwork due to the large number of seriously ill patients and the number of working hours have overwhelmed the medical system and staff. The stress created by the fear of becoming infected, transmitting the infection to family members, or dying from the disease has led to high burnout scores among health workers, influenced by the high mortality rate of medical staff. For example, in a study conducted by Rambaldini et al (2005) in three University-affiliated hospitals in Toronto, Canada during the SARS outbreak in 2003 it was showed that fear was present among healthcare providers because many workers became ill as a result of occupational exposure and some later died. Fear was doubled by the fact that, as the authors explained, SARS was unique in the challenges that it posed to the health care system such as the paucity of the available information about the aetiology and transmission of the infection.

Fear of infection in the academic environment

Data collected in medical schools identified high rates of stress and anxiety related to the possibility to get infected, also, regarding the medical education. The most affected students seemed to be those in final years of their studies. Among the very recent studies conducted during the first months of COVID-19 pandemic, those lead by Cao et al in 2019 in China, showed that epidemic has brought not only the risk of death from infection but also unbearable psychological pressure in the medical universities. Authors found that 0.9% of the respondents were experiencing severe anxiety, 2.7% moderate anxiety, and 21.3% mild anxiety. Living in urban areas, having a stable family income, and living with parents were protective factors against anxiety. Moreover, having relatives or acquaintances infected with COVID-19 was a risk factor for increasing the anxiety of medical students. (Cao et al, 2020)

The pandemic period forced medical schools to rethink their pedagogy and to find new ways of teaching. Medical educators decided to continue with clinical training in the absence of "live patient" contact replacing them with actors, videotaped vignettes and student volunteers, video-taped interviews with patients, the use of mannequin simulators, webcasting and online chatrooms, which were successfully adopted by medical schools during the SARS outbreak. (Lim et al, 2005)

Online learning vs face-to-face traditional learning

While some countries suspended in-person classes from March/April 2020 until further notice, in other countries the universities were less restrictive, where the advices were to reduce face-to-face academic activity and to replace it with online solutions as much as possible. Some other institutions postpone the restart of the activity. Exclusively online activity was considered unacceptable for many medical universities due to its specificity and need to have a student-patient contact, as in nursing schools, medicine, or dentistry.

COVID-19 represents again a crossroads for educators. They must adjust their teaching to be professionally delivered online, to adopt the critical thinking and to encourage individual work, to find ways to objectively evaluate and to support students in their academic achievement. In virtual education the challenge is to "redesign almost everything". (Hall et al, 2020)

Students and teachers should prove digital skills. "Digital competence is the group of skills, knowledge and attitudes needed when using ICT and digital devices to perform responsibilities, such as problem solving, information

management, collaboration with respect to effectiveness, efficiency and ethics". However, some studies showed that almost 25% of the students never participated to an online class before COVID-19 pandemic. (Ferrari, 2012)

The outbreak of COVID-19 resulted in a digital revolution in the higher education system in many countries, due to the long period of confinement. Online lectures, teleconferencing, digital open books, online examination, and interaction in virtual environments have been used. (Kumar, 2020) A significant positive impact of pandemic on academic education was also reported related to learning efficiency and performances by adopting online learning strategies (Gonzalez et al. 2020) and the majority of students reported being involved in online activities since the beginning of COVID-19 pandemic. However, some researchers showed that medical students complained that online learning sometimes fails to provide timely feedback and response compared with traditional learning and do not offer sufficient time to each of them. (Li et al, 2019) On the other hand, it was proved that students can get effective feedback in time when it comes to online tasks. Using both learning systems - a blended learning - was reported to improve the performance skills but not improve knowledge. (Kaveevivitchai et al., 2009)

However, the online mode of the teaching-learning process is often discriminatory to the students with a low socio-economic level and to the marginalized ones. For example, hearing-impaired students or people with visual impairments face difficult challenges in online learning. Socio-economic problems can also be decisive for students' involvement in online practical activities. Not all students live in Internet coverage areas or have a personal laptop at home. The facilities they have at the university are not identical to those at home. The lack of permanent Internet connectivity or of a high-performance personal device (not only a smartphone) is an impediment for attending the online courses and for the good performance of academic activities.

Muthuprasad et al (2020) conducted a study in India and showed the pros and cons of online activity among students with a low socio-economic level. Over half of the participants agreed with the statement that online learning considerably improved their technical skills and was less effective when it comes to communication with the teacher as compared to face-to-face classes.

