

FOR THE RELIGIOUS ISSUE OF REDUCING MORTALITY AND INCREASING LIFE EXPECTANCY

**“One resists the invasion of armies;
one does not resist the invasion of ideas.” (V. Hugo)**

Akaki Bakuradze

Akaki Tsereteli State University

Associate Professor of the Department of Economics

akaki.bakuradze@atsu.edu.ge

Nona Akhvlediani

Akaki Tsereteli State University

Associate Professor of the Department of Economics

nona.akhvlediani@atsu.edu.ge

მოკვდაობის შემცირების და სიცოცხლის ხანგრძლივობის ზრდის რელიგიური საკითხისათვის

აკაკი ბაკურაძე

აკაკი წერეთლის სახელმწიფო უნივერსიტეტის
ეკონომიკის დეპარტამენტის
ასოცირებული პროფესორი
akaki.bakuradze@atsu.edu.ge

ნონა ახვლედიანი

აკაკი წერეთლის სახელმწიფო უნივერსიტეტის
ეკონომიკის დეპარტამენტის
ასოცირებული პროფესორი
nona.akhvlediani@atsu.edu.ge

რეზიუმე

მოსახლეობის ცხოვრების დონის და ჯანმრთელობის მდგომარეობის ამაღლებაზე ზრუნვა, სიღარიბის დაძლევა და შემოსავლების „თანაბარი განაწილება“ მოკვდაობის შემცირების, სიცოცხლის ხანგრძლივობის ზრდის საფუძველია. მოსახლეობის ჯანდაცვის მდგომარეობის გაუმჯობესებაზე, მოკვდაობის შემცირებაზე და სიცოცხლის ხანგრძლივობის ზრდაზე ეკონომიკური ფაქტორებთან ერთად მოქმედებენ სოციალური ფაქტორებიც. შესაბამისად, ეკონომიკური, სოციალური და დემოგრაფიული ქცევის ხასიათში სრული გარკვევა და მოქმედი ფაქტორების გავლენის ხარისხის დადგენა, სპეციალისტებს მიცემს შანსს, რომ დაადგინონ მოსახლეობის დემოგრაფიული ქცევის მიმდინარე და მოსალოდნელი შედეგები. ნაშრომის მთავარი მიზანია მოსახლეობის ჯანმრთელობის დონის გაუმჯობესებაში და მოკვდაობის შემცირებაში ცალკეული მოქალაქის ინდივიდუალური მცდელობის ცნობიერების ამაღლება რელიგიური კუთხით.

ამ მიმართულების კვლევებში აუცილებელია ჩართოს პიროვნული, მისი სულიერი მხარეც, რადგან ადამიანური კაპიტალის მოძრაობის და დაგროვების მყარი საფუძველი მოსახლეობის ფიზიკური და სულიერი განვითარებაა

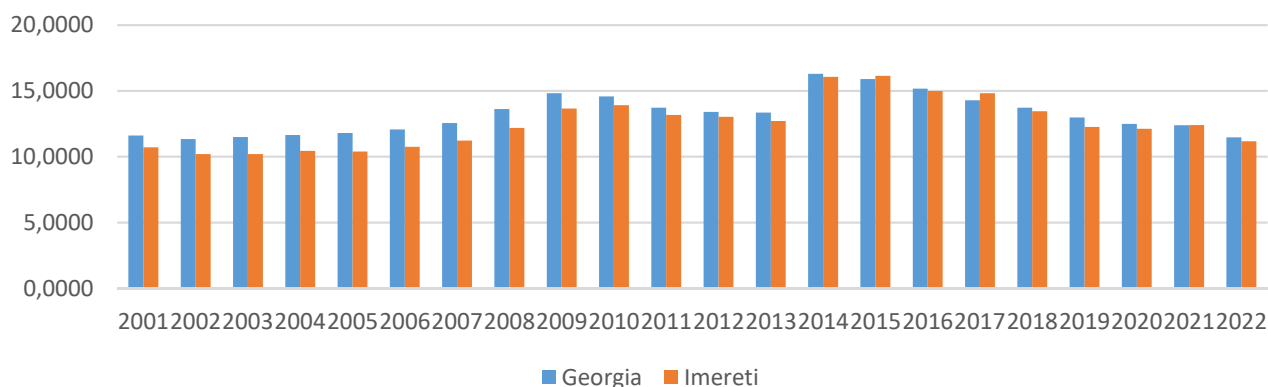
keywords: population, standard of living, economic growth, human capital, mortality, life expectancy, Holy Scripture.

