

Bioethics in international relations

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Abstract: The author follows the development of bioethical insights, the forming of the UNESCO Program on bioethics and of the structure of activities in this sphere, thus undertaking an attempt to analyse both the contemporary state of affairs in this field and new bioethical challenges and threats to humanity, often acquiring an existential meaning.

Keywords: bioethics; UNESCO; challenges; UNESCO chairs; international relations.

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In the recent years a growing attention to issues of bioethical relevance has been witnessed, reflecting an obvious increase in understanding of their importance to humanity. Bioethics has attracted ever more attention and became frequently referred to, though the term has not been defined clearly and explicitly enough to embrace all aspects of this manifold notion. In the traditional sense, bioethics was generally concerned with medicine. At present, however, bioethics is no longer only associated with biomedical aspects. In its broad sense, bioethics is understood to be a part of the general subject of ethics investigating specific ethical issues of biological nature in the life sciences. Questions of bioethical interest are seen today as related to and concerned with the most fundamental, sensitive and disputed problems dealing with the meaning and value of life and death that nations, societies, cultures and individuals may face. It is often difficult, sometimes even impossible, to reach an overall consensus concerning some of these questions due to their complicated character and different perceptions in different cultures and societies. Bioethics is a rapidly changing and developing subject field due to profound new achievements and rapid changes in science and technology. Being valid and important worldwide, issues of bioethical relevance make bioethics a global

challenge and a field of inquiry seeking the common interests of the whole of humanity to establish generally accepted, meaningful and lasting regulations in this field of knowledge and practical application.

As a leading – if not the most advanced – international institution in the field of bioethics, the United Nations Scientific Cultural and Educational Organization (UNESCO) pays special attention to bioethical problems in addressing the social and ethical challenges facing humanity. Bioethics as an interdisciplinary field of knowledge at the intersection of philosophy, law, medicine, sociology, political science, demography, cultural and religious studies refer to moral aspects of the human attitude to life and death. It includes a wide range of socio-economic, moral, ethical and legal problems based on the fact that human values should not be considered separately from biological facts; and has the aim of developing moral and ethical norms, requirements and principles, creating mechanisms to ensure the use of scientific and technological achievements for the benefit of man and nature. It involves the scientific study of problems by medical scientists, biologists, philosophers, theologians, lawyers, psychologists, political scientists and representatives of other scientific disciplines. It provides for educational activities and underlines their importance. It is a rapidly developing social institution with a complex system of international, national, regional and local ethical committees. Bioethics is in a sense a human rights movement in its field.

The UNESCO Bioethics Program was proposed by the Director-General of UNESCO Federico Mayor, a biochemist by profession, and launched in 1993. Later, in his article written for the UNESCO jubilee edition on the occasion of the 20th anniversary of the program on bioethics (Zaragoza, 2015), Federico Mayor stated that the relevance and importance of this program were directly explained by the growing significance of bioethics for a man whose dignity and equality were increasingly becoming the basis for his rights and obligations in society. Posing questions of whether it is ethically acceptable all what can be achieved and is it permissible to use any tool in the whole spectrum of opportunities for its application, he answered both questions in the negative. Knowledge is always positive, F. Mayor believes; but not always its application, which can actually be perverted. That is why ethics has become so much in demand, especially in view of the expanding new knowledge and the impact of economic interests on its application (Zaragoza, 2015).

UNESCO has contributed greatly to the successful completion of the human genome project, which has opened up unprecedented opportunities for health, but also new ethical and social challenges. The famous French scientist-haematologist Jean Bernard was among the first in the world to define the basic ethical principles of biological research (Bernard, 1990). After having analysed different aspects of the moral consequences of the biological revolution, he addressed related areas of knowledge, such as medicine, philosophy, theology, politics, economics and law, paving together with other scientists working in parallel the path to the understanding of bioethics as an integral part of the problems of ensuring human rights and the most important of them all – the right to life. Among these were the American psychiatrist at the University of Maryland, Eugene Brody (Brody, 1993), the abovementioned Federico Mayor (Zaragoza, 1987), Spanish geneticist at the University of Madrid, Juan Ramon Lacadena (Lacadena, 2013), and other Spanish researchers such as Professor Garcia (2013) and Professor Casado (1996).

