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Contents

Executive Summary

The newly independent states formed through the collapse of the Soviet Union were not prepared for what was coming: the transition from planned to a market economy and the universal, standardized structural adjustments developed by the international financial institutions in the 1980s. These prescriptions developed based on a neoliberal economic doctrine known as the "Washington Consensus." In the post-Soviet space, these reforms were called „shock therapy." Their goal was rapid and comprehensive privatization, price and trade liberalization, and ensuring macroeconomic stability.

The expectations of international financial organizations and foreign advisers or reformers that the short-term stagnation accompanying shock therapy would be followed by rapid and continuous growth have not been fulfilled. The GDP per capita in Georgia and similar post-Soviet countries fell by an average of 40% and is still 15% below the 1989 level. The civil strife and armed territorial conflicts that occurred in the early 90s aggravated the situation even more. The country returned to more or less stability only in 1995. In 1995, the first state budget was approved via a constitutional amendment.

Healthcare also faced collapse. The disruption of trade relations between the former Soviet republics led to a significant reduction in the provision of basic medical supplies. In addition, infrastructure and technical equipment deteriorated. If in 1990, 130 dollars were spent on healthcare per person, in 1994 this figure was 1 dollar. Almost 90% of healthcare costs were covered by citizens out of pocket.

Since the beginning of the 90s, healthcare reform began in Georgia. The goal of the reform was to move from the Soviet centralized planning model of healthcare (referred to as the "Semashko System" after the first Soviet Commissar of Public Health, Nikolai Semashko) to a „modern" neoliberal system. Cost optimization and improvements in infrastructure and healthcare quality were supposed to occur through privatization, transition to market principles, competition, and bed reduction. The state was supposed to retain the function of defining policy and regulating the entire health sector.

The reforms in question can be divided into three stages:

1. Toying with neoliberalism: 1994 – 2003

- Decentralization of healthcare at the administrative and regional level;
- The transition from general budget financing to social insurance system;
- Creation of a state insurance company;
- Reduction of the list of medical interventions financed by the state;

- The transition from mandatory services to discretionary service;
- Gradual privatization of state-owned healthcare institutions;
- Complete privatization of dental clinics and pharmacies;
- Implementation of regulations and standards compatible with market principles.

2. Militant neoliberalism: 2004-2012

- Introduction of a flat tax and the elimination of social fees;
- Abolition of the state insurance company;
- Provision of health insurance policies for targeted social groups (means-tested) from the budget through private insurance companies;
- Comprehensive privatization of healthcare institutions, hospitals, and polyclinics;
- A radical reduction in the number of medical institutions and hospital beds;
- Vertical integration of private insurance companies, hospitals, and pharmaceutical companies;
- Reduction of regulations

3. Soft neoliberalism: 2012-present

- Skyrocketing state healthcare expenses;
- Introduction of universal healthcare financing from the budget with gradual/universal coverage of socially vulnerable and low-income groups:
- Fixed medical service prices are financed from the budget when the patient pays the difference between the price offered by the clinic and the price set by the public health system.
- Targeted funding of healthcare (via screen testing) based on social and income-based needs
- Increase in the number of beds and medical institutions.

Purpose of research

This study does not aim to compare the healthcare of Georgia with other models from around the world. This study is a work of political-economic research. Since day one of gaining independence, Georgian healthcare has been characterized by unyielding and totalizing commercialization at all levels. Therefore, the purpose of our research is to determine the social consequences of neoliberal reforms, privatization, and commercialization of healthcare in Georgia. Who gained from commercialization? Was this type of development inevitable? What was driving these processes exactly - necessity or ideology? What role did international organizations play in this process? These are the questions this study will try to answer.

Methodology

The following form the basis of the research:

- Literature review, legislative acts, as well as reports and recommendations by international institutions;
- Interviews with experts and members of the Georgian government, who, at one time or another made decisions regarding reforms;
- Quantitative data analysis.

Using the time series analysis method, we have analyzed data from the beginning of the privatization of healthcare and the introduction of market mechanisms in Georgia immediately after independence. For this purpose, individual aspects of the functioning of healthcare before 1990 and the current year are compared, taking into account the main health indicators of the World Health Organization.

Overview of results

The analysis of the indicators discussed above reveals that the population saw more losses than benefits due to the aforementioned transformation of healthcare, which was expressed in some of the following ways:

- The average death rate from 8 per thousand to 12 per thousand or an increase of 1.5 times
- A slight increase in life expectancy: compared to 1988, the rate in 2020 has increased by only 1.2 years from 72.2 in 1988 to 73.4 in 2020. Even considering that this is the highest number in recent years (74.1 in 2018) compared to 1988, there is an increase.
- An increase in morbidity by 2.3 times;
- Endlessly increasing healthcare costs.

As a result of the transformation that took place during the last 30 years, the majority of health workers also did not gain. Working conditions for healthcare workers worsened and real incomes decreased.

However, the state was freed from its responsibility to manage a large quantity of health-related assets that were expensive to operate.

If we consider the rising healthcare costs, pharmaceutical companies and private clinic owners are probably the only groups that have benefited from the transformation of the last 30 years. Although the trends of private capital inflow and the introduction of market mechanisms are characteristic of developed and industrialized countries' healthcare systems, the privatization of the healthcare sector of the scale and quality of Georgia is unprecedented. Interviews, recommendations, and reports of international financial organizations show that international financial organizations have contributed to the implementation of these reforms.

In the first period, it can be said that the reforms made due to a lack of state funds were supported by the prevailing ideology. A more ideological component prevailed in the second stage of healthcare reform if we consider the characteristics of the general reforms. In the third stage, despite the significant increase in budget funding and several changes, the system remained faithful to market principles.

Recommendations

Access to Medicine

According to studies, the price of medicines in Georgia is expensive compared to other countries, and 69% of out-of-pocket medical expenses of the population are for medicines, while only 2% are covered by state programs. The reason is the failure of the entire system, not only retailer's/wholesalers' trade and vertical integration of health care providers, but the commercial interests between pharmacies and doctors or the lack of popularity of generic drugs. The wholesale purchase of medicines is not driven by systematic and clinical research, but by the interest in obtaining commercial benefits arising from the informational asymmetry characteristic of the healthcare sector.

In addition, due to the scale of the economy, the fragmentation of purchasing organizations further increases the wholesale purchase price. The underdeveloped primary health care sector, taking into account the commercial interest of doctors and private hospitals, makes the patient hostage to expensive medicines. Therefore, neither the promotion of generic medications nor the introduction of an external reference pricing system can eliminate the problem. Leveling of informational asymmetry and the reduction of prices is possible only based on evidence-based, consolidated procurement of medicines by the state and establishment of prices in the retail market. As a result, the wholesale purchase price will decrease, and wholesale and retail trade will naturally be separated. Retail shops will have a marginal profit determined for their activities. As a result, optimal integration of medicines into state programs will take place.

Healthcare financing

Diverse and numerous purchasing agencies and their subsequent fragmentation define the current healthcare system in Georgia. Funding is scattered in the central budget, local budgets, and private insurance companies. Out-of-pocket payments by patients represent approximately 50% of healthcare financing. Given the number of provider clinics and their fragmentation, this environment prevents proper communication between the buyer and the service provider and impedes the consolidation of information about the patient's condition as well as the proper provision of continuous treatment. In addition, it weakens the state's ability to develop and fully implement health policy. At the same time, it creates additional bureaucratic barriers for patients and imposes additional costs on them. Therefore, it would be most appropriate to leave the authority to purchase additional medical services to insur-

ance companies while concentrating the purchase of essential medical services entirely from the central budget.