* * * *

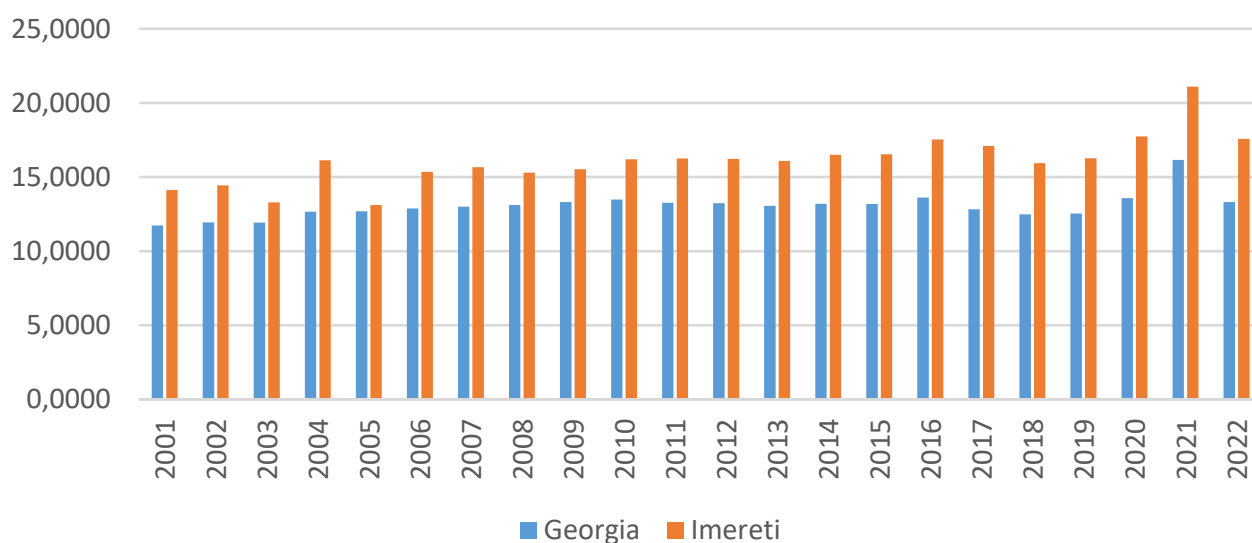
The rapid growth of the world's population, along with the problems of peace, environmental protection and the scientific-technical revolution, the sharp difference between the levels of economic development of advanced and underdeveloped countries... is considered to be a global problem of the contemporary period, of our era. Among the national-state and global problems, population problems and related issues occupies the most important place.

Governmental and scientific circles keep trying to explain the connection between the health status of the population and the economic growth of the country. They also agree, that economic growth ensures the “social vitality” of the population, which in turn is the basis of economic growth.

