# MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS

# Educational Institution BELARUSIAN STATE MEDICAL UNIVERSITY

Контрольный экземпляр APPROVED

by First Vice-Rector, Professor

I.N.Moroz

2. 11. 2022

Reg. #UD-1. 750/2223 /edu.

# **BIOMEDICAL ETHICS**

Curriculum of higher educational institution in the academic discipline for the specialty:

1-79 01 07 «Dentistry»

Curriculum is based on the educational program «Biomedical Ethics», approved 17.11.2022, registration # УД-L.750/2223/edu.; on the educational plan in the specialty 1-79 01 07 Dentistry, approved 18.05.2022, registration # L 79-1-7/2223/mf.

# **COMPILERS:**

T.P.Pavlovich, Head of the Department of Public Health and Healthcare of the educational institution «Belarusian State Medical University», PhD, Associate Professor;

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# RECOMMENDED FOR APPROVAL:

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by the Department of Public Health and Healthcare of the educational institution «Belarusian State Medical University» (protocol # 10 of 26.04.2022);

by the Scientific and Methodological Council of the educational institution «Belarusian State Medical University» (protocol # 6 of 29.06.2022)

# EXPLANATORY NOTE

«Biomedical Ethics» - the academic discipline of the module «Introduction to the Specialty», which contains systematized scientific knowledge about moral issues related to progress in modern medicine, biology, biotechnology and concerning protection of human dignity and rights as well as human life, health and death.

The aim of the discipline «Biomedical Ethics» is the formation of universal and basic professional competencies for conscious humanistic approach to any living creature, life itself, health, disease, death of a person, as well as getting acquainted with ethical issues of modern technologies application in medicine, international ethical and legal documents in the field of protection of human health and wellbeing, developing communicative skills considering the specifity of a dentist's job.

The objectives of the discipline «Biomedical ethics» are to form students' scientific knowledge about ethical and legal aspects of medical practice, main principles and concerns of biomedical ethics, ethical aspects of modern medicine issues and of biomedical research, deontology in different fields of medical practice; skills and abilities necessary for communication with patients and between colleagues.

The knowledge, skills, and abilities acquired during the study of the academic discipline «Biomedical ethics» are necessary for successful mastering of the following academic modules: «General Clinical Therapy Module #1», «General Clinical Therapy Module #2», «General Clinical Surgical Module», «Medical Prevention in Dentistry», «Oral and Maxillofacial Surgery Module».

Studying the educational discipline «Biomedical Ethics» should ensure the formation of students' universal and basic professional competencies:

UC. Be capable of self-development and self-improvement in professional activities. Take initiative and adapt to changes in professional activities.

BPC. Use psychological and pedagogical knowledge about the goals and types of communication, the organization of the communicative process in healthcare, apply effective communication methods in resolving conflict situations in medicine.

As a result of studying the discipline «Biomedical Ethics» the student should

know:

international laws and the domestic laws of the Republic of Belarus in the field of healthcare, modern approaches to the development of public health;

main principles of Biomedical ethics;

moral principles of doctor-patient relations;

moral principles of communication between colleagues;

moral issues of reproductive technologies; death and dying, euthanasia, palliative care; transplantology; biomedical research involving human subjects; and genetic technologies;

deontology of palliative care;

deontology of psychiatry and narcology;

deontology of pediatrics and geriatrics;

deontology in dealing with patients at different stages of a diagnostic and treatment process;

ethical and legal norms in the field of doctor's activities; basic rules of communication in healthcare.

### be able to:

analyze the relations between moral values, principles and rules of traditional medical ethics and biomedical ethics;

determine medical errors and conflicts in medical area;

apply modern techniques and communicative models in practice and scientific research;

determine the influence of risk factors in patients' behavior while interacting with patients;

plan and perform effective communication;

### master:

deontological principles of rendering medical assistance to patients;

the basic methods of communication planning, assessment and performance; set of basic biomedical terms;

skills of independent work with teaching materials, reference books, methodological and scientific sources as well as systematic approach to analyze medical data.