Due to several factors, health insurance as a model did not work in Georgia. Leaving aside the historical and cultural factors, the high rate of unemployment and the large share of the informal sector in the economy are obstacles to the full implementation of healthcare as a system. From the point of view of social justice, it would be beneficial to introduce a progressive income tax, which would fairly distribute the costs incurred by society on healthcare.

Optimization of Costs

Precise healthcare budgeting is the main way to optimize costs. Since the financial situation of the population is difficult, and the need for out-of-pocket payments is high, we cannot know exactly how many beds or infrastructure is needed. This information cannot be determined by an automatic or reductive comparison with the same indicators of other countries, but rather by rigorous research. To optimize budget expenditures and reduce out-of-pocket payments, it would be useful to implement the diagnostic-related group (DRG) within the framework of general budgeting. The DRG method would not affect those unnecessary and expensive medical interventions undertaken by private clinics, which pursue these to maintain their profit margin. The emphasis, in this case, would be placed not on the cost of medical intervention, but on the number of medical interventions. Within the framework of general budgeting, a defined budget of the hospital would be determined from the beginning between the state and the service provider, taking into account both ongoing and capital costs. Based on a selective contracting arrangement, only those clinics that meet these criteria would be included in the state funding program. To increase motivation in the mentioned model, a system of bonuses related to the performance of the indicators defined by the state can be considered.

Primary Health Care

Primary health care has become a kind of Achilles' heel for the Georgian healthcare system. Here too we face the problem of high fragmentation. Without the elimination of fragmentation, the increase in capital financing and the modernization of equipment and infrastructure of the primary medical institution will not provide the desired result. The function of the primary healthcare system is not only to detect diseases early but to function as a history file of the patient's health condition. In the absence of a unified archive of information, then sharing different information between private or state medical companies from out-patient providers to the hospitals is almost impossible to do. Given the fragmentation of funding sources mentioned above and the chaotic system of contracting providers by the purchaser, it can be assumed that patient information does not fully get transferred from one level to another, which is vital for appropriate and continuous care. Already, due to low-profit margins, private medical companies are less focused on investment and development in primary medicine. Therefore, it would be best for the state to gradually buy out private institutions and introduce a performance-based financing system.

To detect disease early and prevent complications, especially at the workplace, proactive examination and the dispensary system should be rehabilitated.

Working Conditions of Health Workers

The minimum wage should be determined at the sectoral level, and the scope of work of health workers should be regulated. Otherwise, the brain drain of workers will become inevitable.

The aforementioned reforms would minimize the possibility of unnecessary and expensive interventions by private companies, the freed-up funds would increase universal healthcare coverage, and the rate of out-of-pocket payments would decrease. At the same time, the healthcare system would be integrated, the condition and productivity of low- and middle-level health workers would improve, and it would be easier for the state to carry out critical public health policies, such as in an emergency like the pandemic.

1
INTRODUCTION

"Expensive, cheap, free, it was a question of the twentieth degree. Privatization was not a process driven by economic expediency. We just knew that any enterprise sold would be another nail in the coffin of communism." -Anatoly Chubais - Chairman of the State Committee for Property Management of the Russian Federation in 1991-94

These words of Anatoly Chubais clearly express the spirit that led to the ongoing reforms in post-Soviet countries after the collapse of the Soviet Union, including in the health sector. The Covid-19 pandemic has been a test of sorts for national health systems around the world. It shed light on the systemic flaws that characterized the healthcare systems of those countries. Georgia was no exception.

Throughout the history of humankind, caring for health has had a long and evolutionary path. Until the Middle Ages, it was believed that illness was an inherent and individual characteristic of a person. It was understood as the destiny of a person because poverty functioned as a judgment and the poor were sick more often. Later, religious charities began to attend to the needs of the poor more often. After the Industrial Revolution, as capital realized that it needed a healthy workforce for uninterrupted reproduction, it agreed to let the state take responsibility for healthcare, of course, in a meager way. The First World War further accelerated and deepened this process, as countries needed a healthy population to build their armies. This trend was supported by the organized struggle of workers for universal and civil rights (Gaffney, 2017). In 1948, the United Nations Declaration of Human Rights declared health care an inalienable human right. After the Second World War, in the era of the Keynesian consensus, the universal healthcare system was one of the pillars of state policy in Europe. The system was guaranteed by, among other factors, a policy of full employment and strong trade unions. Since the hallmark of the Soviet Union was comprehensive, universal social guarantees, during the Cold War, the confrontation between capitalist and socialist systems increased the pressure on Western systems to increase the state's social responsibility towards its citizens. Additionally, a healthy workforce was critically important to both systems.

The situation in the West has changed since the 1970s. The victory of the neoliberal economic paradigm changed state policy drastically. Due to the orientation of local capital to global markets, the policy of full employment was removed from the agenda. A healthy workforce was no longer considered the main driver of the economy. Creating a capital-friendly environment requires deregulation and tax cuts, which reduce the scope and capacity of the state. Therefore, the gradual commercialization of public goods began, which also affected national health systems (Roger Cooter, 2000).

At first glance, there seem to be only changes due to economic expediency, supported by a specific worldview. According to the neoliberal social paradigm, a person's deteriorating

health is related to personal choices and lifestyle. As a result, the state, despite its role as the ultimate arbiter of social responsibility, is freed from the obligation to care for human health and confers responsibility entirely to the individual (Lawrence King, 2009). With the progress that humanity has made in terms of the evolution of the right to health care, this new belief echoes the conception of health from the Middle Ages. From the point of view of the commercialization of health care, not only did an economic paradigm shift[1] occur but also a worldview shift emerged.

Despite this tendency, the budget or social insurance mechanisms represent the main source of financing healthcare costs[2] in the majority of European and OSCE countries. The backbone of healthcare institutions is state and non-profit clinics (Galt & Taggart, 2020).

The healthcare system of Georgia does not belong either to the Beveridge model in Britain, which envisages general budgetary financing of healthcare, or to the so-called Bismarck model prevalent in Western Europe, which is mainly financed by the principle of solidarity, based on social contributions. It represents a kind of amalgam of different systems. But what sets it apart from other systems in other countries is its unprecedented rate of deregulation and commercialization, where health care is provided by private, profit-driven hospitals, and most of the healthcare costs, except for drugs, are covered by the state. The share of commercial healthcare institutions is 86% of the total number of hospitals, which is about 95% of available beds. In addition, the capacities of the healthcare system are not defined and regulated by the state, which contributes to the excessive demand. This situation makes citizens and the state budget hostage to commercial healthcare institutions. As a result, we get a healthcare system that, accidentally or purposefully, tends not to protect the health, but to produce sick people to ensure the reproduction of a profit-oriented system. The results of this study indicate this fact. Although government spending on healthcare tripled between 2010 and 2019, out-of-pocket costs did not decrease proportionately. The specific share of healthcare expenses in the total expenses of the household is still very high and again varies to amounts around 12%. But most importantly and sadly, morbidity and mortality rates have worsened.