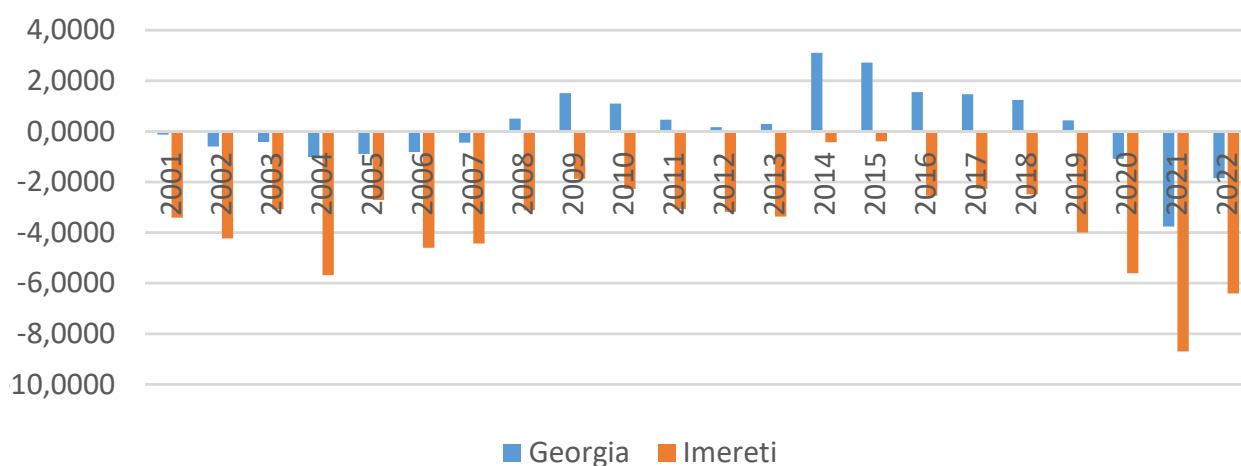
Thus, the essence of all development programs is to focus on the productive results of the growth of the main wealth of the state - human capital, and to take care of its development. The complete characterization, analysis and scientific study of these processes is gaining more and more importance among the scientific circles and the government. However, the increase in the health level of the population is not very noticeable, which has already been reflected in the undesirable dynamics of the indicators of the natural movement (see diagram N1, N2 and N3).



Dynamics of birth in 2001-2022, in %. Diagram N1

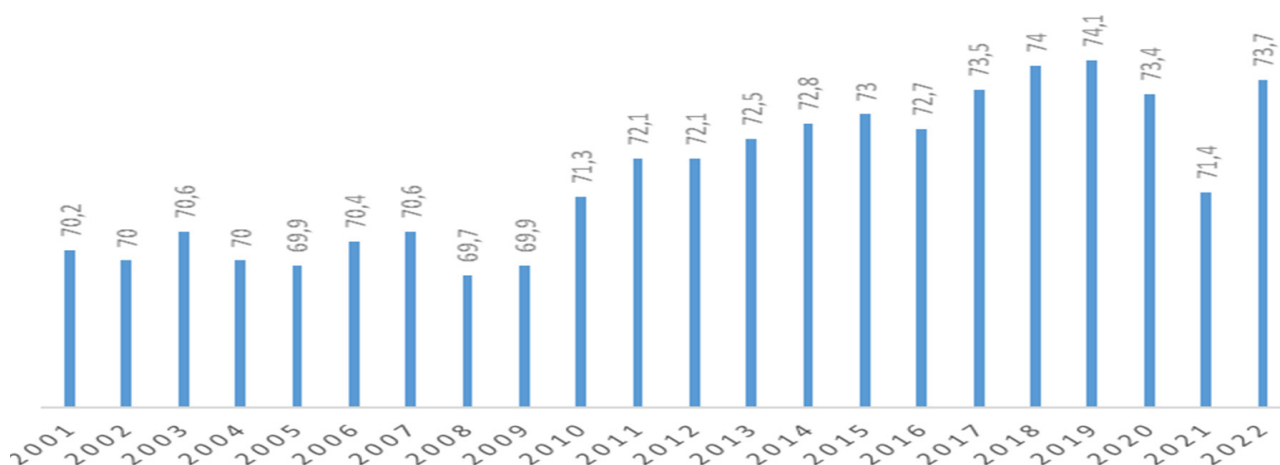


**Dynamics of mortality in 2001-2022, in %
Diagram N2**



**Dynamics of natural increase in 2001-2022, in %1
Diagram N3**

1 The source of the diagrams N1, N2, N3, and N4 is as follows: <https://www.geostat.ge/ka/modules/categories/316/mo-sakhleoba-da-demografia/> /28.04.2023/



Average life expectancy of the population of Georgia at birth 2001-2022 (year). Diagram N4

Taking care of increasing the standard of living and improving health of the population is the basis for overcoming poverty and “equal distribution” of income.¹, which, in turn, has a strong impact on the reduction of mortality, the “desired” change in its structure, the economic, social and demographic behavior of the population, etc. Therefore, if their nature is fully understood and the degree of influence of the active factors is determined, specialists will be given the opportunity to get the current and expected results of the demographic behavior of the population.

