# Polish ethics and medicine in XXI century (opportunities and threats)

Etyka i medycyna w Polsce w XXI w. (wybrane zagadnienia)

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# KEYWORDS:

- · medical advances
- · ethical dilemmas
- · threats to civilization
- · medical ethics
- · abandonment of treatment

# **ABSTRACT**

Despite medical breakthroughs, mankind is still unable to effectively counter health challenges. The COVID-19 pandemic is a case in point. It has failed to predict its effects and the extent to which it is spreading, even though statistical studies had indicated that it may be coming. The purpose of this article is to identify medical and ethical issues arising from the difference between the current state of medical knowledge and the associated challenges.

# SŁOWA KLUCZE:

- postęp medycyny
- dylematy etyczne
- zagrożenia cywilizacyjne
- · etyka medyczna
- · zaniechanie leczenia

# STRESZCZENIE

Mimo przełomowych odkryć w medycynie ludzkość wciąż nie potrafi skutecznie przeciwstawiać się wyzwaniom związanym z ochroną zdrowia. Przykładem może być pandemia COVID-19. Nie udało się przewidzieć jej skutków i zakresu rozprzestrzenia się, mimo że badania statystyczne wskazywały na możliwość jej nadejścia. Celem niniejszego artykułu jest wskazanie problemów medycznych i etycznych wynikających z różnicy pomiędzy aktualnym stanem wiedzy medycznej, a związanymi z nią wyzwaniami.

The turn of the 20<sup>th</sup> and 21<sup>st</sup> century is characterized by a very visible progress in the development of medicine and access to new treatment methods. This phenomenon is evident in many fields of medicine, such as invasive cardiology, oncology, hematology, renal replacement therapy, including dialysis and organ transplantation, especially where the latest technological achievements are used.

A number of important discoveries in the field of physics and chemistry, such as X-rays and radioactive elements, the improvement of microscopy techniques, new ways of synthesizing chemical compounds, or the development of numerous technologies allowing for an increasingly improved description of the structure and function of the organism at the molecular level, up to the elaboration of the structure of the human genome, have led to the current state of knowledge allowing for effective prevention of many diseases (1).

Further and significant developments can be expected in many of these areas in the coming years. Along with this, great progress can be seen in the techniques of organization and bureaucracy of the entire health service, especially in its computerization. Further improvements in this area, however, will depend on the financial capacity of states and their institutions responsible for our health and lives.

Medical advances are just one of the pillars of increasingly longer lives for people in industrialized countries with high standards of living (2).

The expected improvements will probably consist in the introduction of new treatment methods, both conservative and surgical. An important element – having a positive impact on the health of the population – will also be preventive procedures, including methods of preventing the occurrence of dangerous diseases. These include, among others, vaccination against diseases for which there is still no effective treatment, or the so-called healthy lifestyle: physical activity, diet.

We are facing new issues related to over-eating. Hand in hand with this we are seeing a decline in the culture of eating. Until recently, a meal at home was a gathering of family members around the table. Today, modern man consumes without interruption, eating on the streetcar, bus, at the bus stop, on a walk, on the way to work, eating from a bag, at all private meetings or meetings organized by companies or other institutions. We consume until late at night, we drink high-calorie "energy drinks", various kinds of lemonades and "juices" from concentrates, beer, wine. And we forget about the fact that the human body contains 60% water, which we drink so little in its natural form. When we overeat, we sleep badly, we get up sluggish with a headache and we complain about stomach and liver ailments, and sometimes even heart ailments (2).

Still, many situations related to modern possibilities of treatment, and thus to the health of patients, cause us considerable embarrassment. This perplexity concerns both

our medical knowledge, or more broadly: knowledge about the external world, and that concerning human biology and structure. The ongoing Covid-19 pandemic, especially its rapid progress at a time when health care systems were not prepared for its eventual course, has resulted in inefficient hospitals and outpatient clinics in many wealthy European countries as well as in the United States. We well remember the images of the course of the pandemic in Italy, France, the USA or Poland. The initial mortality figures were particularly striking, as was the information on the segregation of patients according to age, in access to ventilators.

