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RELIGIOUSNESS AS A FACTOR FOR  
FORMING THE BIOETHICS IDEOLOGY OF  
PATIENTS

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The aim of the study was to explore the moral and ethical and bioethical representations of believers and non-believers among patients in order to assess the influence of religiosity on the formation of a bioethical ideology and morally responsible attitude to the use of medical services. Study participants were divided into two groups in accordance with religious belief – believers (53,0%) and non-believers (47,0%). We found that there is a difference in all variables related to moral and ethical state of the patients between believers and non-believers. Moreover, we observe differences in the attitude of patients to all 7 analyzed biomedical technologies: in vitro fertilization, surrogate motherhood, human cloning, organ transplantation, fetal cell therapy, abortion and euthanasia. The attitude to the biomedical technologies of religious patients is bioethically responsible and is built on moral grounds, has a moral value and is filled with moral meaning. Religiosity promotes a deeper understanding by patients of the meaning of bioethical dilemmas and morally responsible attitude to medical interventions in the life and death of a person. The results obtained make it possible to assert that religiosity, acting as a factor in the formation of the bioethical ideology of patients, is an ethical regulator of the practice of using biomedical technologies.

**Keywords:** religiosity, bioethical ideology, biomedical technologies, and patients

РЕЛИГИОЗНОСТЬ КАК ФАКТОР  
ФОРМИРОВАНИЯ БИОЭТИЧЕСКОГО  
МИРОВОЗЗРЕНИЯ ПАЦИЕНТОВ

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В статье изложены результаты исследования морально-нравственных и биоэтических представлений верующих и неверующих пациентов для оценки влияния религиозности на формирование биоэтического мировоззрения и морально ответственного отношения к использованию (потреблению) медицинских услуг. Проведенный компаративный анализ морально-нравственных и биоэтических представлений пациентов с религиозным (53,0%) и нерелигиозным (47,0%) типом мировоззрения выявил статистически значимое расхождение по всем 15-ти переменным, характеризующим морально-нравственное состояние личности пациентов. Результаты анализа позволили установить различия в отношении пациентов ко всем 7-ми анализируемым биомедицинским технологиям: экстракорпоральному оплодотворению, суррогатному материнству, клонированию человека, трансплантации органов, терапии фетальными клетками, искусственному прерыванию беременности и эвтаназии. Отношение к биомедицинским технологиям религиозных пациентов является биоэтически ответственным и строится на моральных основаниях, имеет моральное значение и наполнено моральным смыслом. Религиозность способствует более глубокому пониманию пациентами смысла биоэтических дилемм и морально ответственному отношению к медицинским вмешательствам в жизнь и смерть человека. Полученные результаты позволяют утверждать о том, что религиозность, являясь фактором формирования биоэтического мировоззрения пациентов, выступает этическим регулятором практики применения биомедицинских технологий.

**Ключевые слова:** религиозность, биоэтическое мировоззрение, биомедицинские технологии, пациенты

**Introduction.** As a result of the widespread introduction of advanced biomedical technologies into medical practice, the values of religious interpretation of fundamental philosophical problems increases significantly [3, 18], and bioethical content becomes a modern trend in sociological research in the field of health and public health [4]. This is due to the appearance of truly revolutionary consequences for the new opportunities arising from medical manipulations in the border areas of life and death of a person. In such conditions, the religious and philosophical understanding of the bounds of medical interventions in the life and death of people is necessary "not only for researchers engaged in the development of new technologies, but also for those who use these technologies, that is, ordinary citizens" [18, p. 9]. In the circumstances, "one of the ways to protect against disasters, which is fraught with science as an act of man, is the development and acceptance of Christian ethical knowledge" [12, p. 72].

At present, an increasing number of scientific studies of Russian scientists are devoted to the problem of the formation and development of a bioethical ideology. All of them have a certain scientific and practical significance. In particular, the researchers revealed the peculiarities of the religiosity of the Russian population in general [7, 8] and student in particular [2]. Andreeva L.A., et al [2, p. 98] found that the type of religiosity of young people matches with the type of religiosity of Russians and is defined as "a type with an unstable religious orientation that reveals doubts about the truth of even the basic and essential provisions of the dogma." Of particular scientific interest are theoretical studies devoted to predictive interpretation of the consequences of the application of new biomedical technologies [11] and explication of the ideology bases of law by the norms of Christian morality [14]. An important practical perspective belongs to studies of the problems of the formation of ethical regulators of professional activity of medical workers [4, 9] under the new model of moral relations in medicine [1] and the study of health and disease phenomena in the context of the Christian doctrine of personality [17]. However, despite the successes achieved in the study of this problem, its relevance remains nowadays. In the previous studies obviously insufficient attention is paid to the study of the influence of religious ideas on the formation of the bioethical ideology of patients. At the same time, in the study of this problem, one cannot ignore the fact that the Russian society maintains a high trust in the church as a social institution while at the same time increasing its social significance compared to other social structures.