Total number of hours for the study of the discipline is 40 academic hours: seminars – 24 hours, student independent work (self-study) – 16 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit (4 semester).

Form of higher education - full-time.

# ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

I have a second			N	umber of	academic	hours			
hint pag tall in				including					
Code, name of the specialty	semester		in-class	lectures (including supervised independent work)	supervised student independent work	seminars	out-of-class self-studies	Form of intermediate assessment	
1-79 01 07 «Dentistry»	4	40	24	-	- 2	24	16	credit	

# THEMATIC PLAN

	Number of class hours
Section (topic) name	seminars
1. The history and features of Biomedical ethics	4
1.1. Theoretical grounds of Biomedical ethics. The history of the	2
professional doctor's ethics	2
1.2. Principles and rules of Biomedical ethics	10
<ul> <li>2. «Open» issues of Biomedical ethics</li> <li>2.1. Ethical and legal issues of assisted reproductive technologies</li> </ul>	2
2.1. Ethical and legal issues of assisted reproductive terms of death and dying	2
2.2. Ethical and legal issues of death and dying	2
2.3. Ethical and legal issues of organ and tissue transplantation	2
2.4. Ethical issues of biomedical research	2
2.4. Ethical issues of biomedical restaurance and human cloning	10
3. Medical deontology	2
3.1. Modern medical deontology	2
3.2. Deontological problems of psychiatry and narcology 3.3. Deontological problems of providing special care to patients with diseases that pose threat to public health, to patients with	
human immunodeficiency virus  3.4. Communication strategies in healthcare. Medical interview	2
3.5. Deontology in dealing with patients at different stages of diagnostic and treatment process. Deontology in pediatrics and	2
geriatrics	24

# CONTENT OF THE EDUCATIONAL MATERIAL

1. The history and features of Biomedical ethics

1.1. Theoretical grounds of Biomedical ethics. The history of the professional doctor's ethics

Ethics as a philosophic study of morality. The essence and specific features of morality. The structure of a modern ethics. Professional ethics as a set of moral principles and norms governing the specialist's behavior on the basis of universal moral values considering the peculiar features of a definite profession. Medical ethics as a type of professional ethics.

History of medical ethics development. The Hippocratic Oath. The World Medical Association (WMA). The physician's pledge (The WMA Declaration of Geneva 1947). The WMA International Code of Medical Ethics (1948). Medical

ethics in the Republic of Belarus.

Social and cultural backgrounds of Bioethics. Ethical ground of Bioethics. Ethics of «reverence for life» by A. Schweitzer. The notion of «Bioethics» according

to V.R.Potter in this «Bioethics: bridge to the future». Global ethics by V.R.Potter.

Main directions, aims and tasks of Bioethics.

Bioethics and biomedical ethics as a new filed of applied ethics and as an integrative approach in ethics. Specific features of biomedical ethics (interdisciplinary, public, contextual, normative, institutional aspects). The scope of Biomedical ethics: basic, «open», deontological, institutional issues. The backgrounds of Biomedical ethics as a separate discipline.

High moral values in medicine. The notions of good and evil and its application in medical practice. The problem of moral choices in medical practice.

Moral duties of a doctor.

1.2. Principles and rules of Biomedical ethics

The recognition of an unconditional value of a human life as a main principle

of Biomedical ethics.

Principles of Biomedical ethics in the Universal Declaration on Bioethics and Human Rights (2005). «Classic» principles of Biomedical ethics proposed by T.Beauchamp and J.Childress: respect for autonomy, non-maleficence, beneficence

and justice.

The principle of respect for autonomy. The value of a human. Autonomy as a freedom to decide, conditions of autonomy. Respect for patient's autonomy: getting informed consent for any medical intervention, right to refuse medical treatment, right to choose among the possible treatment options and to maintain control over their performance. Special requirements for possible restrictions of autonomy.

Principle of non-maleficence. Types of harm. Responsibility for taking no

actions at all and for wrong actions in particular.

Principle of beneficence. The definition of «good» from the point of view of a doctor and of a patient.

The criteria of justice. Justice in times of limited medical resources.