1 Economism: A theory or view that places economic expediency and self-interest as paramount. Economism Definition & Meaning - Merriam-Webster

2 Public funding of health spending | Health at a Glance 2021 : OECD Indicators | OECD iLibrary (oecd-ilibrary.org)

2
PURPOSE OF STUDY

The study does not aim to compare the Georgian healthcare system with the dominant models in the world or to study the clinical characteristics. This research is more political-economic. What has characterized Georgia's healthcare system since independence, at all stages of reform, is an unwavering move towards the commercialization of healthcare. Therefore, the purpose of our research is to determine and analyze the social consequences of privatization and the commercialization of the healthcare system in Georgia. If the first steps taken in this direction can be explained by the budgetary crisis created in the 90s, the question arises, why did the process continue even in the years when the economy became more or less stable? Why did it deepen in 2006-2011, when the then government boasted of unprecedented economic reforms[3] and economic growth, and why did it continue after that, when one of the main goals of the change of government was to review social policy and adapt the healthcare system to the needs of people?[4] The long-gone Soviet Semashko model of healthcare was based on the belief that a person's health is determined more by social, economic, and cultural factors than by his individual choices. Therefore, it meant a more paternalistic, proactive care for human health on the part of the state. Despite the stagnation, this spirit followed the Soviet health system to the end. And the neoliberal model, as we mentioned above, connects the deteriorating health of a person to personal choices and living an incorrect lifestyle, as a result of which the state no longer accepts the responsibility of taking care of the citizen's health, and it entirely falls on the individual. If we agree that the neoliberal economic paradigm was the ideological basis guiding all of the recent state reforms, it is not difficult to see what paved the way for the commercialization of health care, and why health care became a commodity.

Almost all health parameters, according to the results of the study, have deteriorated. Against the background of this circumstance, the question arises: how realistic is it that illness is related to a person's personal choice? And if this is so, why did so many people make and still make wrong personal choices in the post-Soviet world, and especially in Georgia? Who gained from commercialization? Was this type of development inevitable? What was driving these processes - urgent necessity or ideology? What was the role of international organizations in this process? As the debate on the healthcare system is in an active phase, the present study will try to answer these questions. The final part of the research will be devoted to recommendations.

3 https://www.gov.ge/index.php?lang_id=-&sec_id=131&info_id=758

4 Strategic development document „Georgia 2020" Georgia 2020 (napr.gov.ge)

3
METHODOLOGY

The study consists of three components:

- Review of literature, legislative acts and reports, and recommendations of international institutions;
- Interviews with experts and members of the Georgian government, who at one time or another made decisions regarding reforms;
- Quantitative data analysis

Respondents:

Irakli Menagharishvili - Minister of Health of the Georgian SSR from 1986 to 1991. He held the same position from 1992-93

Avtandil Zorbenadze - Minister of Health and Social Security of Georgia in 1995-2001

Aleksandre Kvitashvili - Minister of Labor, Health and Social Protection of Georgia in 2008-10

Zurab Chiaberashvili - Minister of Labor, Health and Social Protection of Georgia (2012)

Amiran Gamkrelidze - Director General of the National Center for Disease Control and Public Health, First Deputy Minister of Health Protection of Georgia in 1997-2001; In 2001-2004, Minister of Health Protection of Georgia

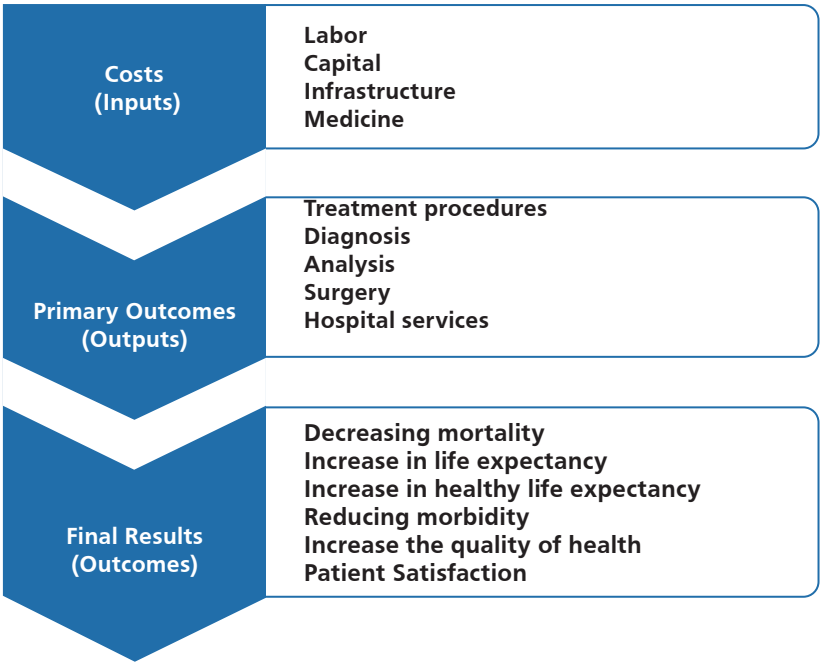
Akaki Zoidze - Health expert; Chairman of the Health Committee of the Parliament of Georgia in 2016-20

Giorgi Gotsadze - Healthcare expert, president of the Curacio Foundation

Ketevan Chkhatarashvili - Independent healthcare expert

Quantitative Data Analysis

A standard approach is used in international practice to evaluate the effectiveness of the healthcare system:



Efficiency is evaluated in two main ways:

1. Evaluation of Technical Efficiency (TE), means achieving maximum output under the conditions of minimum input;

2. Assessment of resource Allocation Efficiency (AE) means optimal distribution under conditions of equality of costs, against the background of which the maximum result will be achieved.

Two main methods are used for evaluation:

A. Data envelopment analysis method

B. Stochastic frontier analysis method

For example, in the work, Health System Efficiency: How to Make Measurement Matter for Policy and Management, the methods and techniques of evaluating the effectiveness of the healthcare system are discussed in detail, although prevention, which was one of the main cornerstones of the healthcare system operating in Georgia until 1990, is only briefly mentioned.

This work is a kind of consolidated document, where the methods and approaches used at different times to evaluate the effectiveness of the healthcare system are collected. Practically all approaches to evaluating the effectiveness of the system consider health care service, and one of the cornerstones of the evaluation is cost-effectiveness.

In our case, the standard methodology for evaluating the effectiveness of healthcare will be of little use since our task is to assess the results of systemic change and not to analyze the development within the already existing system. Before determining the methodology used in this paper, we should consider that our goal is not to directly evaluate the effectiveness of the healthcare system and its tendencies but to describe the social consequences of the transition of the healthcare system to market principles.

In Georgia, as one of the republics of the Soviet Union, the Semashko model functioned until 1990. As we mentioned earlier, as a result, of the transformation of the healthcare system, we got a kind of amalgam of existing healthcare models. Semashko's model and the new system are qualitatively different from each other. In the first case, the state was the only source of both financing and services. The second one prefers market mechanisms. The present study aims to reveal and evaluate the social consequences of the mentioned transformation. For a detailed comparative analysis of the two models, in addition to professional medical education, it is necessary to have access to comprehensive and reliable information databases before 1990 and now. Such information databases are not found in public spaces. It may not exist at all.

To solve the task in front of us, we used time series analysis in which we compared individual aspects of the functioning of healthcare before 1990 and now. The analysis considers time series within the confines of availability since the information, especially about the situation before 1990, is quite limited, those indicators which could be found in the public space are included.