It is clear that only economic factors are no longer decisive for improving health conditions, reducing mortality and increasing life expectancy. The influence of social factors also becomes important. Thus, the more desirable the socio-economic situation is in the country, the more stable the birth rate, the lower the mortality rate and, accordingly, the higher the expected average life expectancy at birth is considering the population as a whole, as well as their age, gender and place of residence (urban-rural).

It is a fact that the birth rate growth prospects are a distant reality! But it is really possible to achieve the growth of the natural increase at the expense of the reduction of mortality, which is a more achievable process for the coming years, because the personal factor, that is, taking care of one's own life, is advancing in the wake of government efforts.²

Diagrams N1, N2 and N3 actually describe the diffi-

cult situation faced by the population of Georgia in the 21st century, the result - a multi-year negative rate of natural increase (for comparison, the indicators corresponding to the natural movement of the population of the Imereti region are provided, because it is interesting to know whether it is typical for the population of the large region or not. But it seems to be more regrettable³). The dynamics of the average life expectancy is not favorable either, as it has lost its stability for 5 years, and, at the same time, the “fallbacks” of recent years can become dangerous (see diagram N4).

The main objective of the present paper is not to analyze the policy of state support for improving the health level of the population and reducing mortality, but to raise awareness in terms of the individual effort of each citizen, in particular from a religious point of view, because “for no man ever yet hated his own flesh; but nourishes and cherishes it” (Eph. 5, 29).

If we have something today, including the current state of economic well-being and the “European” average life expectancy (especially among women), it is directly the result of the patriotic achievements of our citizens, not only in the recent period, but also historically, that is reflected in the average life expectancy of the population (that is not low) and reduced rates of adult population mortality. So, the secret of traditional Georgian longevity is the wealth obtained through the efforts of generations and it should not be lost! It is believed that the share of influence of heredity on life

1 For more see: Bloom, D., Canning, D., The Health and Wealth of Nations // Science. 2000. Vol. 287. Issue 5456; Preston, S., The Changing Relationship Between Mortality and Level of Economic Development // Population Studies. 1975. Vol. 29. Issue 2; Subramanian, SV, Belli P., Kawachi I., The Macroeconomic Determinants of Health // Annual Review of Public Health. 2002. Vol. 23.

2 In addition, it is necessary to take into account: the status of an individual in the social “hierarchy” of society, antagonization of the social structure in the country, indifference to social norms of the population, their social activity, mass deviant behavior, etc.

3 Hopefully, there will be an interest in the scientific circles to analyze the demographic behavior of the population at the regional level as well.

expectancy is 25%⁴ and taking care of its growth requires strengthening, as it is not a short-term perspective.

Assessing the value that people place on health is more difficult because we are not dealing with market goods. However, the choice that individuals make between money and health can be assessed indirectly. At the beginning of the 21st century, expenditure on the increase in the welfare of the population in European countries, related to the increase of the average life expectancy, was 29-38% of GDP. Why such zeal? Studies have shown that missing work due to illness caused significant losses; It affects labor productivity, employment, savings and investments, not to mention losses caused by death, etc.⁵

It is a fact that in such type of studies, it is necessary to include a spiritual side as well, because the solid basis for the movement and accumulation of human capital is the physical and spiritual development of the population, because in the case of an undesirable population and/or a low level of individual health, investing in human capital in other directions is usually less effective.⁶ These processes are also influenced by the factors of psychological attitude and set, such as a pleasant family and work atmosphere, a permanent job, a regular income, real prospects for career advancement, etc.