Basic rules of Biomedical ethics: truthfulness, confidentiality and informed consent.

The rule of truthfulness. Truthfulness and trust as a guarantee of effective treatment. Truthfulness and the terminally ill patients. Placebo effect. The right of a patient to get truthful information.

The rule of confidentiality. The confidential information (diagnosis, state of health, prognosis, non-medical personal data of a patient and their relatives). Situations of legitimate breaches of confidentiality by a doctor. Confidentiality and

the protection of socio-economic statues of a patient.

The rule of informed consent. Providing information about aims of medical intervention, its duration, consequences, risks, optional treatment and its efficacy. Information about patient's rights and ways to protect them. Parts of informed consent: competence; understanding of information; free will. The notion of legally competent and incompetent patient. Free will in decision making and its violation (coercion, manipulation, persuasion).

Law of the Republic of Belarus «On Healthcare»: rights and duties of patients; the supply of information about patient's health, consent to be medically assisted.

2. «Open» issues of Biomedical ethics

2.1. Ethical and legal issues of assisted reproductive technologies

The value of life, its biological, legal and ethical aspects. The Universal Declaration of Human Rights, Constitution of the Republic of Belarus. The undefined status of embryo. Infertility as medical and social concern. Types of assisted reproductive technologies. Artificial insemination. Ethical concerns of artificial insemination. Moral concerns of reproductive cells donation. In-vitro fertilization. The issue of «unclaimed» embryos, the reduction of embryos, using embryos for scientific research. Surrogacy. Ethical concerns of surrogacy. Commercialization of maternity, the risk of psychological trauma to a surrogate mother and a child.

2.2. Ethical and legal issues of death and dying

The ethical and philosophic views on death. Medicalization of death. Death and dying in times of technological advances in medicine. The criteria of death determination. Clinical and biological death. Brain death: medical and moral concerns. Ethics of resuscitation. Life-sustaining treatment and refusal of it. Ethical concerns of ending of life issues.

The definition of euthanasia. Historical views on euthanasia. Forms of euthanasia: active, passive, voluntary, nonvoluntary. Physician assisted suicide. Liberal and conservative concepts towards the morality of euthanasia. Euthanasia of

newborns with heavy impairments.

The notion of palliative care in medicine. History and principles of hospice movement. Ethics of palliative care. Ethics of chronic pain management. The quality of life of a dying patient. Support of dying patient's family members. Stages of grief by E.Kubler-Ross.

2.3. Ethical and legal issues of organ and tissue transplantation

The notion of transplantation. History of transplantation and its modern advances. Moral concerns of transplantology. Ethical aspects of living donation. Donation as an altruistic, conscious and voluntary act. Ethical aspects of cadaveric donation. Confidentiality of a donor and a recipient. Organ harvesting (presumed consent and explicit consent). The issue of just organ allocation, the criteria of allocation. Commercialization of transplantology. Moral concerns of fetal organ and tissue transplantation. Moral concerns of different types of transplantation. The issue of making and using artificial organs.

The WHO Guiding principles on human cell, tissue and organ transplantation. Observation of biomedical ethics principles while dealing with cadaveric bodies and anatomical specimens. «The anatomical gift». Unacceptability of depersonalization

of dead people.

2.4. Ethical issues of biomedical research

Definition of the term biosafety. The activities and functions of the National coordination center on biosafety. Legal grounds and international documents in the field of biosecurity. Convention on Biological Diversity. The Cartagena protocol on Biosafety.

Legal regulations of biomedical research involving human subjects. Nuremberg Code. The Declaration of Helsinki. The CE Convention «On Human

Rights and Biomedicine», the UNESCO Declaration on Bioethics and Human Rights. The Council of Europe Recommendations on research on biological materials of human origin. Main ethical principles of biomedical research involving human subjects. Autonomy and informed consent of participants, their right to refuse to participate in research. Ethical issues of biomedical research involving vulnerable groups of population.

Law of the Republic of Belarus «On healthcare»: the maintenance of the

clinical research of drugs, medical products.