It is necessary to first consider the chronology of qualitative changes in the healthcare system, which is given in the document "Brief Overview of the Healthcare System of Georgia"[5] on the website of the relevant ministry, *Table #1: Main reforms in healthcare.*

1. Until 1991 Semashko model - services were fully financed by the state;
2. 1991-1994 remnant of Semashko model - services were financed by informal out-of-pocket payments;
3. 1995-1996 Compulsory social insurance (3%+1%);
4. 2007-2012 Hospital sector development general plan, full privatization of the hospital sector;
5. 2007-2014 Transfer of state funds to private insurance companies for providing health insurance for target groups (those below the poverty line, teachers, etc.);
6. 2012-2014 State health insurance program for pensioners, children up to 0-5 years old, students, and disabled persons;
7. 2013 Universal Health Program (Phase I and II);

5 https://www.moh.gov.ge/uploads/files/2018/Failebi/06.08.2018.pdf

8. 2015 Hepatitis C Elimination Program;

9. 2017 program of drugs for the treatment of chronic diseases;

10. 2017 Universal Health Program Phase III - Stratification of Services by Income Groups.

The present analysis is also prepared with this chronology in mind.

Our primary task is to compare two completely different healthcare systems. For this, first of all, we selected indicators that were found both before 1990 and after 1990.

It should be noted here that the 90s (especially the first and partly the second half) were characterized by a complete disruption of recordkeeping, and the indicators calculated during this period raise quite a few question marks. Recordkeeping in healthcare started, more or less, after 2000. For the selection of indicators, first of all, we considered the list[6] of 100 main health indicators of the World Health Organization, from which we selected the following indicators for analysis:

1. **Life expectancy at birth.** This is one of the most important indicators, information about which can be found even before 1990. A more informative indicator of healthy life expectancy would be, but this data for the period before 1990 is difficult to find or does not exist. In any case, a similar indicator could not be found in the public records. Life expectancy at birth describes the outcome of the healthcare system, which is very important.

2. **Adult mortality rate between 15 and 60 years of age.** Instead of this indicator, the average mortality rate will be used, which is also very important data and describes the final results of the healthcare system. The result of the system should be a low mortality rate.

3. **TB incidence rate.** Tuberculosis is a very specific disease, and this indicator is one of the important characteristics of the functioning of the system. It is also possible to find data up to 1990; therefore, morbidity rates under two completely different models are comparable.

4. **Cancer incidence, by type of cancer.** For comparative analysis, similar to tuberculosis, cancer incidence rates can be very important. Disaggregation according to types will not be possible, since we could not find such indicators for the period before 1990. However, there is no need for this, because the present analysis is more of a political-economic content than a medical one.

6 https://apps.who.int/iris/bitstream/handle/10665/173589/WHO_HIS_HSI_2015.3_eng.pdf?sequence=1

5. In addition to these two diseases, **the overall morbidity and mortality rates for other diseases** will also be compared.

6. **Service utilization.** This is one of the most important indicators that indicate the frequency of visits to outpatient facilities and polyclinics, both for outpatient treatment and preventive purposes. This parameter is one of the most important distinguishing features of the system operating in Georgia until 1990.

7. **Health worker density and distribution.** This relative indicator indicates the provision of the population with both senior and junior health workers. This data can be found for the period before 1990, and it is one of the most important indicators for comparing periods.

8. **Total current expenditure on health (% of gross domestic product).** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

9. **Current expenditure on health by the general government and compulsory schemes (% of current expenditure on health).** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

10. **Out-of-pocket payment for health (% of current expenditure on health).** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

11. **Total capital expenditure on health (% current + capital expenditure on health).** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

12. **Headcount ratio of catastrophic health expenditure.** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

13. **Headcount ratio of impoverishing health expenditure.** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

14. **Structure and tendencies of spending on health care by the population.** Data before 1990 is very difficult or impossible to obtain. For the analysis, we will use only the data of the period that can be obtained.

The following sources of information are used for the data necessary for this analysis:

1. For the period up to 1990, data from the following publications were used in the library of the National Statistics Service:

   1.1. НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1980 Г. (NATIONAL ECONOMY OF THE GSSR – 1980)
   1.2. НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1983 Г. (NATIONAL ECONOMY OF THE GSSR – 1983)
   1.3. НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 Г. (NATIONAL ECONOMY OF THE GSSR – 1985)
   1.4. ГРУЗИЯ В ЦИФРАХ – 1986 Г. (GEORGIA IN FIGURES – 1986)
   1.5. საქართველო ციფრებში - 1990 წ. (GEORGIA IN FIGURES – 1990)

2. For the calculation of morbidity rates, we used the 1999 publication "Health and Health Protection" of the Medical Statistics and Information Center of the Ministry of Health Protection.[7]

3. Two main sources are used for the analysis of health expenditures:

   3.1. Databases of the World Bank[8], where the budget expenditures for healthcare are located.

   3.2. Household income and expenditure survey databases, which are located on the website of the National Statistics Service.[9]

4. We also used data posted on the website of the World Health Organization.

7 Medical Statistics and Information Center of the Ministry of Health. Tbilisi, M. Tsinamdishvili St. 126. T. Danelia; M. Kereselidze; I. Kocharova; M. Tsintsadze; M. Shakh-Nazarova; S. Shakhbudagiani. No special permission is required for the use and reproduction of published materials. Citation of the source is preferred.

8 https://data.worldbank.org/

9 https://www.geostat.ge/ka/modules/categories/127/monatsemta-bazebi

4
DATA ANALYSIS

INFRASTRUCTURE

A complete comparison of the existing healthcare infrastructure today with that of 30 years ago is quite a difficult task, since the level of technological development today is critically different from that of 30 years ago. In addition, the second, and no less important problem, is the scarcity of information. It should be noted that the scarcity of information does not concern only the period before 1990. Even a complete and orderly information database reflecting the current situation is not available in the public space, which gives us a reason to assume that such a database does not exist at all.

Thus, for the time series analysis, we used the indicators that we could find and which accurately reflect the provision of the population with healthcare system infrastructure. We were able to find indicators for the period before 1990 in the old editions stored in the library of the National Statistics Service, which is stated in the information sources. We have data from 1940, 1965, 1970, 1980-1990 for analysis. The same indicator for 2002-2019 is posted on the website of the National Statistics Service. These indicators are:

1. Number of hospitals and medical centers, i.e. institutional units. The relative index calculated per 100,000 inhabitants is used for the analysis.

2. The number of out-patient clinic/polyclinic institutions, that is, the number of institutional units, and in this case also the relative indicator calculated per 100 thousand inhabitants is used.

3. The number of beds, that is, the number of hospital beds in the hospital sector, and the relative indicator of the number of beds per 10,000 inhabitants is also used here. This indicator accurately reflects the development of the hospital sector.

According to the data found, in 1940 there were an average of 8.7 hospitals and medical centers per 100,000 inhabitants in Georgia. In 1965, this indicator increased to 14.4 units. After that, the indicators of 1970, 1975, and 1980 decreased, and the reason for this was the sharp increase in the country's population from 1965-1980. The number of hospitals and medical centers did not decrease, the population increased.

The indicator was characterized by a tendency to decrease in 1980-1990 as well, but the rate of decrease was much lower than in 1965-1980. The reason for this was the relatively low rate, but constant growth of the population.