Specifically Jean Bernard, who sought to make medicine a humanitarian discipline, initiated the establishment in France of a national advisory committee on the ethics of life

and health sciences and headed this committee in 1983. In 1990, he called for the widespread establishment of bioethics committees and prompted UNESCO to the formation and introduction three years later of the international program on bioethics. Lawyer Noel Lenoir, who headed the international committee on bioethics, believed that the concept of bioethical protection should be applied to all forms of life (Lenoir, 1998).

By addressing the new social and ethical challenges that have arisen as a result of the development of science and technology, UNESCO has engaged in the development of human genetics and bioethics at a global level. An important achievement in this work was the adoption in October 2005 of the Universal Declaration on Bioethics and Human Rights (UDBHR, 2006).

The declaration helped to define universal principles on the basis of which it was possible to search for an adequate response to the new dilemmas and contradictions facing humanity as a result of the development of science and technology. Along with general bioethical principles, the declaration included provisions on social responsibility and drew attention to the importance of reducing the gap in inequality between the north and the south. UNESCO considers the declaration as a unique tool in the field of bioethics, since the agreements on its content were adopted and approved by the global forum of states. In the declaration, UNESCO defines bioethics as “ethical issues related to medicine, life sciences and associated technologies as applied to human beings, taking into account their social, legal and environmental dimensions” (UDBHR, 2006). This document was preceded by documents forming its basis – the Universal Declaration on Genome and Human Rights adopted in 1997 (UDHGHR, 1997) and by the International Declaration on Human Genetic Data of 2003 (IDHGD, 2003).

For international legal regulation in the field of bioethics, such normative documents as the World Medical Association Declaration of Helsinki ‘ethical principles for medical research involving human subjects’, adopted in 1964 and amended in 2000 (Helsinki Declaration of the World Medical Association, 2013), are also used. The convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine of the Council of Europe of 1997 called Oviedo Convention and its additional protocols on the prohibition of cloning human beings, on transplantation, biomedical research and genetic testing for health purposes (Council of Europe Convention on Human Rights and Biomedicine, 1997), and the United Nations Declaration on Human Cloning (2005).

The UNESCO Program on Bioethics is implemented within the framework of activities of the Social and Human Sciences Sector of the UNESCO Secretariat in Paris. In 1993 the International Committee on Bioethics was established, composed of 36 experts who were appointed by the Director-General of UNESCO. In 1999 the structure of the program management was joined by the Intergovernmental Committee on Bioethics, composed equally of 36 participants representing member states elected to the committee for a four-year term. These two committees on bioethics – international and intergovernmental – are working closely together to initiate the establishment of bioethical committees at all levels worldwide (SHS UNESCO, 2006). In 1997 the World Commission on the Ethics of Scientific Knowledge and Technology was established. A significant part of its activities became devoted to bioethics. The growing attention of the world community on bioethical issues confirmed the creation of the UN Inter-Agency Committee on Bioethics to coordinate the activities of UN special agencies in this area (SHS UNESCO, 2006).

In the Council of Europe there also exists a committee steering activities in the field of bioethics. In the leaflet *Bioethical Issues* (2009), published for educational purposes by the Council of Europe, it is pointed out: “while scientific and technical developments in biology and medicine have brought progress, they often raise numerous ethical issues. Central to these issues is the protection of human beings and their fundamental rights and freedoms. It is necessary to be able to distinguish between what is technically feasible and what is morally acceptable.”

The World Health Organization (WHO) established a global network of collaborating centres for bioethics as key institutions with relevant expertise. The WHO considers that ethical questions related to health, healthcare and public health cover topics as diverse as moral issues around reproduction, state obligations in the provision of healthcare services, and appropriate measures to control infectious disease. It states that scholars and healthcare professionals have debated ethical questions related to health and healthcare since the earliest days of medicine. Recent formal efforts to articulate international standards of ethics applicable to health and healthcare can be traced to the Nuremberg trials of 1947, during which the horrors of Nazi medical experiments came to light. The principles that emerged from those trials, known as the Nuremberg code 1, are broadly applicable to many types of health-related research involving human participants, including clinical trials. The growing breadth and complexity of contemporary health challenges have produced a range of difficult questions that cannot always be adequately addressed by relying exclusively on existing policies, guidelines or codes of conduct. Debates over access to new and expensive pharmaceuticals and medical technologies, as well as increasing awareness of the gross health disparities that exist both within and between countries, have called attention to the need for an ethics of health policy and practice (WHO, 2015).