2.5. Ethical issues of genetic engineering and human cloning

Moral issues of genetic engineering technologies. Ethical concerns of collecting and using genetic information. Genetic consulting, testing and screening. Free consent to obtain genetic information, its confidentiality, the availability of a medical-genetic assistance, the prohibition of discrimination and stigmatization on genetic basis. Directiveness and non-directiveness of genetic counseling. Genetic diagnosis. The notion of gene therapy, concerns and perspectives. Documents regulating the field of genetic engineering

Stem cells: types, sources, ethical aspects of its usage.

The issue of cloning. Reproductive and therapeutic cloning. Moral concerns of human cloning.

# Medical deontology

3.1. Modern medical deontology

The notion of modern deontology and its issues. Main terms of medical deontology: professional duty and responsibility of a doctor. Honor and dignity as moral characteristics of a person. Professional honor of a doctor and its social character.

Main models of doctor-patient communication. Classification proposed by R. Veatch. Medical and ethical aspects of doctor-patient communication at different

stages of a diagnostic and treatment process. The healing power of words.

Interaction between medical workers: doctor-doctor, doctor-nurse, etc. The favorable atmosphere in medical groups. Corporate interests, democracy and subordination. Partnership, personal responsibility, care about professional credibility, professional image as a moral duty of a doctor. Solidarity and mentorship in medicine. Collegiality as a form of communication.

Medical errors and iatrogenic diseases in medical practice. Causes and types of medical errors: diagnostic, tactical, technical, organizational, medicinal, behavioral,

errors in documentation. Causes and types of iatrogenic diseases.

3.2. Deontological problems of psychiatry and narcology

Deontology of psychiatry. History of psychiatry as a science. Paternalism in the history of psychiatry. Antipsychiatry movement (60-70ies XX cent.). The definition of normality and pathology in psychiatry. Vulnerability, incompetency, stigma related to a diagnose, social isolation of a patient.

Ethical and legal rules in psychiatry: humanism and respect for human dignity of patients with mental disorders, unacceptability of discrimination, the protection of

rights of the mentally ill.

Compulsory hospitalization and informed consent of the mentally ill. The importance of confidentiality in psychiatry (group therapy, out of work talks about patients, etc.). Acceptability of breaches of confidentiality to third parties (for research, insurance or a family therapy). Forensic psychiatric examination. Ethical issues of modern psychiatry. The Declaration of Hawaii (1983). Legal grounds for psychiatric assistance in the Republic of Belarus.

Ethical issues of narcology. Ethics of communication and treatment of patients with deviant behavior (drug addicts, alcohol addicts, etc.). Application of principles and rules of biomedical ethics in narcology. Discrimination and stigmatization of

patients.

3.3. Deontological problems of providing special care to patients with diseases that pose threat to public health, to patients with human immunodeficiency virus

The list of diseases posing threat to public health. Ethical concerns of rendering medical assistance to patients with diseases posing threat to a public health, human immunodeficiency virus (HIV). Prohibition of discrimination and stigmatization of HIV positive people, people suffering from AIDS. The issue of «AIDS-phobia and the requirements of medical ethics. Criminal and administrative liability for breaking confidentiality. Voluntary and anonymous testing of people which possibly have diseases posing threat to public health, HIV. Legal and social guarantees to HIV positive people, people suffering from AIDS. Professional risk of medical workers. Universal efforts to combat HIV spreading. Ethical issues of rendering assistance to patients with diseases posing threat to a public health, patients with HIV. Discrimination of HIV positive people. Stigmatization, its notion, classification by Goffman.

# 3.4. Communication strategies in healthcare. Medical interview

The definition of «communication». Main principles and goals of communication in healthcare. Functions of communication. Communicative process. Non-verbal communication in doctor-patient interaction. Forms of communication of medical workers. Forms of communication depending on the channels of communication (formal and informal communication). Forms and types of informal communication.

Causes of communicative barriers during interaction of a doctor with patients, their relatives and doctor's colleagues in different situations. Principles of effective communication in healthcare (neutral, competent, ethical, truthful, equal). Medical interview and basic communicative skills for its performance. The formation and development of communicative skills necessary for effective communication of a doctor with patients, their relatives and doctor's colleagues in various situations. Common principles of effective communication.