In 1990, the Soviet Union and with it, the Semashko model of the healthcare system ended. As of 2002, there were 6.3 hospitals and medical centers per 100,000 inhabitants in Georgia,

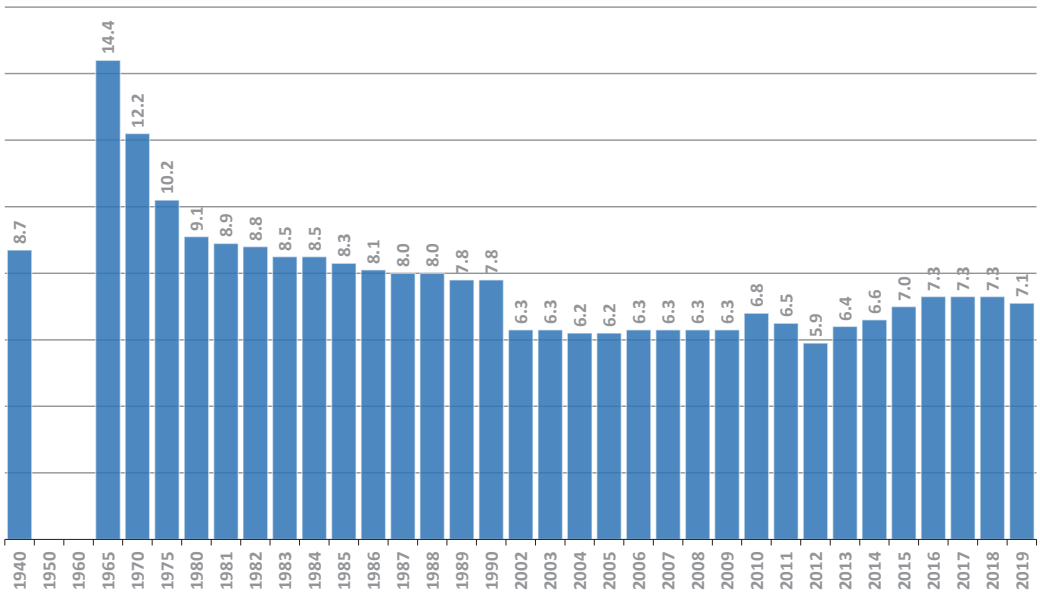
which is about 20% less than the last data of the Soviet period. The rate of decrease is much higher than 20% if we consider that the population of Georgia in 2002, compared to 1990, decreased by 26%. The number of hospitals and medical centers in 1990 would have been 10.7 units per 100,000 inhabitants under the conditions of the population in 2002, that is, the scale of the real relative decrease is more than 40%.

2002-2009 YEARS:

The number of hospitals and medical centers per 100,000 was stable. After a sharp increase in the number in 2010, the rate decreased in 2011-2012 and started to increase again from 2013, which continued until 2016. As of 2019, there were 7.1 hospitals and medical centers per 100,000 inhabitants in Georgia.

In this case, let's leave aside the comparison of hospital capacities and the fact that the guiding principles of current hospitals and medical centers are radically different compared to the period before 1990. Physically, the relative number of administrative units is 9% less than in 1990.

Graph #1: Hospitals and Medical Centers (per 100,00)



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 Г., pp.252; 1986-1990 data – Georgia in Figures 1990, p. 71; 2002-2019 data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

The number of outpatient clinics-polyclinic institutions per 100,000 inhabitants was 31.5 units in 1965, and this figure showed a decreasing trend until 1980, which was due to the increase in the population.

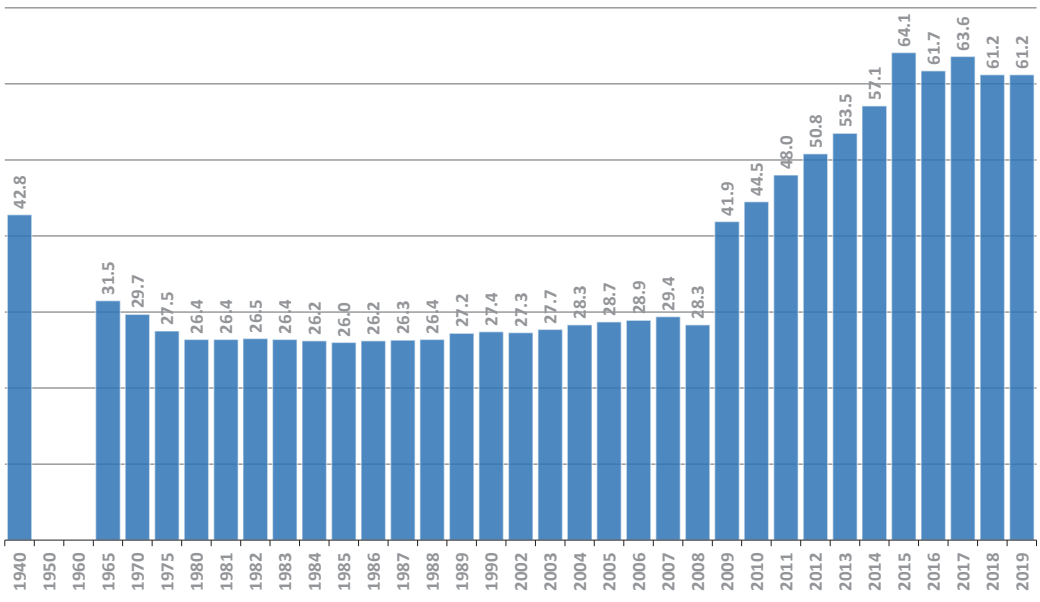
Between 1981 and 1990, the figure was stable, and this stability was most likely maintained in the missing period of 1991-2001 in the chart below since the data for 2002 is the same as for 1990, however, it should be noted that the 2002 figure is calculated under the conditions of 26% reduction of population.

From 2002-2009, the number of outpatient clinics/polyclinic institutions per 100,000 practically did not change. Small fluctuations of the indicator are due to changes in the number of the population.

From 2009, a sharp increase in the indicator begins, which continues until 2015 and reaches its maximum value, 64.1 out-patient clinic/polyclinic institutions per 100,000 inhabitants. After that, in 2016-2019, the indicator is not stable, although it does not go beyond the range of 61-64.

The reason for the sharp increase in 2009-2015 is the complete privatization of the healthcare sector starting in 2007, and the sharp increase in the number of institutions does not necessarily mean an increase in the total capacity of the institutions. Most likely, such an increase in the number indicator is since, after the privatization of one old polyclinic, several independent outpatient-polyclinic institutions were created in the same space, which increased the number indicator, although the total capacity of these institutions did not change in the direction of growth, while a change in the direction of decrease is quite possible.

Graph #2: Outpacient clinics / polyclinics (health facilities) (per 100,00)



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 г., pp.252; 1986-1990 data – Georgia in Figures 1990, p. 71; 2002-2019 data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

One of the important indicators of medical infrastructure is the number of beds. According to the retrieved data, in 1940, there were 36.8 hospital beds per 10,000 inhabitants in Georgia. This indicator increased to 82.4 in 1960. From 1960-1980, the rate was increasing steadily and in 1980 it reached 107.3 beds per 10,000 people. After that, from 1980-1990, the rate was stable and was characterized by a weak growth trend. In 1990, the number of hospital beds per 10,000 people reached a historical maximum of 110.0 beds per 10,000 people. In 2002, compared to 1990, the number of hospital beds per 10,000 people decreased by 2.4 times and reached 45.8. From 2002-2012, the relative rate of the number of beds continued to decrease and reached the historical minimum (30.3 hospital beds per 10 thousand inhabitants) 2012. Since 2013, the rate has started to increase, and in 2019 there were already 46.9 beds per 10,000 inhabitants, which is the historical maximum of 2002-2019, although it is 57% lower than the similar rate of 1990.