It is pleasing to note that more and more papers are devoted to the application of theological teaching in social, governmental, and economic-management analysis. Accordingly, the present paper is intended to activate opinions about the religious factor - the teaching of "long life" considering the historical past. "Lord, let me know my end, and what is the measure of my days; let me know how fleeting my life is" (Ps. 38, 5). Life, death and, in general, time are inseparable parts of each other. There is no life without time and no time without life to describe and measure. Birth-death-birth-... seems like a self-regulating and simple process for the society and the individual, but on the other hand, it is the most difficult process. When does life begin and when does it end? Even the most accurate modern calculations are powerless to determine the date of our death (the date when the death comes), because it is known but to God.

In different eras and nations people had different ideas about life, both long-lasting and eternal (the latter is of special importance to the population professing traditional religions), and death. For example, the ancient Egyptian teaching "Book of the Dead", is built entirely on chants, hymns or prayers and curses, which

are directly related to burial and death. However, the main concern for the deceased is focused only on one direction: how the soul "survives" after death. The Tibetan "Bardo Thodol" (bar-do thos-grol) teaches a kind of instructions about the soul of those who are "on the edge of death" to find out about the next life, although it differs significantly from the teachings of other "traditional religions" (e.g. Lama's task is to explain to a dying man that all the horror or beauty he sees is the result of his imagination, etc.)⁷.

Traditional religions teach that death does not end a person's existence with its arrival, but changes the face. The person does not die as a whole, but only the body does. The soul preserves life eternally and because of that a person "resembles God". However, the teachings of the death of the body in Buddhism differ significantly from the teachings of other traditional religions. Therefore, they can not be compared for drawing certain parallels, because "Buddhism denies the existence of the body, which is evidenced by the Buddha's conversation with the disciples". One fact is amazing that according to the teachings of the Buddha, life is not replaced by death, but it was and will be. Accordingly, death is considered to be not only a natural, but also a desired fact, it has several faces and is characterized by cyclicity, etc.⁸

In Islam, death and generally the state of the soul after death ("ahireti - afterlife") is given a great importance. According to the Qur'an, an Islamist should not fear death and should constantly be concerned about the afterlife, which in turn obliges him to be thoughtful of all his actions. In Islam, the understanding of death plays a great role (it is mentioned 160 times in the Qur'an). Every adult Muslim knows that according to the teachings of the Qur'an, he will have to answer for all his actions after death. By doing this, they constantly think about each step they take in life and they believe that life in the visible world is temporary and all men are mortal.⁹

There are various approaches to the issue in ancient philosophy. According to Epicurus, "When we exist, death is not; and when death is present we no longer exist. It is nothing, then, either to the living or to the dead, for with the living it is not and the dead exist no longer." In ancient philosophy, a reasonable understanding of death is given by Socrates, who believes that death is not the denial of life. Death is the separation of the soul from the body... in Plato's concept, at the time of death, the body is freed, the soul reaches the truth, it thinks, understands and feels much better than