In 2017, the day of October 19 was widely celebrated as World Bioethics Day. Among those having contributed greatly to the dissemination of the World Bioethics Day celebration, thus attracting public attention to bioethical problems, there were UNESCO chairs and networks. One of the most active UNESCO chairs on bioethics has been operating since 2001 at Haifa University. The Haifa Chair has initiated 13 World Conferences on Bioethics, Medical Ethics and Health Law, including the most recent one in Jerusalem in November 2018 (UNESCO Chair on Bioethics, 2019).

In 2005, the project of the Global Ethics Observatory was launched with an electronic database containing training materials and programs on bioethics, as well as information on scientists around the world who can act as experts on bioethical problems and their particular aspects (GEObs, 2019).

Bioethics is an important part of contemporary biopolitics which is broadly understood as the application of the provisions of life sciences (biology, ecology, genetics, etc.) in the political and social sphere (Bioethics, 1992). Bioethics that considers ethical problems related to the problems of life support in its various forms is often referred to as the ethics of life (SHS UNESCO, 2006). For the solving of issues in bioethics it is of great importance to implement the development and application of bio-legislation which represents a code of laws governing human activity in its relations with itself and with nature (Bioethics, 1998a).

Bioethics is an interdisciplinary field providing research and practice of results in relation to ethical, philosophical and anthropological problems arising in connection with the progress of science in general and biomedical science in particular; and the

introduction of new technologies in various spheres of life, among which medicine and health care occupy a special place (Bioethics, 1998b).

The term ‘bioethics’ is a very polysemous noun. It is believed that this term was first used in 1927 by the German pastor Fritz Jahr (1885–1953), offering his bioethical imperative, which unlike Kant demanded respect not only for man, but also for animals and plants (Jahr, 1927). In this, he echoed another theologian and humanist, Nobel laureate Albert Schweitzer (1875–1952) who lived at the same time and created an ethics of reverence for all forms of life which involved the recognition of man’s moral duty towards all other living organisms (Schweitzer, 1973). Long before the origins of bioethical thought, there could be found similarities in Buddhism (philosophy of Ahimsa: the refusal to cause harm to anyone), in the works and views of the ancient humanists and thinkers Pythagoras (6th century BC), Aristotle (384–322 BC), Plutarch (46–100), Thomas More (1478–1535), Michel de Montaigne (1533–1592), René Descartes (1596–1650), Henry More (1614–1687), John Locke (1632–1704), Voltaire (1684–1778), Jean Jacques Rousseau (1712–1778), Immanuel Kant (1724–1804), Jeremy Bentham (1748–1832) who expressed different, sometimes opposite, bioethical views (Tishchenko, 1994).

American scientist Aldo Leopold (1887–1948), one of the founders of the now well-known wildlife movement (Meine, 1988), and later his colleague at the University of Wisconsin, Van Rensselaer Potter (1911–2001), originally identified bioethics as a kind of a special option in environmental ethics. Later, Potter (1971) in his book *Bioethics: a Bridge to the Future* outlined the main ways the ecological and ethical ideas of A. Leopold developed in their application to the field of biological research and medical practice.

However, much earlier than Potter (1971) the Russian scientist Vikenty Veresaev outlined problems of bioethics as applied to medicine in his revolutionary book *Notes of a Doctor* (1901) (Veresaev, 2010). V. Veresaev advocated ethics in science in a broad, philosophical sense which, first of all, should cover in its entirety the question of the mutual relationship between medical science and a living person. He saw the main task of ethics in a comprehensive theoretical clarification of the question of the relationship between a person and medical science in the boundaries which do not permit to sacrifice the interests of an individual to the interests of science. He stressed that the question of human rights before medical science that infringes on these rights is inevitably becoming a fundamental, central issue of medical ethics. In fact, V. Veresaev should be considered the father of bioethics, although he did not use that term. During his time the prevailing bioethical nihilism restrained the development of bioethics and obscured the pioneering role of V. Veresaev in this area.

A big contribution to the formation of bioethical ideas was made by the Great Russian scientist V. Vernadsky (1863–1945) – the founder of biochemistry and biogeochemistry who developed the biosphere theory at the top of ecological thinking (Vernadsky, 2013). In 1940, the outstanding biologist D. Filatov advocated the ‘ethics of love for life’ in which bioethical principles are clearly felt. In 1952, another Russian scientist, A. Lyubishchev, wrote an article ‘The basic postulate of ethics’ which, in his opinion, should be universal, scientific and synthetic. Prominent Russian scientists Y. Lopukhin (Lopukhin, 2003) and A. Chuchalin (2019) also made a great contribution to the development of bioethical views. However, the names of these Russian scientists who laid the foundations of modern bioethics are rarely mentioned and not widely known.