Main psychological determinants of a doctor's communicative competency building. Methods to persuade patients to follow the regime of treatment and to comply with it. Causes for a patient's incompliancy. Main principles of educational

work with patients.

Medical counselling. Conditions for successful counselling. Basic communication skills for doctor-patient interaction: adequate material provision, greeting of patients, active listening, empathy, respect, interest, support, language,

cooperation, skills to gather information.

Telemedicine – the scope of activity. Informatization of a healthcare system. Medical counselling via email. The code of e-health. Ethical principles of e-health. The application of biomedical principles in e-health. Artificial intelligence in medicine. Robotics capabilities in medicine. Ethical concerns of artificial intelligence and robotics' usage in medicine.

3.5. Deontology in dealing with patients at different stages of diagnostic

and treatment process. Deontology in pediatrics and geriatrics

Ethical and deontological concerns of doctor-patient relations as different stages of diagnostic and treatment process. Specific features of interaction with patients during traumatizing and invasive procedures. The patient's perception of disease. Principles of therapeutic doctor-patient relations (triad of Carl Rodgers). Psychological types of patients. Types of disease perception.

Deontology in pediatrics. Deontological issues of diagnostic testing.

Specific features of interaction with elderly patients.

Ethical and deontological principles in oncology. Communication with patients, their relatives and colleagues in hospices, palliative care units of hospitals and oncology centers, out of medical establishments.

«Syndrome of burnout» of medical workers.

# ACADEMIC DISCIPLINE CURRICULAR CHART ON «BIOMEDCIAL ETHICS»

	Equipment form of control			Interviews, reports, accounts of classroom practical exercises with oral defense, e-tests	1		Interviews, reports, accounts of classicoun practical exercises with oral defense, e-tests	Interviews, reports, role-playing evaluation, e-tests	Interviews, reports, role-playing evaluation, e-tests	Discussion, reports, accounts of classroom practical exercises with oral defense, e-tests. Colloquiums
ļuə	student independ work	2	-		6	-	2	7	2	2
number of hours	seminars	4	7	2	10	2	2	2	2	2
lmun	lectures			•		ı		•		
	Section (topic) name	The history and features of Biomedical	Theoretical grounds of Biomedical ethics. The	Principles and rules of Biomedical ethics	«Open» issues of Biomedical ethics	Ethical and legal issues of assisted			Ethical issues of biomedical research	Ethical issues of genetic engineering and human cloning
	Section, topic #	1	1	1.2	2.	2.1	2.2	2.3	2.4	2.5

•	M. Jim Joseph John	ı	10	n	
3	3. Medical deominiogy				Interview reports accounts of classroom
1.	3.1 Modern medical deontology	1,	2	<b>—</b>	practical exercises with oral defense, e-tests
	T				Interviews renorts role-playing evaluation,
3.2	Deontological problems of psychiatry and		7		o toats
	narcology				C-ICSIS
3.3	3.3 Deontological problems of providing special				Interviews, accounts of classicon practical
	care to patients with diseases that pose threat		2		exercises with oral defense, cresss
	to public health, to patients with human		l		
	imminodeficiency virus				The state of the s
3.4	Communication strategies in healthcare.		2		Interviews, reports, role-playing evaluation,
	Medical interview	ı	1	1	e-tests
3.5	3.5 Deontology in dealing with patients at		24		accour
	different stages of diagnostic and treatment		2		oral deletise,
	process. Deontology in pediatrics and				questioning. Creati
	geriatrics				
	Total	,	24	16	

# INFORMATION AND INSTRUCTIONAL UNIT LITERATURE

Basic:

1. Biomedical ethics and communications in health service: study guide/Clushanko V. S., Kulik C. P., Gerberg A. A., Myasoedov A. M., Mihnevich E. V., Orehova L. I., Tserkovskiy A. L. – Vitebsk: VSMU, 2018. – 233 p.