This was related to the mechanical description of the time series, but behind these indicators, there are significant systemic changes. It's great that the relative number of hospital beds is increasing, but hospital beds in 2019 are qualitatively different from hospital beds in 1990. The hospital beds of 2019 serve to make a profit while treating the sick, which was not the goal of hospital beds in 1990.

In addition, it is important to answer the question: is this number of beds enough? To answer this question, first of all, it is necessary to answer the question of what meaning we put in the concept of a hospital bed: is it an infrastructure where a sick citizen should be treated or is it a source of income?

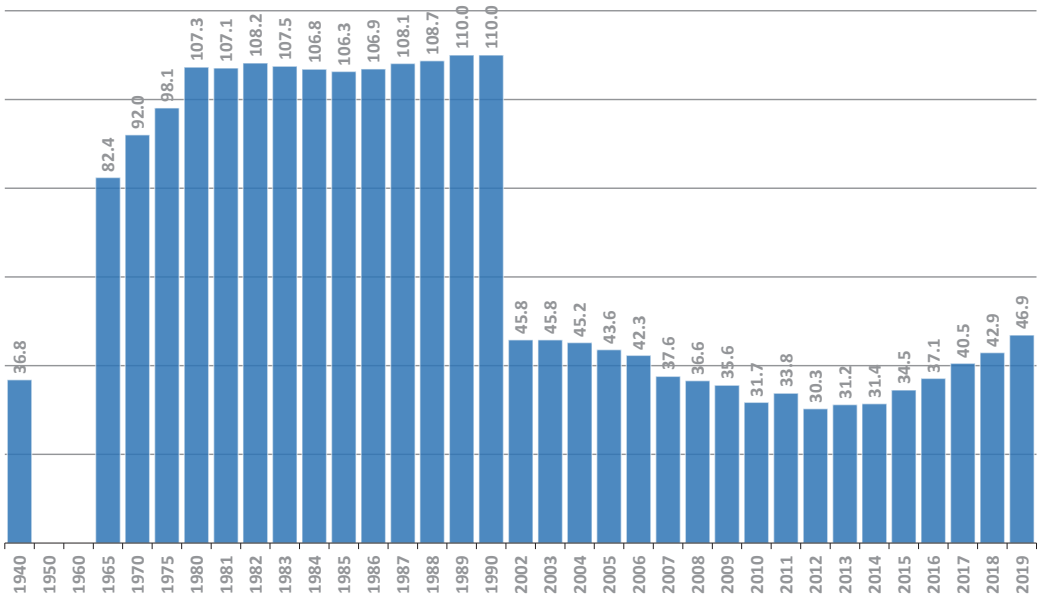
If this is a source of income, then we have to consider that each added bed requires additional staff and additional infrastructure maintenance costs. And if the goal is revenue, then business takes into consideration the population's ability to pay. Thus, in such a case, determining the optimal number of hospital beds is a relatively simple task, but with one important drawback - the health of citizens does not participate in this process in any way. Under the existing healthcare system, the increase in beds is primarily due to the increase in payable demand.

If the purpose of a hospital bed is to treat a sick citizen, then the optimal allocation of beds according to the profile and constant readiness for emergencies are more important than cost efficiency. The coronavirus pandemic showed the weakness of the healthcare system in Georgia today in dealing with unexpected situations. When the number of hospital beds was not enough for the increased number of sick people. It should also be noted here that the spread of the coronavirus, called a pandemic, is quite far from the actual scale of the epidemic, and even more so. The maximum number of active cases - 30,944 cases - was recorded on December 14, 2020, which is 0.8% of the total population. According to the classical definition, a real epidemic means the simultaneous illness of at least 5% of the population, i.e. 186 thousand people as of 2020. The existing healthcare could not withstand such a load. It could not withstand even a load close to the epidemic form with a loose criterion. According to the loose criterion, the combined morbidity of at least 1% of the population is considered epidemic conditions, which means 37 thousand cases at the same time as of 2020. It should be noted that in this situation, Georgia was not among the worst, and most likely, this is due to the historical experience of the model operating until 1990. This conclusion is further

supported by the fact that, according to https://www.worldometers.info/coronavirus/data, one of the best indicators found was in the former Soviet republics and Eastern European countries, where the Semashko model of healthcare was operating until 1990.

Finding information about the optimal number of beds in the healthcare system turned out to be an unsolvable task. However, based on the retrieved data, we can say that 110 beds per 10,000 inhabitants are optimal since this standard was maintained in Georgia in the 1980s and 1990s when the construction of additional infrastructure was not a problem.

Graph #3: Hospital beds (per 100,00)



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 г., pp.252; 1986-1990 data – Georgia in Figures 1990, p. 71; 2002-2019 data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

From the time series analysis of the physical infrastructure indicators, we can conclude that the infrastructure of healthcare developed intensively before 1990. In the conditions of constant population growth, the indicator of the number of hospitals and medical centers was decreasing due to population growth, but the indicator of the number of beds was increasing sharply, which illustrates the increase in the capacities of hospitals and medical centers. Thus, as of 1990, the optimal indicator of the number of hospital beds had already been reached, and healthcare facilities were geographically evenly distributed.

In the 90s, the healthcare system collapsed completely. The situation was more or less regulated at the end of the 90s, although the post-crisis system is radically different from the pre-crisis system. Naturally, the systemic differences between the end of the crisis and before the crisis manifest in the infrastructure as well.

As of 2019, the number of hospital beds is 43% of the 1990 level. This indicator is growing and, other things being equal, it will reach the level of 1990 in 2045. But even if it happens and there are 110 beds per 10,000 inhabitants in 2045, what does this mean? 2.5 times better access to healthcare and a healthy population? This would mean 2.5 times more profit for the healthcare "provider" companies. The difference is fundamental and it cannot be described correctly only by the quantitative indicators of the infrastructure.