The concept of bioethics in different countries and at a global level acquired new meanings, as the biological life of people increasingly obeyed social, political, cultural, moral and spiritual needs, thus opening the field for public dialogue designed to ensure the harmonisation of science with human interests (Bioethics, 2017). However, the world community happened to be intellectually and morally unprepared for these revolutionary scientific discoveries. The danger of the knowledge that man possesses now lay in the opportunity to interfere with the foundations of life on earth and to change by means of new technologies the way of life and the way of thinking. Society was faced with existential questions about the possibility of human survival as a biological species and the preservation of the earth's biosphere. The need for a global bioethics approach became obvious (UNESCO, 2015).

Today, biotechnologists:

- help to bring plants resistant to disease allowing not to use chemical remedies that are harmful to humans and nature
- solve the problem of the processing of household waste with the help of microorganisms
- purify ocean water of petrochemicals using special micro-organisms
- provide cheap protein-based nutrition to fight hunger in poor countries
- present new opportunities for the processing and storage of food.

This list of examples is by no means exhaustive.

Biotechnologies open perspectives for maintaining human health and for the treatment of various diseases by extracting proteins from plants, animals and humans necessary for the production of a wide range of drugs, as well as by the targeted transport of drugs in human organism, diagnosis and subsequent treatment of hereditary diseases etc. However, new technologies have introduced new ethical problems that are dangerous to human welfare.

The development of scientific knowledge today requires large material costs leading in turn to a rise in the cost of qualified medical care. Quality medical services have become a privilege of rich people.

The achievements of transplantology are saving the lives of many people. At the same time, the shortage of organs for transplantation and the increasingly high demand for them has led to the criminalisation of the entire field of transplantology and generated serious risks and complicated monetary issues both for sellers and buyers in this very often illegal market.

Biotechnologies allow the production of medicines for the treatment of rare diseases to be expanded and for costs to be reduced. However, pharmaceutical companies, due to their commercial interests, either do not produce them or artificially maintain high prices. Violations of the rights of those subjected to clinical tests of new drugs are often witnessed.

The use of modern methods of diagnosis help to identify people suffering from rare and congenital genetic diseases. However, information about such diseases can be used for discriminatory purposes: dismissal from work, refusal of insurance, inflicting moral damage. There is a possibility of the emergence of a biologically lower class, a kind of a contemporary pariah society.

The solution to the demographic problem with the help of artificial reproduction creates complex ethical problems for parents and children. Against the background of artificial life extension with the help of new drugs and methods of treatment, an aging population should be taken into account, especially in economically developed countries, as well as the unbalanced and uncontrolled population growth and worsening demographic situation in the world following the development of preventive medicine. Bioethical challenges show their interrelation and interdependence asking for scientifically based and well calculated response.

A man depends on physicians from birth to death because of his biosocial nature. Their monitoring allows diseases to be identified and treated in time. But it also leads to a certain limitation of the human right to dispose of one's body and make decisions about one's life and death. The introduction of new technologies has changed the traditional understanding of life and death, of their beginning and end. It has given rise to bioethical problems of the rights to life of unborn children, of euthanasia, of the maintenance of life with the help of artificial devices.

For a long time, doctors often did not even know about these new consequences and when faced did not know how to avoid them. Moral and legal problems that have arisen in the course of their professional activities were mainly discussed behind closed doors. Medical errors have been concealed from the public. Medicine to some extent is now getting lost its humanistic contents. In a technical sense, it is becoming more perfect, but more 'soulless', or so many consider. Technocratic thinking in medicine, focusing on technique and technology has led to a crisis of traditional medical ethics. Its principles and rules have begun to lose the function of regulating medical and pharmaceutical practice from the standpoint of moral good and justice. Thus, the new possibilities of medicine and pharmacy related to the treatment and management of human life, psyche, consciousness and activity have come into conflict with moral values and principles. This has led to a situation in which people's trust in medicine has become undermined.