4 For more see: https://scienceagainstaging.com/open_longevity_genes

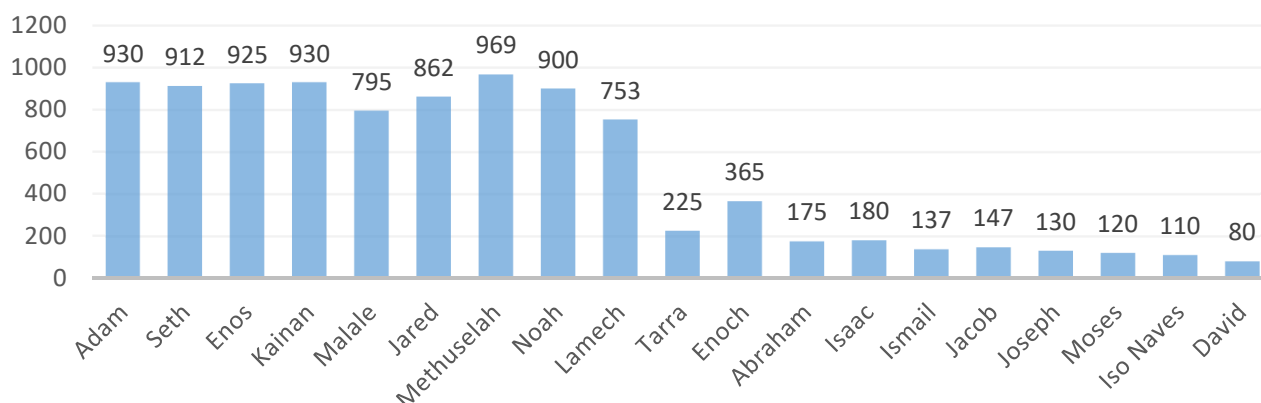
5 For more see: <https://www.ncbi.nlm.nih.gov/>

6 Miller M., Influence of the level of health of the population on the increase in human capital, 2008, p., 60

7 For more see: Oldenberg H., Davids T., Buddha: Sein Leben, seine Lehre, seine Gemeinde, 1885

8 For more see: www.mystique.com, www.antaiji.dogen-zen.de, www.sgi.org and www.buddhanet.net

9 For more see: www.lossofsoul.com, Surah Al-Ankabut, verse 57, Surah Al-Jumu'a, verse 8 and Surah Al-Imran, verse 185



Life expectancy dynamics from the birth of Adam to the 10th century BC. Diagram N5

during the captivity of the body, and according to the Stoics, every day we are led to death and a person must realize that life itself contains death...¹⁰

What a Christian thinks and what attitude he has towards life and death is naturally also interesting to us, since the main law of their life is "the Law of Faith"¹¹, which is a set of moral and spiritual laws and, openly or secretly, manifests itself in the nature of man and society. Its purpose is to show and teach people how to live in mutual love and, as a result, attain eternal bliss/blessing. Deviations from these laws brings exhausting hard work, grief, physical impotence, illnesses, living and wandering in this world for a certain amount of time, and finally physical death¹².

According to the teaching of the Church, "life is the unity and union of the mind, soul and body, and death is not the destruction of the united, but the breaking of their union, because the God preserves all of them even after the break."¹³ "See, I have set before you today death and evil... If you obey the commandments of the LORD your God that I command you today, by keeping his commandments and his statutes and his rules, then you shall live and multiply... But ... if you will not hear ... I declare to you today ... you shall not live long in the land (2 S. Deut. 30, 15-18)¹⁴ and "... we had received

the sentence of death" (2 Cor. 1, 9). As a result, life expectancy begins to decrease from Adam to David, king of Israel, which, against the background of the growth of the "dominion of sin", can be seen regularly from the ages of the patriarchs of the Old Testament.¹⁵ (See Chart N5. The figures are taken from the Old Testament _ The Book of Genesis and their high degree of reliability is often unquestioned.)

Death as an event does not come from God! "God did not make death" (Wisdom 1:13), but "our desires make us sin, and when sin is finished with us, it leaves us dead" (James 1:15) and "therefore, just as sin entered the world through one man, and death through sin, in this way death spread to all men, because all sinned" (Rom. 5,12). Death is the full price of our sins, the wages ... It appeared in our own life because of us, as by inheriting sins we lost our eternal life on earth!¹⁶

As for the length of time, according to which life expectancy is measured, i.e. age, it biblically begins with the counting of days and nights.¹⁷, the unity of which makes one year (in the Bible there are also places where the content of "day" includes both a specific moment or measure of time, as well as a certain duration and period¹⁸).

"Who is the man that shall live, and not see death"

¹⁰ For more see: www.sibrdzne.ge

¹¹ "The Law of Faith" is compiled by the resolutions of the world or local congresses, the laws of the apostles and Church Fathers, which is mainly based on the teachings of the book that carries the most wisdom in the history of mankind - the Bible.