As a result, after nearly two years of the pandemic, the number of deaths reached about 6.2 million. (data as of April 1, 2022) (3), which – taking into account the progress of medicine during the last 100 years – is proportional to the human losses that were reported during the pandemic of the so-called "Spanish flu" (4, 5).

On the one hand, we have incomparably greater possibilities of treatment, and on the other, we have the same as before impotence of health care institutions, which raises questions of a philosophical nature. The most important question here is as follows: will nature always be ahead of us in the choice of means, so that - regardless of the progress of civilization - we will never have the opportunity to prepare an adequate response to pandemic threats? Do periodic pandemics simply have to happen? Should we be guided here by simple statistics more than by human reason? This last question is existential in nature: are human destinies subject only to statistics, or are they therefore mechanistic in nature? This is not a question about our individual decisions, this question has a deeper character. It concerns our collective behavior, as if social phenomena were subject to the principle of necessity, regardless of who specifically participates in them.

After all, it is something truly intriguing that in spite of all preparations and the human ability to foresee events, also with the help of sophisticated devices, man is still unable to properly prepare for the actions of nature, also in the area of cyclically occurring pandemics. This is all the more astonishing since the predictions of a future pandemic have been known for several years.

The COVID-19 pandemic in the U.S. was preceded by long-term forecasts and numerous direct warnings of dangerous developments in China (6, 7).

Despite ongoing containment efforts, the COVID-19 pandemic proved surprisingly accurate in dismantling the gains of human civilization. The pandemic changed our civilization not only biologically, but also socially, economically, politically, psychologically, even ethically. The pandemic has reversed the direction of social thinking: from the individual to the whole, it has completely changed the concept of freedom, including civic freedom, it has overturned the order of civilization, for which the most valuable thing was development and crossing successive barriers.

All this has given rise to ethical dilemmas and ever new moral challenges, which are faced above all by health care workers. Of course, such dilemmas include concrete situations, such as the lack of equipment necessary for treatment. It is equally obvious, however, that these situations do not remain without influence on other segments of the health care sector. This is the case, for example, when the aforementioned lack of equipment results in the necessity of conveying unfavorable information to the patient or his/her family. For a physician, this is always an ethically ambiguous situation.

However, these are not the only ethical problems in medical practice. These are often associated with the need

to decide whether or not to use a particular treatment, to continue or to abandon treatment already started.

The decision to undertake treatment seems to be easier to make. Especially when it concerns an acute disease, which is an immediate threat to the patient's life. A good example can be the treatment of acute myocardial infarction, in which, regardless of the age of the patient, timely cardiac intervention can save and prolong the patient's life. The situation is slightly different in the case of stroke. In this situation, treatment is more difficult and treatment effects are uncertain, often ending in permanent disability. If it concerns a person of advanced age, the disease dramatically affects the quality of further life.

The situation is different in the case of renal replacement therapy using dialysis. The progress that has been made in accessing this treatment means that anyone who needs it can receive it in both acute and end-stage failure. Withholding treatment at this stage would therefore be against the principles of medical ethics.

It has to be said that withholding treatment is one of the most delicate problems of contemporary health care. In spite of the procedures, human life still evades unambiguity, so that a certain gap arises between the abstractness of the legal norm and medical practice. After all, treatment takes place on a living, spontaneous organism, so that it is not possible to define objective procedures. The decision-making gap is then the space in which the physician moves according to the principles of his conscience. These, together with medical knowledge, constitute the core of the decisions to be taken. Most importantly, these decisions – although based solely on a moral foundation – do not, because they cannot, remain in conflict with legal norms.

A legal norm is general and abstract in nature. It defines the order or prohibition of conduct in a typical situation. The doctor, on the other hand, has to deal with a specific accident, which in addition to general characteristics, is characterized by individual features. Abstraction of a legal norm creates a certain slack in the doctor's decision-making process.