Society faced important questions:

- Does modern science comply with the principles of respect for the human individual?
- How does one treat the biomedical knowledge already accumulated, if it can be used for good and for harm to man?
- Where are the ethical limits of scientific research?
- What is the role of a scientist who is often out of the control over the results of his scientific research and a physician who uses new methods of intervention in the human body.

The famous discussion 'Choose Life' (Toynbee and Ikeda, 1976) between two prominent thinkers, Japanese Daisaku Ikeda and Englishman Arnold Toynbee, is riddled with biological motives and questions (Toynbee and Ikeda, 1976).

Medical ethics is an integral part of bioethics, which is historically represented in four main models:

- Hippocratic model ('do no harm').
- The Paracelsus model ('do good') when such ethical principles as humanism, mercy, goodness, benevolence and healing are put forward to the fore and are considered as the creation of love for one's neighbour.
- The deontological model comes from the moral integrity of the physician and the observance of his duty.
- The biomedical model involves the introduction of new types of relationship based on the patient's autonomy and on respect for his rights to informed consent, confidentiality and truthfulness. For this purpose, bioethics committees are being established in medical and research institutions which are gradually developing into a global network, as issues related to human research, organ transplantation, euthanasia, artificial reproduction, cloning and genetic engineering affect the interests of mankind as a whole. Complex bioethical problems affect many aspects of the development of modern communities. The conclusions and recommendations of the ethical committees have a serious impact on the quality of public opinion, preparing it to address the most complex moral and legal problems affecting each person (UNESCO, 2015). For example, the world's first heart transplant operation performed by the South African surgeon Christian Barnard on 3 December 1967 gave rise to murder charges along with the rapture.

The ideology of the ecological movement is historically the first and most essential prerequisite for the formation of bioethics. Scientific and technological progress is not only a source of civilisational benefits, but also often a threat to human existence in the destruction of its natural environment. There is a limit to the use of natural resources. The report of the Club of Rome 'Limits of Growth' (Meadows et al., 1972) stated that humankind went beyond this limit. In 2018 the most recent report dedicated to the 50th anniversary of the Club of Rome and expressing its consolidated position was published. The report is entitled 'Capitalism, short-termism, population and destruction of the planet' (von Weizsaecker and Wijkman, 2018). The club sees the need to achieve a balance in the relationship between man and nature on the basis of sustainable development and environmental consciousness. This position occupies first place in the list of priorities. If we are to continue living by present rules, the collapse will not be long in coming, says the report. In this regard, it is important to form a new moral imperative: what was permissible in the past is no longer permissible today. Ecological education at all levels should be united with bioethical education, making a joint system of perceptions which could be used as a tool for the formation of mass ecological and bioethical consciousness.

Meanwhile, the situation in the sphere of bioethics is deteriorating. It is characterised by the aggravation of existing and the emergence of new bioethical challenges (UNESCO Documents and Materials on Bioethics, 2017). Hypertrophied tolerance has led to a gender schizophrenia, to the normalisation of the unnatural, to attacks on the family way of life, extremely dangerous for the bioethical health of society. Perverted values have substituted normal human relations to such extent that a man's natural interest in a woman has been declared a 'demonic phallocracy'. The fall of mores was also noted in the medical sphere. Most recently, a surgeon in England was convicted of signing on the internal organs of patients during surgery.

There are, however, far graver concerns. There are signs that the development of biological weapons on new principles is continuing, using the latest scientific and technological advances to make them targeted – for example, acting on the Russians, but safe for Europeans. It is assumed that it is for this purpose that the USA is trying to collect biomaterial in Russia; but, having suffered several failures and seizures at the Russian customs of already collected samples, they have switched to Ukraine, where it is easier to do this, as the people are in fact the same from a biological point of view.

Combat viruses are invisible and cheaper than nuclear weapons, but biological weapons can pose an equally effective threat of mass annihilation. No less dangerous are biotechnologies designed to make humans manageable. The Bilderberg Club, which is considered to be the club of shadow rulers of the world, discussed in 2017 the theme of the man of the future as being ruled by the elites. It is intended to change the human being, as well as the animals and plants which he eats, through genetic engineering. Gene modification should be aimed at creating a manageable person with a weak will and poor health who will constantly need medical support and will not be able to live up to retirement age. The magazine ‘Sun’ showed on its cover a prototype of ‘the man of the future’ – a degenerate with long limbs and fewer teeth which will only be strong enough to chew genetically modified food. The largest shareholder of the market leader in the field of genetically modified organisms (GMOs), ‘Monsanto’, is billionaire Bill Gates who proposed the project of the ‘Green Revolution’ in Africa on the basis of GM plants, and recently allocated \$120 million for genetic engineering projects. Those who are opposed to GMOs, pointing to the lack of study and the unpredictability of the consequences of their use have been subjected to persecution by those who make a lot of money from this industry. This also applies to scientists. For example, the Russian biologist Irina Yermakova (Ecology and Life, 2019), who is opposed to GMOs, has been denied access to foreign scientific journals, ceased to be invited to international symposia and has been forced to abandon her position by threats (ecology and life).