The aim of the study was to explore religiosity as a factor of the bioethical ideology formation among patients.

**Methods.** A cross-sectional study was applied. Questionnaire for studying the bioethical representations of patients was used. Prototype of the latter was a questionnaire proposed by the employees of the Department of Biomedical Ethics of the Russian State Medical University (Moscow) L.B. Liaus, V.I. Saburova, I.V. Siluyanov, N.A. Sushko in 2002 and presented by a 20-point questionnaire [9]. The modified questionnaire was validated during the pilot study. The questionnaire consisted of three main parts and the final (passport) part characterizing the status of the respondents (5 questions). The first part of the questionnaire is devoted to determining

the religious and confessional identity of patients (2 questions), the second - moral characteristics of patients (15 questions), and the third – attitude of the patients to biomedical technologies (18 questions).

Study participants were patients 18 and older years old, who went to outpatient clinics in Arkhangelsk and the Arkhangelsk region in March 2015 and gave their informed consent to participate in the study (N=513).

According to the classical concept of religiosity, the terms "believer" and "unbeliever", "atheist" are synonymous with "religious" and "irreligious" types of a person [8, p. 97]. The distribution of patients with a religious and non-religious ideology was a difficult methodological task. Its complexity consisted, on the one hand, in the absence of unambiguous religious criteria, and on the other, in the presence of different methodologies for measuring the level and degree of religiosity. According to the first methodology, the religiosity is defined due to the question: "To which people do you belong?".

The most complex method for determining the level and degree of religiosity was developed by DM Ugrinovich [15]. It contains 49 empirical signs, the ratio of which allows us to refer the individual to this or that type of religiosity. F.N. Ilyasov [5] proposed an inexpensive and reliable technique, including two direct questions: with the help of the first one is measured the sign "belief", the second - "attitude toward religious (atheistic) activity". Typology of religiosity by F.N. Ilyasova is built on a combination of these two signs. According to the results of the study F.N. Ilyasova [5], the share of true believers in modern society is very small (3%). The share of those who believe in the supernatural beginning of the world and doubting (43%) is much larger in comparison with the latter. They, as a rule, are not familiar with the subject of belief and do not pray, that is, "they believe, not fully understanding what they are doing."

Typology of religiosity done by E.A. Kublitskaya includes 3 groups: believers; those who are wavering between believer and non-believer; and non-believers (including atheists). This typology is sufficient for carrying out an analysis of the influence of ideology positions on the social orientations of the individual [7, p. 98].

Practical application of the Kublitskaya typology assumes a dichotomous division of the population into religious and non-religious. However, a

methodological problem arises. It is unclear those who doubt should be believers or non-believers. In this regard, scientists have no common opinion. So, for example, Soviet sociologists ranked the group of those who doubted toward the religious population [5, 6, 15], while the American ones did not do it [16]. Currently E.A. Kublitskaya [7, p. 98] believes that the replenishment of the religious population at the expense of this group is not entirely justified, since sociological studies conducted in our country have found that 35-45% of those who doubt do not believe in God or in other supernatural powers.

In our division we used the typology of E.A. Kublitskaya religiosity. To the believers we referred the religious patients, and to the non-believers - the non-religious, including doubted patients and atheists.

Chi-squared tests were used for statistical analysis. Data are presented as a percentages (%) and 95% confidence interval (95% CI). The critical level of significance is assumed to be 0.05. The processing of statistical data was carried out using the SPSS ver. 21 and WinPEPI.

### Results.

A little more than half (53,0%, 95%CI 47,7-57,3) of patients were classified as religious people. At the same time, one third (31,2%, 95%CI 27,3-35,3) considered themselves a non-believer person, including an atheist (5,7%, 95%CI 4,0-8,0). The group of those who doubted, that is, those who could not clearly define their ideology positions, was 15,8% (95%CI 12,9-19,2). Moreover, the basis of the ideology of the majority (71,7%, 95%CI 67,7-75,5) was Orthodox Christianity and only 6,8% (95%CI 4,9-9,3) - other religious denominations.