In a situation of discretion, the doctor guided by the precepts or prohibitions of conscience is not in conflict the disposition of the legal norm. The norm, as it were, refers to the criterion of the doctor's conscience through the lack of specificity of the order or prohibition (8).

Thus, the problem of the omission of treatment actually becomes primarily a moral problem. It is worth adding that today's proposals go in the direction of strengthening the institution of conscience at the expense of parameterization and bureaucratization of medical procedures. This is particularly evident in the case of legislative proposals referring to life-threatening situations or situations of serious damage to health. Thus, we read:

In a situation of threat to life or of danger of serious harm to health, it is reasonable to assume that the threatened goods must, in the hierarchy, precede the individual freedom of the doctor against compulsion to act contrary to his conscience.

Beyond such a situation, the freedom of conscience must be more strongly protected against coercion to act contrary to conscience. To this extent, Article 39 of the Medical Profession Act should be amended by narrowing the reservation with respect to Article 30 of this Act to only those cases in which a delay in rendering medical care threatens an imminent danger to life or an imminent danger of grave harm to health (8).

Continuing on the topic of renal replacement therapy with hemodialysis, which, if chronically administered, is routinely done 3 times a week in the hospital setting, is associated with constant transport of patients to the 4-hour-long procedure in a specially designed transport vehicle. Such treatment may last for many years, which for a person with multiple comorbidities and complications of dialysis alone may be burdensome, even difficult to bear. Another situation is the initiation of chronic dialysis therapy in a patient at an advanced age with severe comorbidities. Wouldn't it be better to continue chronic conservative dialysis treatment for such a patient at home? Especially that conservative treatment in such a situation may or may not be as effective as renal replacement therapy. From the ethical point of view, the good of the patient should always come first. On the other hand, the economics of a given treatment is at stake. This is one of the most significant problems of the health service, when on the one hand, there is the possibility of effective treatment of a given patient, and on the other, treatment of a less effective but larger number of patients.

It must be said at once that any calculation as to the number of patients to be treated is morally unacceptable. You cannot save a few patients at the cost of someone else's life.

In organ transplantation, the issue of whether this therapy, which is one of the greatest achievements of medicine, is ethical, comes up again. This is a very complicated subject, because it usually concerns the transplantation of organs from the dead, most often in road accidents. It is a matter of determining brain death, as well as the consent of the deceased and his family for organ donation, the possibility of family organ donation (which is not always possible), transplantation of organs from animals, or the possible future of organs grown by biomedical engineering from appropriately induced pluripotent stem cells or the cultivation of hybrid organisms. Although this issue is no longer a new problem, the emerging possibilities perhaps require a fresh look at this dilemma.

One of the most important ethical problems in this area is the problem of presumed consent for the procurement of organs from a deceased person. This is because, contrary to popular belief, there is no such thing as a Consent Registry – in this sense, the consent declarations filled out by some for organ removal after death have no legal significance. According to para. 1, Article 5 of The Cell, Tissue and Organ Recovery, Storage and Transplantation Act:

If a deceased person did not express objection, when alive, it is allowed to recover cells, tissues, or organs from such person human cadaver for transplantation purposes (9).

In practice, this means that any legal significance has an entry in the Central Register of Objections. However, it should be taken into account that the Polish society does not have sufficient knowledge about transplantation regulations - the CBOS survey of 2016 showed that only 20% of respondents know about the principle of presumed consent functioning in Poland (by the way, the commentary to the survey notes that this is the highest percentage – in the previous survey, i.e., the one of 2016, the knowledge about presumed consent was characterized by only 14% of respondents) (10). Ethical reflection in this context should address the question of individual consciousness (in the case of living persons, any interference with the human body must be preceded by conscious and free consent, with the clear exception of exceptional situations clearly defined by law). Perhaps more justification should be given as to why - in the case of deceased persons – consent to the harvesting of cells, tissues and organs is presumed.