On the threshold of a new technological order, people should be prepared for genetic wars which could be decisive regarding the question of who has a chance to survive. Viral and genetic weapons are being developed that are able to radically reduce the world’s population. Recently a secret project was disclosed called ‘Coast’ in South Africa at the time of apartheid, aimed at making black people infertile by specially developed bacteria. Now in South Africa the UNESCO chair on nano-ethics is in operation which conducts a number of studies in the context of bioethical issues preparing an international conference.

Global social and ethical challenges have put before humanity questions of an existential bioethical nature, to which it is necessary to search for and find adequate answers through the combined efforts of the world scientific community.

References

- Bioethics (1992) *Bioethics: Problems and Prospects (Bioetika: problemy i perspektivy)*, in Russian, Moscow.
- Bioethics (1998a) *Bioethics: Principles, Rules, Problems (Bioetika: printsipy, pravila, problemy)*, in Russian, Moscow.
- Bioethics (1998b) *Introduction to Bioethics (Vvedenie v Bioetiku)*, in Russian, Moscow.

- Bioethics (2017) *Bioethics and Biotechnologies: the Limits of Human Improvement (Bioetika i bioteknologii: predely uluchsheniya cheloveka)*, in Russian, Publishing House of the Moscow Humanitarian University, Moscow.
- Bernard, J. (1990) *De la biologie à l'éthique*, Buchet/Chastel, Paris.
- Bioethical Issues (2009) *Bioethical Issues – Educational Fact Sheets*, Published by the Council of Europe, ISBN: 978-92-871-6421-6 [online] <https://www.humanism.scot/wp-content/uploads/2015/09/Bioethical-Issues-Educational-Fact-Sheets.pdf> (accessed 4 September 2019).
- Brody, E.B. (1993) *Biomedical Technology and Human Rights*, UNESCO, Paris, France.
- Casado, M.E. (1996) 'Estudios de Bioética y Derecho', in *Buscando acuerdos universals*, pp.69–72, Barcelona.
- Chuchalin, A.G. (2019) *Academician, Member of the Russian Academy of Sciences (RAS)*, Chairman of the RAS Scientific Ethics Committee, of the Russian National Committee on Bioethics at the Ministry of Health of the Russian Federation, of the Committee on Bioethics at the Russian National Commission for UNESCO.
- Council of Europe Convention on Human Rights and Biomedicine (1997) [online] <http://www.bioethics.imbp.ru> (accessed 4 September 2019).
- Ecology and Life (2019) *The Website of Irina Yermakova* [online] <http://www.irina-ermakova.ru/> (accessed 4 September 2019).
- Garcia, C.E. (2013) 'El derecho a la reproducción humana. Debe permitirse la maternidad subrogada', in *Revista de Derecho y Genoma Humano*, No. 38, p.45.
- GEObs (2019) [online] <http://www.unesco.org/shs/ethics/geobs>. (accessed 4 September 2019).
- Helsinki Declaration of the World Medical Association (2013) *Ethical Principles in Medical Research Involving Human Intervention* [online] <http://www.elibrary.ru> (accessed 4 September 2019).
- International Declaration on Human Genetic Data (IDHGD) (2003) Adopted by the Resolution of the General Conference of UNESCO on the Report of Commission III, 20th Plenary Meeting, 16 October 2003 [online] <http://www.un.org> (accessed 4 September 2019).
- Jahr, F. (1927) *Bio-Ethik: eine Umschau über die ethischen Beziehungen des Menschen zu Tier und Pflanzen*, Kosmos, Berlin.
- Lacadena, J.R. (2013) 'Patentes de genes humanos, sí o no? Reflexiones en torno a la sentencia del Tribunal Supremo de los Estados Unidos', in *Revista de Derecho y Genoma Humano*, 29 September, No. 38, p.167 [online] <https://www.bioeticaweb.com/patentes-de-genes-humanos-aisi-o-no-reflexiones-en-torno-a-la-sentencia-del-tribunal-supremo-eeuu/> (accessed 4 September 2019).
- Lenoir, N. (1998) 'Respect de la vie et droit du vivant', in *The Ethics of Life (L'éthique du vivant)*, pp.175–211, UNESCO, Paris, France.
- Lopukhin, Y.M. (2003) *Selected Articles and Reports (Izbrannyye statyi i doklady)*, in Russian, Moscow.
- Meine, C. (1988) *Aldo Leopold: his Life and Work*, University of Wisconsin Press, Madison, Wisconsin.
- Meadows, D.H., Meadows, D., Randers, J. and Behrens, W.W. (1972) *The Limits to Growth. Potomac Associates - Universe Books*, Falls Church, Virginia, USA.
- Potter, V.R. (1971) *Bioethics: Bridge to the Future*, Englewood Cliffs, NY.
- Schweitzer, A. (1973) *Culture and Ethics (Kultura i Etika)*, in Russian, Moscow.
- SHS UNESCO (2006) *Bulletin 12* [online] <http://webarchive.unesco.org/frame/20151214145100/http://unesdoc.unesco.org/images/0014/001448/144835R.pdf> (accessed 4 September 2019).
- Tishchenko, P.D. (1994) 'To the beginnings of the bioethics', *Journal 'Questions of Philosophy'*, ('K nachalam bioetiki', zhurnal 'Voprossy filosofii'), in Russian, Vol. 3, No. 3.
- Toynbee, A. and Ikeda, D. (1976) *Choose Life: a Dialogue*, Oxford University Press, Oxford, ISBN: 978-5-211-05343-4.