To explicate the moral state of the believers and non-believers we used 15 variables, combined into 2 blocks. The first block of variables reflected the ethical characteristics and representations of patients about the relationship between religion, morality and medicine (Table 1), the second block defined judgments about the state of Russian society and health care (Table 2).

Table 1  
Ethical characteristics of believers and non-believers and their perceptions of religion, morality and medicine, % (95% CI)

Variables	Type of ideology		$\chi^2$ p-level
	believers	non-believers	
Moral problems are a constant subject of reflection in the process of life activity			
yes	89,3 (85,1-92,5)	83,4	$\chi^2 =$
no*	2,9 (1,5-5,7)	(78,2-	

I do not know	7,8 (5,1-11,5)	87,6 9,5 (6,44-13,9) 7,1 (4,4-11,0)	<b>9,815</b> <b>p = 0,007</b>
Pre-chastity is evidence of human dignity			
yes*	75,0 (69,5-79,8)	38,2	<b><math>\chi^2 = 72,93</math></b> <b>p &lt; 0,001</b>
no	14,0 (10,4-18,6)	(32,3-44,5)	
I do not know	11,0 (7,8-15,3)	41,1 (35,1-47,4) 20,7 (16,1-26,3)	
A person's life begins with conception			
yes*	78,7 (73,4-83,1)		
no	19,1 (14,9-24,2)		
I do not know	2,2 (1,0-4,7)		
The origin of morality has a divine (metaphysical) nature			
yes*	35,7 (30,2-41,5)		
no	39,3 (33,7-45,3)		
I do not know	25,0 (20,2-30,5)		
Morality and religion are closely interrelated and interdependent			
yes*	64,3 (58,5-69,8)		
no	20,6 (16,2-25,8)		
I do not know	15,1 (11,3-19,8)		
Medicine is associated with morality and depends on the moral attitudes of society			
yes*	56,6 (50,7-62,4)		
no	28,3 (23,9-33,9)		
I do not know	15,1 (11,3-19,8)		
Religion should intervene in the practice of medicine			
yes*	30,8 (25,7-36,6)		
no	59,6 (53,6-65,2)		
I do not know	9,6 (6,6-13,6)		
8. Use (consumption) of medical services is carried out taking into account of religious views			
yes*	39,0 (33,4-44,9)		
no	54,8 (48,8-60,6)		
I do not know	6,2 (3,9-9,8)		
Total	53,0		

Footnote: \* - statistical significance  $p \leq 0,05$

Moral state of the believers in comparison with non-believers is distinguished by a higher interest in moral issues (89,3% vs. 83,4%) ( $\chi^2 = 9,815$ ,  $p = 0,007$ ). They often consider that a person's life begins with conception (78,7% vs 48,5%) ( $\chi^2 = 51,425$ ,  $p < 0,001$ ), and pre-chastity is a human dignity (75,0% vs 38,2%) ( $\chi^2 = 72,932$ ,  $p = 0,001$ ). Thinking about the nature of the origin of morality, believers more often consider that it was given by God (35,7% vs 5,0%) ( $\chi^2 = 79,240$ ,  $p < 0,001$ ). Therefore, for them, morality and religion are closely related (47,1% vs 14,9%) ( $\chi^2 = 62,009$ ,  $p < 0,001$ ). They also more often mentioned that medicine depends on the moral attitudes of society (56,6% vs 25,7%) ( $\chi^2 = 50,023$ ,  $p < 0,001$ ). The majority of believers (59,6%, 95%CI 53,6-65,2) and non-believers (82,6%, 95%CI 77,3-86,8) consider that religion should not interfere in medicine. However, every third believer admits the latter (30,8%, 95%CI 25,7-36,6 vs 6,6%, 95%CI 4,1-10,5) ( $\chi^2 = 48,335$ ,  $p < 0,001$ ), focusing on their religious representations when using (consuming) medical services (39,0% vs 8,7%) ( $\chi^2 = 63,804$ ,  $p < 0,001$ ).