**Additional:** 

2. Bases of Bioethics and Biosafety: study guide for stud. of institutions of higher education of Ministry of Health of Ukraine. / V. M. Bobyrov, O. M. Vazhnicha, T. O. Devyatkina. – Vinnytsia: Nova Knyha, 2019. – 248 p.: il.

3. Глушанко, В. С. Общественное здоровье и здравоохранение = Public Health and Health Service : пособие для студентов учреждений высш. образования, обучающихся по специальности 1-79 01 01 «Лечебное дело», 1-79 01 07 «Стоматология» / В. С. Глушанко, Е. В. Михневич, Л. И. Орехова; – Витебск : ВГМУ, 2020. – 188 с.

4. McCullough, Laurence B. Historical dictionary of medical ethics. -

Lanham: Rowman & Littlefield, 2018. - 371 p.

5. Do not judge. Stories about medical ethics and wisdom / Daniel Sokol. – Moscow: Publishing house AST, 2020 – 240 p.

Normative regulatory acts:

6. On Healthcare: Law of the Republic of Belarus No. 2435- XII of 18.06.1993 with amendments.

International ethical and legal documents:

7. Declaration of Venice on terminal illness (WMA, 1983).

8. Declaration of Geneva (Modern physician's pledge) (WMA, 1948).

9. International code of medical ethics (WMA, 1949).

10. Declaration of Helsinki (WMA, 1964).

11. Declaration of Hawaii (WPA, 1983).

12. Universal declaration on bioethics and human rights (UNESCO, 2005).

13. Statement of animal use in biomedical research (WMA, 1989).

14. Declaration of human organ transplantation (WMA, 1987).

15. 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 (Council of Europe, ETS No.164, 1997).

# METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

Main forms of student independent work:

preparation for seminars;

preparation for the colloquium and credit;

marking a research on topics and problems that have not been discussed in class;

fulfilling creative tasks; preparation of reports, papers, presentations.

# LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms are used for competences assessment:

# Oral form:

interviews;

discussion;

colloquiums;

role-playing evaluation.

# Written form:

control questioning;

reports.

# Oral-written form:

accounts of classroom practical exercises with oral defense; credit.

# Technical form:

electronic tests.

# LIST OF AVAILABLE TEACHING METHODS

Traditional method (lecture, laboratory practicals).

Active (interactive) methods:

Problem-Based Learning (PBL);

Team-Based Learning (TBL);

Case-Based Learning (CBL);

Research-Based Learning (RBL).

# LIST OF PRACTICAL SKILLS

- 1. Analysis, argumentative presentation on biomedical ethics texts.
- 2. Making ethical decisions (case-based learning).
- 3. Analysis of ethical and legal concerns in managing medical errors and conflicts in medicine (case-based learning).
  - 4. Communicative strategies in medicine.
- 5. Communication with patients at different stages of diagnostic and treatment process.
  - 6. Medical interview.
- 7. Arranging biomedical research involving human beings (case-based learning) in conformity with ethical and legal standards.

# LIST OF EQUIPMENT USED

Multimedia equipment (laptop, projector, screen). Standard workstation with a personal computer.

# LIST OF SEMINARS

1. Theoretical grounds of Biomedical ethics. The history of the professional doctor's ethics.

2. Principles and rules of Biomedical ethics.

3. Ethical and legal issues of assisted reproductive technologies.

4. Ethical and legal issues of death and dying.

5. Ethical and legal issues of organ and tissue transplantation.

6. Ethical issues of biomedical research.

7. Ethical issues of genetic engineering and human cloning.

8. Modern medical deontology.

9. Deontological problems of psychiatry and narcology.

10. Deontological problems of providing special care to patients with diseases that pose threat to public health, to patients with human immunodeficiency virus.

11. Communication strategies in healthcare. Medical interview.

12. Deontology in dealing with patients at different stages of diagnostic and treatment process. Deontology in pediatrics and geriatrics.

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Curriculum content, composition and the accompanying documents comply with the established requirements.

Dean of the Medical Faculty for International Students of the educational institution «Belarusian State Medical University»

<u>21. 11.</u> 2022

Methodologist of the educational institution «Belarusian State Medical University»

*21. 11.* 2022

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