Another issue that relates to pandemics and vaccinations as the only effective method of disease prevention is the need for clinical trials before introducing drugs or, for example, the aforementioned vaccines. These studies are based on observations of the effects of new medicinal products in animals and then in man. For the medical profession this is an understandable situation, but for the public the volunteers who take part in clinical trials are considered so-called "guinea pigs". The first trials with Edward Jenner's smallpox vaccine on a small boy two hundred years ago, of course without the approval of the Bioethics Committee, as is the case today, were fortunately successful. Had this not been the case, the discovery of a vaccine against the deadly smallpox and other diseases would have been delayed, and these diseases would have claimed many lives. At the same time, society is undermining the feasibility and efficacy of vaccines, as we can see in the current pandemic, resulting in still too few people being vaccinated. The consequences are both a prolonged pandemic and many casualties.

In this context, one of the major ethical challenges (which is part of the task of social ethics) is to convince individuals that their interests are in fact aligned with those of society. Typically, individuals who show no desire to be vaccinated understand the pandemic situation as a systematic erosion of their civil rights - this is particularly evident in the case of restrictions. These people oppose pandemic regulations, question the sense of these regulations, and challenge the authority of modern medicine and epidemiology. They do not understand, however, that the goal in itself is not to violate their fundamental rights (by - as these people erroneously state - closing restaurants, stores, swimming pools, hairdressers, etc.), but to limit the transmission of the virus as much as possible. A similar – if not identical - situation applies to the issue of vaccination. The widespread encouragement of vaccinating as much of the population as possible has one main goal: to eradicate the pandemic dimension of the COVID-19 disease and, consequently, to return to the pre-pandemic state.

In the practice of medicine, because in it we mainly encounter ethical dilemmas related to treatment and its possibilities, there are many more similar issues/important problems, but developing them is already beyond the capacity of this publication. The ones presented in the above paper/in the above considerations are issues selected entirely subjectively by the authors.

# REFERENCES

- Urban K. Rozwój medycyny w XXI wieku. Web sites. https:// enel.pl/enelzdrowie/technologie/rozwoj-medycyny-w-xxi--wieku [access date: 21.12.2021].
- (2) Zazgórnik J. Niektóre aspekty współczesnej medycyny. Web sites. http://www.czytelniamedyczna.pl/3208,niektlre-aspekty-wsplczesnej-medycyny.html [access date: 21.12.21].
- (3) https://www.worldometers.info/coronavirus/ [access date: 01.12.2021].
- (4) https://szczepienia.pzh.gov.pl/ciekawostki/czy-pandemiacovid-19-zalicza-sie-do-najgorszych-plag-w-historii/ [access date: 21.12.2021].
- (5) https://www.medonet.pl/koronawirus/to-musisz-wiedziec,-grypa-hiszpanka--czego-nie-wiecie-o-najwiekszej-epidemii--w-historii-,artykul,43757339.html [access date: 21.12.2021].
- (6) https://pism.pl/publikacje/\_Pandemia\_COVID19\_a\_skutecznosc\_systemu\_ostrzegania\_przed\_zagrozeniami\_biologicznymi w USA [access date: 21.12.2021].

- (7) https://biotechnologia.pl/biotechnologia/chinscy-naukowcy-badajacy-nietoperze-juz-w-2017-r-ostrzegali-przed-zblizaja-ca-sie-epidemia-wirusa-podobnego-do-sars,20956 [access date: 21.12.2021].
- (8) Zoll A. Niektóre etyczne i prawne dylematy związane z zaniechaniemświadczeń medycznych. Websites. https://www.mp.pl/ etyka/terapia\_chorob/40137,niektore-etyczne-i-prawne-
- -dylematy-zwiazane-z-zaniechaniem-swiadczen-medycznych [access date: 25.12.2021].
- (9) art. 5. Ustawy z dnia 1 lipca 2005 r. o pobieraniu, przechowywaniu i przeszczepianiu komórek, tkanek i narządów. Dz. U. 2005 Nr 169 poz. 1411.
- (10) Postawy wobec transplantacji narządów. Komunikat z badań CBOS nr 119/2016, Warszawa 2016; 3.