Table 2  
Evaluations about Russian society and health care among believers and non-believers. % (95% CI)

Variables	Type of ideology		$\chi^2$ p-level
	believers	non-believers	
The state and development of Russian society is closely linked with the preservation of traditional religious values			
yes*	90,8 (86,8-93,7)	51,3 (45,0-57,5)	<b><math>\chi^2 = 99,765</math></b> <b>p &lt; 0,001</b>
no	6,3 (3,9-9,8)	30,0 (24,5-35,9)	
I do not know	2,9 (1,5-5,7)	18,7 (14,3-24,1)	
Russian mass media actively introduce ideas of consumption and hedonistic values into the public consciousness			
yes*	59,6 (53,6-65,2)	32,8 (27,2-38,9)	<b><math>\chi^2 = 15,183</math></b> <b>p = 0,001</b>
no	13,2 (9,7-17,8)	23,2 (18,4-28,9)	
I do not know	27,2 (22,3-32,8)	44,0 (37,9-50,3)	
The main reason for the unfavorable state of affairs in the domestic health care is the spiritual and moral crisis of society			
yes*	47,4 (41,6-53,4)	20,3 (15,7-25,9)	<b><math>\chi^2 = 41,400</math></b> <b>p &lt; 0,001</b>
no	52,6 (46,6-58,4)	68,5 (62,4-74,0)	
I do not know	0	11,2 (7,8-15,8)	
Medical professionalism assumes that the doctor has moral qualities and knowledge of ethical knowledge			
yes*	75,4 (69,9-80,1)	56,8 (50,5-62,9)	<b><math>\chi^2 = 22,110</math></b> <b>p &lt; 0,001</b>
no	8,8 (6,0-12,8)	20,7 (16,1-26,3)	
I do not know	15,8 (11,9-20,6)	22,4 (17,6-28,1)	
Following of the principles of professional ethics and deontology in medicine requires that a future doctors gave a doctor's swear			
yes*	84,2 (79,4-88,1)	72,2 (66,2-77,5)	<b><math>\chi^2 = 11,525</math></b> <b>p = 0,003</b>
no	9,9 (6,9-14,1)	19,5 (15,0-25,0)	
I do not know	5,9 (3,7-9,3)	8,3 (5,4-12,5)	
The topics of biomedical ethics (death, life as a value) have to be taught by clergymen			
yes*	30,1 (15,0-35,9)	18,3 (13,9-23,6)	<b><math>\chi^2 = 10,517</math></b> <b>p = 0,005</b>
no	37,5 (32,0-43,4)	40,2 (34,3-46,6)	
I do not know	32,4 (27,1-38,1)	41,5 (35,5-47,8)	
When giving the opportunity to choose a place of work in Russia or abroad, you should be a patriot and stay working in your country			
yes*	66,5 (60,7-71,9)	52,7 (46,4-58,9)	<b><math>\chi^2 = 11,087</math></b> <b>p = 0,004</b>
no	21,0 (16,6-26,2)	26,6 (21,4-32,5)	
I do not know	12,5 (9,1-17,0)	20,7 (16,1-26,3)	
Total	53,0	47,0	100,0

Footnote: \* - statistical significance  $p \leq 0,05$

Believers and non-believers perceive the need to preserve traditional religious values in Russia differently ( $\chi^2 = 9,815$ ,  $p = 0,007$ ). If almost all believers (90,8%, 95%CI 86,8-93,7) think that it is necessary to save a religious tradition, then among the non-believers, this is 1.8 times less (51,2%, 95%CI 45,0-57,5). Believers are more likely to consider that the mass media carry out active

propaganda of hedonism and consumption in the society (59,6%, 95%CI 53,6-65,2 vs 32,8%, 95%CI 27,2-38,9) ( $\chi^2 = 15,183$ ,  $p = 0,001$ ). Moreover, the unfavorable state of affairs in Russian medicine is associated with the spiritual degeneration of Russian society (47,4% vs 20,43%) ( $\chi^2 = 41,400$ ,  $p < 0,001$ ).