¹² Epistle of the Ecumenical Patriarchs, "Theological Collection", 1988, No. 3

¹³ Virtue, 2010, part 1, p., 30

¹⁴ St. Moses taught in the name of the Lord not only the Jews of that time, but all mankind for centuries

¹⁵ According to the teachings of the Church, the life expectancy of biblical heroes was also shortened due to sinful life, which will be reduced to 70-80 years (source: www.omolenko.com). This can not be found in other religious books. The coming of age of Abraham and the biblical heroes of the later period is not surprising for great medical scientists in the 20th century, such as Ukrainians - I. Mechnikov and A. Bogomolets and German K. Hufeland (source: Studies on human nature. Experience of Optimistic Philosophy, 1903; Bogomolets A., Life extension, 1940 and <https://archive.org/details/hufelandsartofpr00huferich/page/n5/mode/2up>).

¹⁶ Cf. Phil. 1, 21

¹⁷ "And God saw that the light was good. And God separated the light from the darkness. 5 God called the light Day, and the darkness he called Night. And there was evening and there was morning, the first day. (Gen. 1, 4-5)

¹⁸ Equivalence with the length of the day and night of the modern year must be assumed from the 4th day of the creation of the universe. According to the Bible, God called the day the period (duration) of the rule of light, and the darkness - the

(Ps. 88, 49). As the Lord teaches us: "I am the God of Abraham, the God of Isaac, and the God of Jacob" ? He is not the God of the dead but of the living." (Mt. 22, 32). According to the teachings of St. John Chrysostom: always expect death, but never fear it, because both are signs of wisdom¹⁹... as if a substance is produced in the body, for which we should call it "anti-death", which should expel all the thoughts and memories of death from consciousness.²⁰

Naturally, every person dreams of a long life, and this can be achieved through faith – "I have been young, and

now am old; and I have not seen the just forsaken, nor his seed seeking bread." (Ps. 36, 25). Considering the strict reality, the expectation of the effect in achieving the goal of improving the real situation will be obtained if public and individual efforts to observe the laws of religious and Christian morality and faith are made in general. Such a way of life will significantly weaken the influence of factors affecting life expectancy (avoidance of harmful habits, etc.), equip people with objective and necessary knowledge of the real world guaranteeing practical results.

night, and this happened in order to ensure and maintain the existence of the life of man, the animal world and, in general, every creature (Cf. Ps. 73, 16; 103, 20 -24; Jer. 33, 20-25, Gen. 6, 3; Eccl. 3, 2; Ps. 38, 5-6; 88, 46; 89, 4; 9-10; Mt. 13, 1; Mark 1, 9, etc.). Also, see: Gunia B., Julian Calendar, Vol., 1998; St. Seraphim Rose, The Book of Creation (Genesis, Creation and Early Man of the Old Testament), Tb. 2004;

19 For more see: www.blagobor.ua

20 Archimandrite Raphael (Karenin), "Why is the Lord calling us?!" Tb., 2006

LITERATURE

1. Miller M., Influence of the level of health of the population on the increase in human capital, 2008, p., 60
2. Oldenberg H., Davids T., Buddha: Sein Leben, seine Lehre, seine Gemeinde, 1885
3. The Law of Faith» is compiled by the resolutions of the world or local congresses, the laws of the apostles and Church Fathers, which is mainly based on the teachings of the book that carries the most wisdom in the history of mankind - the Bible.
4. Epistle of the Ecumenical Patriarchs, «Theological Collection», 1988, No. 3
5. Мечников И.. Этюды о природе человека. Опыт оптимистической философии, 1903; Богомолец А., Продление жизни, 1940.
6. <https://archive.org/details/hufelandsartofpr00huferich/page/n5/mode/2up>
7. <https://www.geostat.ge/ka/modules/categories/316/mosakhleoba-da-demografia/28.04.2023/>
8. https://scienceagainstaging.com/open_longevity_genes
9. <https://www.ncbi.nlm.nih.gov/>
10. www.sibrdzne.ge
11. www.blagobor.ua