- UDBHR (2006) *Universal Declaration on Bioethics and Human Rights (UDBHR)* [online] <http://www.unescodoc.unesco.org> (accessed 4 September 2019).
- UNESCO (1998) *The Ethics of Life (L'éthique du vivant)*, Paris, France.
- UNESCO (2005) *Guide N°.1 Establishing Bioethics Committees*, Paris, France [online] <https://repository.library.georgetown.edu/handle/10822/984479> (accessed 4 September 2019).
- UNESCO (2015) *Global Bioethics: What For? Twentieth Anniversary of UNESCO's Bioethics Programme*, in Solinis, G. (Ed.). Paris, France, ISBN: 978-92-3-100061-4 [online] <http://int-chair-bioethics.org/wp-content/uploads/2015/05/231159e.pdf> (accessed 4 September 2019).
- UNESCO Chair on Bioethics (2019) [online] <http://www.unesco-chair-bioethics.org> (accessed 4 September 2019).
- UNESCO Documents and Materials on Bioethics (2017) [online] <http://www.unesco.org/shs/ethics> (accessed 4 September 2019).
- United Nations Declaration on Human Cloning (2005) *Adopted by the General Assembly Resolution 59/280 of 8 March 2005* [online] <http://www.un.org> (accessed 4 September 2019).
- Universal Declaration on the Human Genome and Human Rights (UDHGHR) (1997) *Adopted on 11 November 1997 by the General Conference of the United Nations Educational, Scientific and Cultural Organization* [online] <http://www.un.org> (accessed 4 September 2019).
- Veresaev, V. (2010) *Doctor's Notes (Zapiski vracha)*, in Russian, EKSMO, Moscow.
- Vernadsky, V.I. (2013) *Collected Works-M.: Science (Sobranie sochineniy, Nauka)*, in Russian, Moscow.
- von Weizsaecker, T. and Wijkman, A. (2018) *Come On! Capitalism, Short-Termism, Population and the Destruction of the Planet*, Report of the Club of Rome-2018, Springer.
- WHO (2015) *Global Health Ethics - Key Issues*. World Health Organization, ISBN: 978-92-4-154911-0 [online] <https://www.who.int/ethics/publications/global-health-ethics/en/> (accessed 4 September 2019).
- Zaragoza, F.M. (1987) *Mañana siempre es tarde*, Espasa-Calpe, Madrid.
- Zaragoza, F.M. (2015) 'Dignity as the foundation for all human rights', in Solinis, G. (Ed.): *Global Bioethics: What For? Twentieth Anniversary of UNESCO's Bioethics Programme*, UNESCO, Paris, France, pp.47–52, ISBN: 978-92-3-100061-4.