Believers in compared to non-believers are more aware of the need for moral and ethical knowledge among medical professionals to achieve professionalism in medicine (75,4% vs 56,8%) ( $\chi^2 = 22,110$ ,  $p < 0,001$ ). The taking of a doctor's swear, the content of which reflects the basic provisions of the code of professional ethics in medicine, is undeniable among the majority of believers and non-believers (84,2% and 72,2% respectively). However, believers more rarely consider the doctor's swear unnecessary (9,9% vs 19,5%) ( $\chi^2 = 11,525$ ,  $p = 0,003$ ). Moreover, they more often consider that topics of biomedical ethics (life as value, death) have to be teacher by clergymen (30,1% vs 18,3%) ( $\chi^2 = 10,517$ ,  $p = 0,005$ ). Given the choice of a place to work in Russia or abroad, the majority of the interviewed patients will not leave the country (believers – 66,5%, non-believers – 52,7%), but believers will less often prefer to travel abroad (21,0% vs 26,6%) ( $\chi^2 = 11,087$ ,  $p = 0,004$ ).

To determine the influence of the type of the ideology on the content of bioethical representations of the interviewed patients, we studied the attitude of believers and non-believers to biomedical technologies associated with different period of life: the onset (in vitro fertilization, surrogate motherhood, cloning), maintenance (organ transplantation, fetal cell therapy), and the termination (artificial termination of pregnancy, euthanasia).

The attitude of the believers and non-believers to methods of artificial reproduction of human beings is presented in Table 3.

Table 3

The attitude of the believers and non-believers to methods of artificial reproduction of human beings, % (95% CI)

Variables	Type of ideology		$\chi^2$ p-level
	believers	non-believers	
In Vitro Fertilization			
positive	39,7 (34,1-45,6)	40,7 (34,7-47,0)	$\chi^2 = 0,049$ , $p = 0,825$
neutral	20,2 (15,9-25,4)	24,1 (19,1-29,8)	$\chi^2 = 1,100$ , $p = 0,294$
negative*	23,9 (19,2-29,3)	5,4 (3,2-9,0)	$\chi^2 = 33,931$ , $p < 0,001$
missing*	16,2 (12,3-21,0)	29,8 (24,5-35,9)	$\chi^2 = 13,704$ , $p < 0,001$
Surrogacy			
positive	23,2 (18,5-28,5)	21,6 (16,9-27,2)	$\chi^2 = 0,185$ , $p = 0,667$
neutral*	30,5 (26,4-36,2)	39,4 (33,5-45,7)	$\chi^2 = 4,471$ , $p = 0,034$
negative*	35,3 (30,0-41,1)	21,2 (16,5-26,8)	$\chi^2 = 12,483$ , $p < 0,001$

missing*	11,0 (7,8-15,3)	17,8 (13,5-23,2)	$\chi^2 = 4,860$ , $p = 0,027$
Human cloning			
positive *	2,6 (1,3-5,2)	8,7 (5,8-12,9)	$\chi^2 = 9,336$ , $p = 0,002$
neutral	14,3 (10,7-19,0)	15,8 (11,7-20,9)	$\chi^2 = 0,205$ , $p = 0,651$
negative*	68,0 (62,3-73,3)	53,9 (47,6-60,1)	$\chi^2 = 10,678$ , $p = 0,001$
missing	15,1 (11,3-19,8)	21,6 (16,9-27,2)	$\chi^2 = 3,641$ , $p = 0,056$
Total	53,0	47,0	100,0

Footnote: \* - statistical significance  $p \leq 0,05$

The majority of believers and non-believers have a positive (39,7% and 40,7%, respectively) ( $\chi^2 = 0,049$ ,  $p = 0,825$ ) or neutral (20,2% and 24,1%, respectively) ( $\chi^2 = 1,100$ ,  $p = 0,294$ ) attitude to in Vitro fertilization (IVF). The rationale is the assertion that IVF "enables to get a child for childless families and single women" (believers – 50,7%, 95%CI 44,8-56,6, non-believers – 50,2%, 95%CI 43,9-56,5) ( $\chi^2 = 0,014$ ,  $p = 0,905$ ). In this case, every second respondent considers children born due to IVF are "the same as the rest" (believers – 50,4%, 95%CI 44,5-56,3, non-believers – 52,7%, 95%CI 46,4- 58,9) ( $\chi^2 = 0,278$ ,  $p = 0,598$ ), and only 4,4% (95%CI 2,5-7,6) of believers and 5,8% (95%CI 3,5-9,5) of non-believers consider that such children are less healthy ( $\chi^2 = 0,519$ ,  $p = 0,471$ ). At the same time, believers are more likely to have a negative attitude to IVF than non-believers (23,9% vs 5,4%) ( $\chi^2 = 33,931$ ,  $p < 0,001$ ). They also often do not allow its use, considering it "an unnatural way of pregnancy" (19,5%, 95%CI 15,2-24,6 vs 5,0%, 95%CI 2,9-8,5) ( $\chi^2 = 24,300$ ,  $p < 0,001$ ) and twice less likely to be admitted only in extreme cases (6,6%, 95%CI 4,2-10,2 vs 13,7%, 95%CI 9,9-18,6) ( $\chi^2 = 7,145$ ,  $p = 0,008$ ). Children who were born due to IVF, are more often considered to be "born unnatural" (17,3%, 95%CI 13,3-22,2 vs 10,4%, 95%CI 7,1-14,9) ( $\chi^2 = 5,051$ ,  $p = 0,025$ ).