HEALTH WORKERS

For the health workers in the healthcare system, it is important to divide them according to specialization, but unfortunately, such detailed information is not available in the public databases either before 1990 or after 1990. Therefore, we limited ourselves to generally accepted indicators:

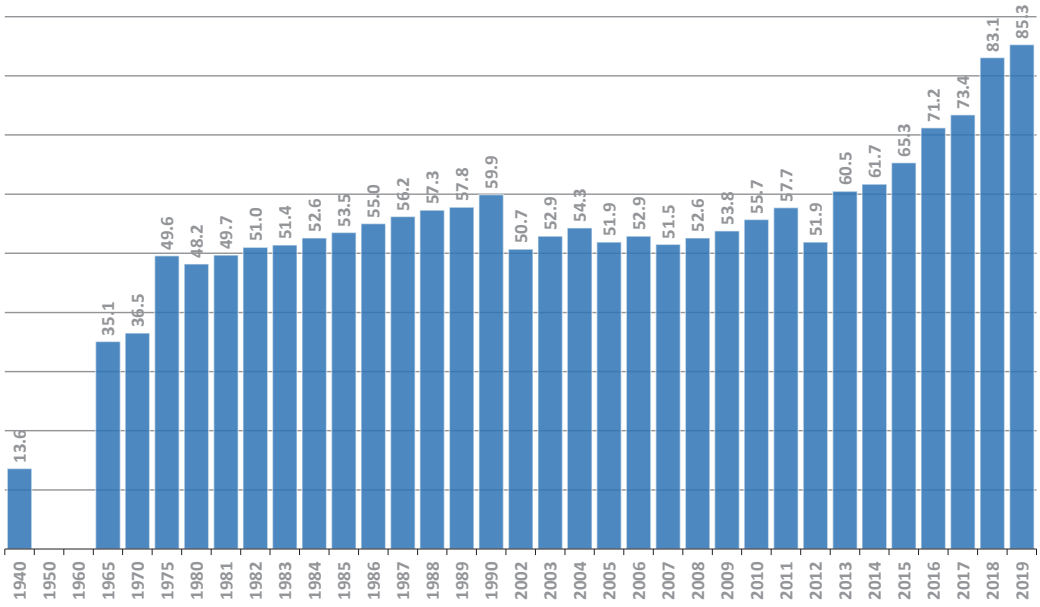
1. The number of doctors per 10,000 inhabitants.

2. The number of nurses and midwifery per 10,000 inhabitants.

3. The total number of health workers per 10,000 inhabitants.

According to the retrieved data, in 1940, there were an average of 13.6 doctors per 10,000 inhabitants in Georgia. In 1965, this indicator was already at 35.1 points. From 1970 to 1975, the rate of the number of doctors per 10,000 inhabitants increased dramatically. From 1980-1990, the number of doctors per 10,000 inhabitants was increasing. In 2020, compared to 1990, the relative number of doctors decreased substantially. From 2002-2011, the indicator of the number of doctors per 10,000 inhabitants had a weak growth trend. After a sharp decrease from 2011 to 2012, the relative indicator of the number of doctors showed a pronounced growth trend, and already in 2013 it slightly exceeded the level of 1990, and by 2019 it had already reached 85.3 points, which is 42% higher than the indicator of 1990.
The described trend, at first glance, is very positive, but on the other hand, the question is how much and for what purpose a large number of doctors is useful: does it serve to generate profits for healthcare "service" providers, or will we have a healthier population with more doctors?

Graph #4: Doctors (per 100,00)



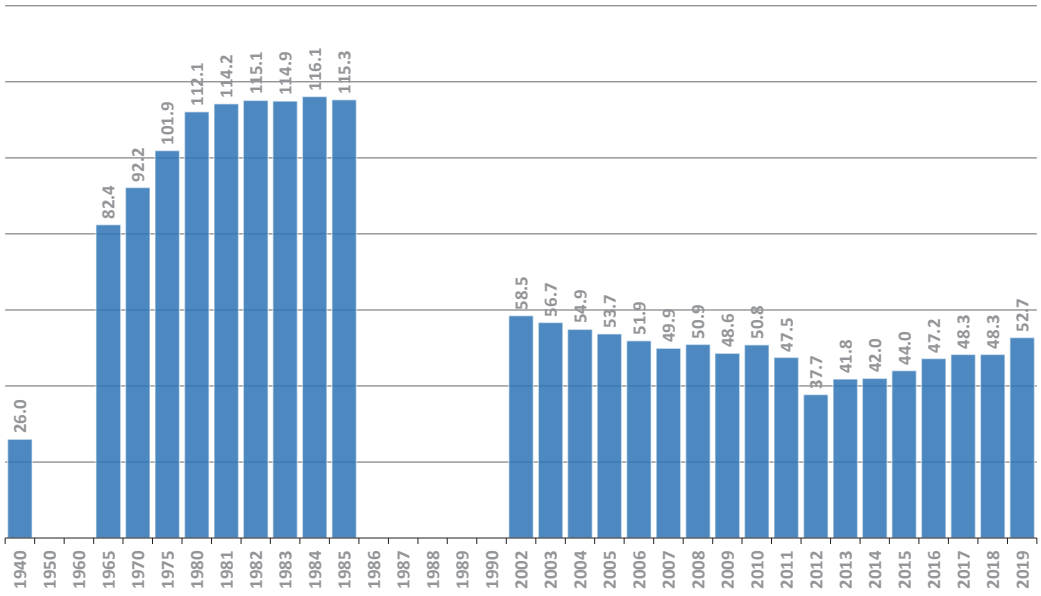
Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 Г., pp.252; 1986-1990 data – Georgia in Figures 1990, p. 71; 2002-2019 data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

Along with the number of doctors, the number of average health workers (nurses, laboratory assistants, and similar types of workers) is also an important indicator. According to the data from 1940, there was 26 average qualified health workers per 10,000 inhabitants. In 1965, this indicator increased to 82.4, and after that, until 1980, it had a marked growth trend. From 1980-1985, the rate was already stable at about 115 nurses and other health workers of average qualification per 10,000 inhabitants. In 2002, compared to 1985, the average number of health workers decreased by two times. From 2002-2012, the rate was again characterized by a decreasing trend.[10] Since 2013, the rate has been increasing. As of 2019, there was 52.7 average qualified health workers per 10,000 inhabitants in Georgia.

We could not find information on the optimal indicator of the number of nurses, as well as other information, but the fact that as of 2019 the ratio of doctors (85.3) is 1.6 times higher than the ratio of nurses (52.7) is already a thought-provoking circumstance. Although the present analysis does not aim to provide a professional analysis of the medical field, such a proportion is anomalous from a political-economic point of view.

10 According to the data published on the website of the National Statistics, in 2003 the number of nurses per 10,000 inhabitants was more than 90, which is clearly out of bounds since in 2004 the indicator returned to the general trend. It is most likely due to a technical error. Because of this, the published figure for 2003 was replaced by the average value of the figures for 2002 and 2004

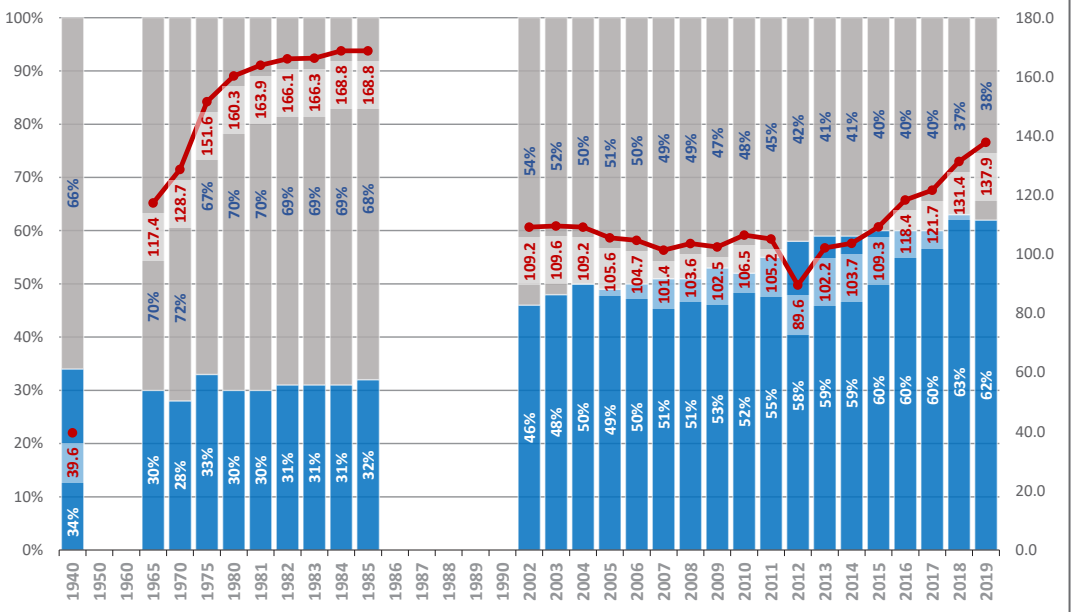
Graph #5: Nursing and Midwifery personnel (per 100,00)