Barriers in online learning were also identified by Baticulon et al (2020). The authors identified five categories: technological, individual, domestic, institutional, and community barriers. Among the most frequent were mentioned: difficult adjusting learning styles, having to perform responsibilities at home, and poor communication between educators and learners.

Online learning - Fear of academic failure. Concept of self-regulated learning (SRL) and performance in higher education and the practice of unethical behaviours

A metanalysis carried out by Pei and Wu (2019) showed that there is no evidence that offline learning works better than online learning. Online learning has advantages to enhance undergraduates' knowledge and skills. The authors concluded that it can be considered as a potential method in undergraduate medical teaching.

Another study conducted by O'Doherty et all, in 2018, found that, when analysing articles from databases regarding the impact of online learning in medical education, findings showed that the key barriers which influence the development and implementation of online learning included many factors such as time constraints, poor technical skills, inadequate infrastructure, absence of institutional strategies and support and negative attitudes of all involved. The authors also identified some solutions such as: improved teacher skills, incentives and reward for the time dedicated to the development and delivery of online content, improved institutional strategies and support and positive attitude amongst all partners involved in the development and delivery of the online content to medical students.

One of the greatest challenges is to have an accurate and objective evaluation in medical schools, in terms of both theoretical and practical knowledge. In order to have a fair process of evaluation and to give equal chances to all students, teachers must adapt their strategies.

One of the most used ways of learning is the individual one – autonomous learning – meaning that the students must learn under the supervision of a teacher, of course. For many students, especially those from final years of studies, individual preparedness of the works and thesis could be stressful. Teachers should find ways to stimulate them to work and to provide quick answers to guide them adequately. In the beginning of pandemic, the consequences of university closure extended to the end of the academic year generated many questions concerning grading and evaluation of progress that rapidly became a significant policy challenge. (Gonzalez et al, 2020)

Online evaluation, as Gonzalez et al (2020) explained recently, has become one of the most concerning concepts in the education during recent pandemic of COVID-19 because of two reasons. First, academic teachers should adjust their lectures and homework, redesigning teaching and evaluation to meet distance evaluation requirements. Some of the theoretical disciplines are more easily to be managed, but in case of clinical stages, the information is fractioned and delivered with difficulty. Second, it is still unclear and need more

research to identify the manner in which we can ensure that all students follow the instructions and do not adopt unethical behaviours during their online evaluation tests, like plagiarising, cheating, using of supplementary sources, sharing information with colleagues etc. (Gonzalez et al, 2020)

Jovanovic et al (2019) showed that management of learning resources is essential for a correct self-management of learning strategies of students. Therefore, many authors highlighted the importance of self-regulation learning processes among higher-education students to achieve their academic goals during pandemic period and online activities. Self-regulated learning (SRL) refers to "the active and constructive processes that are driven by thoughts, feelings, and actions toward reaching one's personal goals". (Zimmerman & Schunk, 2011) As the authors explained, the low level of achievement in school is related to SRL that induces stress and dissatisfaction. Many researchers describe SRL as the ability of students to function academically on their own, to be motivated and to achieve their goals and consider it extremely important for life-long learning.

"In an era when these essential qualities for lifelong learning are distressingly absent in many students, teaching self-regulated learning processes is especially relevant", as stated by Zimmerman (2002). Zimmerman presented the model of SRL as a process model that use a cyclical structure. From this social cognitive perspective, the strategies of SRL are defined in phases of *before*, *during* and *after* learning, having three phases: *forethought*, *performance*, and *self-reflection* (pre-action phase, action phase and post-action phase). Thus, students involved in online activities (as the many of them during pandemic period) had to deal with individual work and self-management, under the supervision of a teacher, As Zimmerman said "self-regulated learning refers to how students become masters of their own learning processes. It is not a mental ability or a performance skill but rather is the self-directed process through which abilities are transformed into task-related skills in diverse fields." (Zimmerman, 2008)

In front of the new challenge – studying by themselves – students must prove their abilities to deal with this new status. As Zimmerman and Schunk presented in their different studies, the component skills include: (a) setting specific proximal goals for oneself, (b) adopting powerful strategies for attaining the goals, (c) monitoring one's performance selectively for signs of progress, (d) restructuring one's physical and social context to make it compatible with one's goals, (e) managing one's time use efficiently, (f) self-evaluating one's methods, (g) attributing causation to results, and (h) adapting future methods. A students' level of learning has been found to vary based on the presence or absence of these key self-regulatory processes (Schunk & Zimmerman, 1994; 1998).