Every fourth or fifth patient has a positive attitude to surrogate motherhood (believers – 23,3%, non-believers – 21,6%) ( $\chi^2 = 0,185$ ,  $p = 0,667$ ). Believers less often substantiate their attitude to surrogate motherhood by "the opportunity for childless families and single women to get a child" (believers – 36,8%, 95%CI 31,3-42,6, non-believers – 46,9%, 95%CI 40,7-53, 2) ( $\chi^2 = 5,393$ ,  $p = 0,020$ ), and they are twice as likely to prevent its use (28,3%, 95%CI 23,4-33,9 vs 13,7%, 95%CI 9,9-18,6) ( $\chi^2 = 16,205$ ,  $p \leq 0,001$ ).

Believers (68,0%) are more likely to have a negative attitude to cloning than non-believers (53,9%) ( $\chi^2 = 10,678$ ,  $p = 0,001$ ). They more often consider "it unacceptable under any circumstances" (69,9%, 95%CI 64,2-75,0 vs 53,5%, 95%CI 47,2-59,7) ( $\chi^2 = 14,668$ ,  $p = 0,001$ ).

Attitude to biomedical life extension technologies among believers and non-believers is presented in Table 4.

Table 4  
Attitude to biomedical life extension technologies among believers and non-believers, % (95% CI)

Variable	Type of ideology		$\chi^2$ p-level
	believers	non-believers	
Transplantation of organs and tissues			
positive*	23,9 (19,2-29,3)	37,8 (31,9-44,0)	$\chi^2=11,603, p = 0,001$
neutral*	16,5 (12,6-21,4)	29,5 (24,1-35,5)	$\chi^2=12,183, p < 0,001$
negative*	48,9 (43,0-54,8)	13,3 (9,6-18,1)	$\chi^2=74,303, p < 0,001$
missing*	10,7 (7,5-14,9)	19,4 (15,0-25,0)	$\chi^2=7,913, p = 0,005$
Fetal cell therapy			
positive*	12,9 (9,4-17,4)	20,3 (15,7-25,9)	$\chi^2 = 11,561, p = 0,003$
negative*	37,1 (31,6-43,0)	24,5 (19,5-30,3)	$\chi^2 = 9,529, p = 0,002$
missing	50,0 (44,1-55,9)	55,2 (48,9-61,3)	$\chi^2 = 1,378, p = 0,240$
Total	53,0	47,0	100,0

Footnote: \* - statistical significance  $p \leq 0,05$

Believers have more often a negative attitude to organs and tissues transplantation than non-believers (48,9% vs 13,3%) ( $\chi^2 = 74,303, p \leq 0,001$ ). They call it as "unnatural" (22,4%, 95%CI 17,9-27,8 vs 5,0%, 95%CI 2,9-8,5) ( $\chi^2 = 31,870, p \leq 0,001$ ) and do not agree that it is "A step forward in medicine" (18,0%, 95%CI 13,9-23,0 vs 32,8%, 95%CI 27,2-38,9) ( $\chi^2 = 14,877, p < 0,001$ ). One third considers organ transplantation has to be only in extreme situation (believers – 27,2%, 95%CI 22,3-32,8, non-believers – 31,1%, 95%CI 25,6-37,2) ( $\chi^2 = 0,950, p = 0,330$ ).

Every second believer (50,0%) and non-believer (55,2%) has a difficulty in assessing of the possibility of the therapeutic techniques usage based on the fetal tissues. At the same time, believers are more likely to be negative about the therapy with fetal cells (37,1% versus 24,5%).

Attitude to abortion and euthanasia among believers and non-believers is presented in Table 5.

Table 5  
Attitude to abortion and euthanasia among believers and non-believers, % (95% CI)

Variable	Type of ideology		$\chi^2$ p-level
	believers	non-believers	
Abortion			
positive*	6,3 (3,9-9,8)	11,6 (8,2-16,3)	$\chi^2 = 4,602, p = 0,032$
neutral*	43,0 (37,3-49,0)	58,5 (52,2-64,6)	$\chi^2 = 12,267, p < 0,001$
negative*	45,6 (40,0-51,5)	19,1 (14,6-24,5)	$\chi^2 = 40,503, p < 0,001$
missing*	5,1 (3,1-8,5)	10,8 (7,6-15,3)	$\chi^2 = 5,656, p = 0,017$
Euthanasia			
positive*	14,3 (10,7-19,0)	28,2 (22,9-34,2)	$\chi^2 = 14,908, p < 0,001$
neutral*	14,3 (10,7-19,0)	24,1 (19,1-29,8)	$\chi^2 = 7,887, p = 0,005$
negative*	51,8 (46,0-57,7)	22,0 (17,2-27,6)	$\chi^2 = 48,406, p < 0,001$
missing	19,6 (15,2-24,6)	25,7 (20,6-31,6)	$\chi^2 = 2,862, p = 0,091$
Total	53,0	47,0	100,0

Footnote: \* - statistical significance  $p \leq 0,05$

Believers are against abortion (45,6% vs 19,1%) ( $\chi^2 = 40,503, p < 0,001$ ) than for the latter (6,3% vs 11,6%) ( $\chi^2 = 4,602, p = 0,032$ ). They less often try to justify their neutral attitude with various life circumstances (43,0% vs 58,5%) ( $\chi^2 = 12,267, p < 0,001$ ). There are no differences between believers and non-believers on the following statements: "abortion is permitted when the health or life of mother under threat" (believers – 49,6%, 95%CI 43,7-55,5, non-believers – 41,1%, 95%CI 35,1-47,4) ( $\chi^2 = 3,769, p = 0,052$ ), and "abortion is permitted due to incorrect development of the fetus" (believers – 42,3%, 95%CI 36,6-48,2, non-believers – 37,8%, 95%CI 31,9-44,0) ( $\chi^2 = 1,086, p = 0,297$ ).

The divergence of views is established in respect of:

- "abortion is a sin" (believers – 22,4%, 95%CI 17,9-27,8, non-believers – 10,4%, 95%CI 7,1-14,9) ( $\chi^2 = 13,304, p < 0,001$ );
- "woman has to decide herself about abortion" (believers – 17,6%, 95%CI 13,6-22,6, non-believers – 35,7%, 95%CI 29,9-41,9) ( $\chi^2 = 21,543, p < 0,001$ );
- "abortion is permissible only in the early stages of pregnancy" (believers – 10,7%, 95%CI 7,5-14,9, non-believers – 22,0%, 95%CI 17,2-27,6) ( $\chi^2 = 12,214, p \leq 0,001$ ).

Believers more often consider that "a doctor has a right to refuse to conduct an abortion due to ideology" (32,7%, 95%CI 27,4-38,5) than non-believers (13,7%, 95%CI 9,9-18,6) ( $\chi^2 = 27,658, p \leq 0,001$ ). Moreover, the attitude of believers to euthanasia is mostly negative (51,8% vs 22,0%) ( $\chi^2 = 48,406, p < 0,001$ ), rather than positive (14,3% vs 28,2%) ( $\chi^2 = 14,908, p < 0,001$ ) or neutral (14,3% vs 24,1%) ( $\chi^2 = 7,887, p = 0,005$ ).

## Discussion.

The term "ideology" means "a system of generalized views on the world and the place of man in it, attitude of people to the surrounding reality and themselves, as well as the beliefs, ideals, principles of cognition and activity" [10]. The carrier of ideology is a person and a social group who perceive the existing reality due to a certain system of views. Ideology influences all spheres of human activity and cognition. Formation of the ideology is due to the process of socialization, education, cultural and historical experience, and the choice of a life position and strategy for its implementation. It is directly

related to the growth of consciousness, the enrichment of the inner world of man and the assimilation of spiritual values. In the structure of the ideology there are two main types: religious and non-religious (secular).