If students are not aware of their learning goals and if they do not have a clue on how to reach them, they will be more prone to adopt habitual learning strategies. Thus, they will be tempted to avoid adapting or making up new strategies that may not be appropriate for processing a learning task instead of creating new ones. The SRL process model and the related learning strategies and techniques are used to guide the learning process.

Moral competencies and ethical practices are among the desired outcomes of academic training in different types of specialisations. Nevertheless, academic dishonesty, unethical behaviour and misconduct are reported by universities across the world with high rates among medical students. Self-reported unethical practices identified scores between 2% in a study conducted in United Kingdom and 99% in Croatia. But generally, the scores are high and reflect a habitual behaviour encouraged by institutional rules, teachers' reaction, colleagues' behaviour, and personality traits.

A recent study of Yadav et al (2019) showed that most medical students (83%) have admitted that they practiced academic dishonesty, 12% have copied from the record books of others, 5% of the students revealed forging a teacher's signature in their record or logbooks.

Many studies have shown that there is an important correlation between practicing unethical behaviours during university studies and previous unethical experience. Also, studies conducted on resident physicians have shown that those who practiced unprofessional behaviours also practiced unethical behaviours throughout university studies. That is why many policy makers in medical universities have introduced ethics and ethics courses. But, on the other hand, various studies show that the level of knowledge about professional moral behaviours does not influence the behaviour itself. Not only the practice of unethical behaviours influences the professional practice later but also the fact that students witness such behaviours exhibited by their colleagues and the lack of reaction on the part of teachers encourages them to adopt such behaviours as well. (Seif-Farshad et al, 2016; Papadakis et al, 2005)

When comparing student's success in online classes and in face-to-face traditional classes, the results obtained by different authors proved that students' performance is worse in online courses. Students in online education underperform, particularly the underprepared and disadvantaged ones. McLaren (2004) mentioned that regular teacher-student interactivity is an important key of quality in online education and has a positive impact on student satisfaction. As Gefen and Straub (2004) showed, face-to-face discussions are usually more effective than electronic means because social presence influences information-sharing behaviour. A less developed relationship between teacher and students, a

less motivated involvement in the academic activity, a low level of self-control will determine poor outcomes. Being afraid to fail in online classes, student is more tempted to cheat.

Due to the extreme importance of professional training and the need for a practical evaluation in the field of medicine, it has been observed that online activities are preferred in the case of basic subjects, while clinical disciplines are carried out face to face. (Ruiz, Mintzer & Leipzig, 2006)

Conclusion

Online activities in the university field are more and more challenging for both students and teachers. Unethical behaviour among students is known to affect their practice over the years. That is why online education should not neglect ethics and professionalism while training medical students. Students and teachers are discovering new ways of using online teaching methods and evaluation tools and sometimes the attractiveness of high grades is determining the learners to find ways to obtain them. Providing trainings, establishing guidelines and promoting ethical behaviour among online university activity will help both actors- student and teacher- to collaborate better during restrictive times of pandemics.

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II. INTERVIU – INTERVIEW

STUDIA UBB BIOETHICA, LXV, 1-2, 2020 (p. 89-91)
(RECOMMENDED CITATION)

COVID-19 PANDEMIC: HOW BIOETHICS CAN HELP FACE HEARTBREAKING CHOICES

A dialogue between Maria Aluaş and Professor Rouven PORZ, Universitätsspital BernInselhospital Bern, Switzerland and Visiting Professor at the Iuliu Haţieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

The exceptional situation experienced in the last months with the COVID-19 pandemic raised difficult ethical questions in medical, political and social decision-making. A Clinical Ethics Unit is a facility in a hospital that is set up with the purpose to help medical professionals when they are facing difficult ethical decisions, for example in relation to their patients' diagnosis or therapy or in relation to deal with the relatives of patients. In this interview we will interrogate Professor Rouven PORZ, from the University Hospital Bern "Inselspital" in Bern, Switzerland. He is the head of a Clinical Ethics Unit and president of the European Association of Centers of Medical Ethics (EACME). We will talk with him about the role and the meaning of clinical ethics support during the Covid-19 pandemic.

MA: Before asking you about very specific activities, please tell us, what is the usual daily activity of an ethicist in the clinics setting?