The current period of development of modern society occurs under the conditions of humanization of secular and religious life. The main characteristic of the latter is process of convergence of secular and theological ideas, leading to contradictions between knowledge and faith, science and religion, believers and non-believers. Due to the gradual erosion of boundaries between social groups of believers and non-believers, as well as lack of classification criteria in order to determine ideology, in the modern secular society the understanding of the phenomenon of religiosity is greatly expanded. At present, it includes a wide range of relations to religion: from fanatical and truly devotional to superficial and even aesthetic [5]. This creates the prerequisites for the formation of a qualitatively new type of ideology - bioethical, based at the same time on modern scientific concepts and religious beliefs [1, 13]. Bioethical ideology allows connecting the latest achievements of medical science with moral laws and traditional spiritual values.

Differences in the content of religious and non-religious types of ideology are evidenced by the results of our comparative analysis. The obtained results show that the bioethical representations of believers, reflecting the moral state of the individual and explaining the attitude to biomedical technologies, are meaningful, critical and responsible. This is greatly facilitated by moral representations of believers, such as: awareness of the dependence of morality on religion, understanding of the need to apply religious morals in medicine, and the perception of the inevitability of the interaction between medicine, religion and morality in the modern secular world.

Moral state of the patients mainly, depends on the materialistic or idealistic perception of existing reality, as well as adoption of natural or synergistic, including theological, explanations of the world. Undoubtedly, individuals with difference religious denominations, have a different degree of development of religious consciousness. However, common to them is a commitment to traditional spiritual values and the adoption of norms of religious morality. Ethical knowledge of morality, religion and medicine, causing the essential transformation of the

bioethical views of patients, lay the foundations for the formation of a bioethical ideology and, as a consequence, contribute to the establishment of limits of medical interventions in the natural processes of birth, life and death. Religiousness contributes to the successful development of the bioethical ideology, which today becomes an important condition for the moral development of man and an ethical regulator of the practice of applying medical services.

**Conclusion.** Thus, our findings allow us to state that the attitude to biomedical technologies of patients with a bioethical ideology is based on moral grounds, and has a moral meaning. It promotes a deeper understanding of the content of bioethical dilemmas and a more responsible attitude to medical interventions in the life and death of a person. The latter allows us to hope that the bioethical ideology of patients, acting as an ethical regulator of the use of medical services, will also serve as an ethic regulator of introducing new biomedical technologies into medical practice, the application of which is associated with the uncertainty of the consequences and the danger to human life and health.

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## ACQUISITION OF DEONTOLOGICAL PRINCIPLES THROUGH GAME TECHNOLOGIES

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The actual task of professional education of students is the development of independent evaluation and selection of information received. In pedagogical practice, active and interactive teaching methods are used. The influence of the role play on the formation and assimilation of deontological principles among the students of a medical college was studied. The initial level of knowledge on the principles of deontology revealed 48% of correct answers. After the role play and discussion of the basic deontological principles of the relationship between the doctor - patient, the doctor - the nurse, the degree of mastering the material was estimated at 79% of the correct answers. It is established that the use of role games consolidates professional skills, reveals the creative abilities of students and the ability to find solutions in various clinical situations. Mastering students with deontological principles of behavior makes it possible to avoid conflict situations in further independent work. The results of the conducted research showed high efficiency of the use of gaming technologies in the educational process.

**Keywords:** deontology, role-playing game, education in a medical higher school, students.

## ОВЛАДЕНИЕ ПРИНЦИПАМИ ДЕОНТОЛОГИИ ЧЕРЕЗ ИГРОВЫЕ ТЕХНОЛОГИИ

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Актуальной задачей профессионального обучения студентов является развитие самостоятельной оценки и отбора получаемой информации. В педагогической практике используются активные и интерактивные методы обучения. Изучено влияние ролевой игры на формирование и усвоение деонтологических принципов среди студентов медицинского вуза. Исходный уровень знаний по принципам деонтологии выявил 48% правильных ответов. После ролевой игры и обсуждения основных деонтологических принципов взаимоотношения врач - пациент, врач - медицинская сестра, степень усвоения материала оценивалась в 79% правильных ответов. Установлено, что применение ролевых игр закрепляет профессиональные навыки, раскрывает творческие способности студентов и умение находить решения в различных клинических ситуациях. Овладение студентами деонтологическими принципами поведения позволяет не допускать конфликтных ситуаций в дальнейшей самостоятельной работе. Результаты проведенного исследования показали высокую эффективность использования игровых технологий в учебном процессе.

**Ключевые слова:** деонтология, ролевая игра, обучение в медицинском вузе, студенты.