RP: The role of a clinical ethicist is a relatively new role in our Western healthcare systems. We see ourselves as a support function for doctors, nurses, midwives and physiotherapists - in other words, for all health care professionals - when they are faced with difficult ethical situations. But what is an 'ethical situation'? It is for example a conflict of values: one does not know what to do, or a team does not know how to best treat a patient. I give you an example: Imagine a therapy situation with a very, very sick old male person in the intensive care unit. And, let's imagine that this man is currently incapable of making his own judgments. A doctor now wants to discontinue the therapy; he gives many reasons why a further therapy is not worthwhile. However, another doctor wants to try a new experimental therapy, and the daughters of the patient are overwhelmed. Can they let their father die? Or do they have to keep trying? Such and similar situations are relatively common in a University hospital, simply because medicine

today has so many possibilities to do so much. Here it can help to have this decision-making process structured by an ethicist, so that every perspective has its say, that every voice is heard, and that - in the end - hopefully, the decision will be in the best interest of the patient. Here the ethicist is a process aid, a facilitator of the decision-making process. He or she does not make a decision himself or herself.
Besides activities like that, we can give one-to-one advice, or we conduct inter-professional case discussions or offer continuing education on ethical issues. In addition, we teach medical students and nursing staff at the university or at the technical college. And, we also counsel the board of directors of our hospital when it comes to strategical institutional questions around ethics topics.

MA: What have been your activities, related to healthcare professionals and patients in recent months, during the pandemic?

RP: To be honest, our role was not very different from that described above: we tried to help with the situations that were considered ethically difficult by the health care professionals. First, we helped to think about whether and how guidelines for triage in the intensive care unit were needed. Then we introduced a telephone consultation for employees who had questions about Corona. But all in all, we spent a lot of time (especially with the students) explaining how our work paradigm in the hospital has changed. We were very used to offering individualized medicine and putting the individual patient in the foreground of attention (that is the realm of 'medical ethics'). From one day to the next, however, there was a new paradigm: Now the focus was no longer on the individual but on public health (so we had to change from the paradigm of 'medical ethics' to public health ethics). This was very difficult for many employees to understand, and it is not easy for many of them even at the moment.

MA: What were the most discussed ethics issues and values related the emergency of pandemic?

RP: This was different at the beginning of the crisis, in the middle or now. Specifically, in March 2020, there was a lot of talk in the health sector about the concern that there would not be enough resources for all patients in intensive care units. During the lockdown, other problems were suddenly at stake: Which elective surgeries should be postponed, which ones have to be performed? Can visitors come to the hospital or not? How to deal with domestic violence, or with the increase of usage of alcohol during the lockdown? At the moment, we seem

to have a first 'normalization'. Now it becomes visible in Switzerland that the biggest ethical problems may have occurred in the nursing homes (and not in the intensive care units). Many old people were no longer allowed to receive any visits at all, and some of them died without being able to say goodbye to their relatives. In addition, there were probably disproportionately many COVID-19 infections in the nursing homes. This problem is now being dealt with. But, it is now June 2020 and we are still living in uncertainty about how this year will continue and what new things may come related to COVID-19.

MA: In your perception, what could be the most important role of bioethicists and clinical ethicists after the Covid-19 pandemic?

RP: I think our most important role will be to explain and teach. As I have said, Western medicine is so attuned to self-determination and emphasis on the individual patient that the new paradigm of public health is not yet fully understood. This is where we must help. Just as it is now normal for us to wear seat belts in our cars and cycle helmets (these are also public health measures), hygiene measures must be understood, and the understanding of the importance of vaccination also plays an important role in public health. Ethics must not be patronizing or too moral, ethics must help people come to terms with what is at stake. That is why I believe that ethics has the following important tasks in the Corona crisis: it can help to encourage people (students, doctors) that we are really facing uncertainty in situations of crisis. The discipline of ethics is used to dealing with uncertainties and discrepancies. Ethics is about meaning, and that is something different from scientific facts. In the search for meaning there is always uncertainty. Ethics can help explain that these uncertainties are human (and ethics should never try to provide certainty if there is no certainty). Aristotle already said these two and a half thousand years ago (and he did not know about COVID-19 coming): Ethics is always blurred, because human actions are also often blurred. There is certainty in mathematics, but not in ethics. So let us not pretend certainty in situations of uncertainty.

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