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 Г., pp.252; 1986-1990 data – Georgia in Figures 1990, p. 71; 2002-2019 data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

The indicator of the ratio of health workers of any qualification may not be so informative, but the proportion of the number of doctors and nurses is more important here. Before 1990, there were 2.2-2.3 nurses for every doctor, and accordingly, 30% of the medical staff were doctors, and 70% were nurses and other specialists with secondary qualifications. That this proportion is not accidental is confirmed by the fact that even in the conditions of a sharp increase in the ratio of health workers, the proportion is maintained. The ratio of 30:70 is unchanged in 1940, 1965, 1970, and 1975, and the following years as well. And the proportion is radically different from 2002-2019. In particular, the tendency show that the share of doctors is steadily increasing and the share of staff with mid-level qualifications is decreasing. Although the purpose of this analysis is not to research the medical details of healthcare, the 60:40 proportion of doctors to others in medical staff does not seem normal.

Graph #6: Health Workers (per 100,00)



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 Г., pp.252; 1986-1990 data – Georgia in Figures 1990, p. 71; 2002-2019 data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

In general, from the analysis of the time series of health workers in the healthcare system, we can conclude that after 1990, the situation in the healthcare system of Georgia has radically changed for the worse, which is clear by the following circumstances:

As of 2019, there are an average of 0.6 nurses per doctor, compared to an average of 2.2 nurses per doctor before 1990. Thus, as of 2019, the number of nurses should be increased at least 3.6 times to restore the optimal proportion of medical staff with higher and mid-level qualifications.

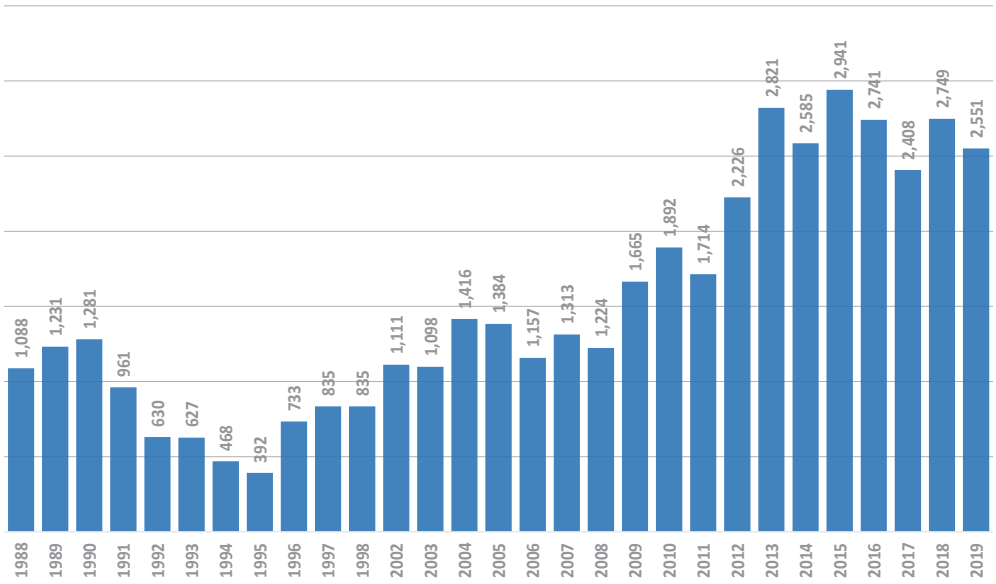
The sharp increase in the number of doctors indicates the completely asynchronous work of the education and healthcare systems. Another sure sign of complete disunity is the inverse relationship trend between doctors and nurses. The reason is very simple: the education system also works on market principles: doctor diplomas are in demand in society, and the education system supplies the appropriate products to the "market." However, despite the fact that the training of doctors alone does not ensure the full functioning of the healthcare system, there is no market demand for a nursing degree. Ultimately, the entire population loses out.

MORBIDITY

One of the important characteristics of the healthcare system is the morbidity rate of the population. According to the retrieved data, the morbidity rate of infectious and parasitic diseases in 2017-2019 has increased by an average of 2.14 times per year compared to 1988-1990. The low incidence rate between 1992 and 1998 is more a result of the quality and effectiveness of record-keeping than of the population's health.

From the retrieved data, the comparison with the years 1988-1990 is important, since this period was the last three years of the proper functioning of the Semashko model when the recording and reporting system worked properly.

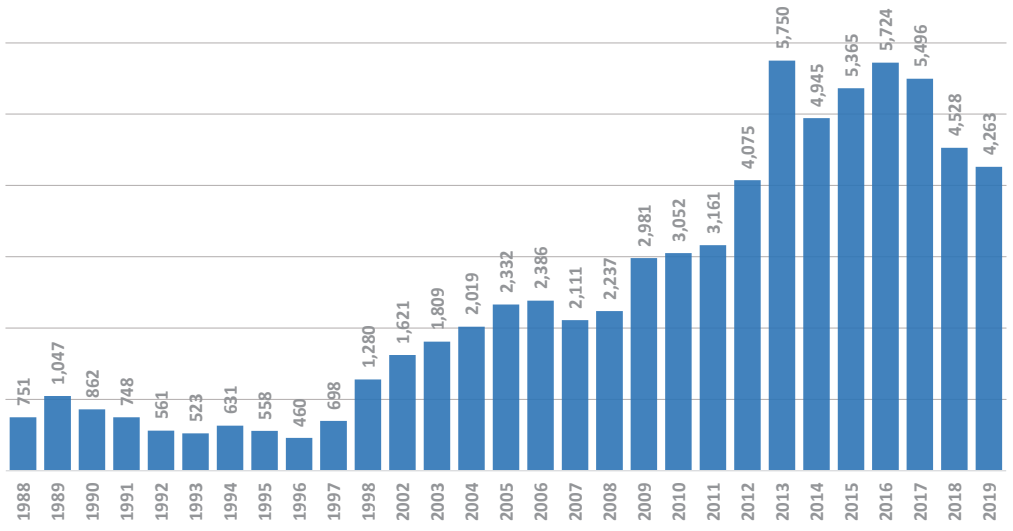
Graph #7: Infectious and parasitic diseases (per 100,00)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

In 2017-2019, the morbidity rate caused by circulatory system diseases, and those infecting the blood, and blood-forming organs increased by 5.37 times per year compared to 1988-1990. The low incidence rate between 1992 and 1998 is more a result of problems with keeping records than of the population's health.

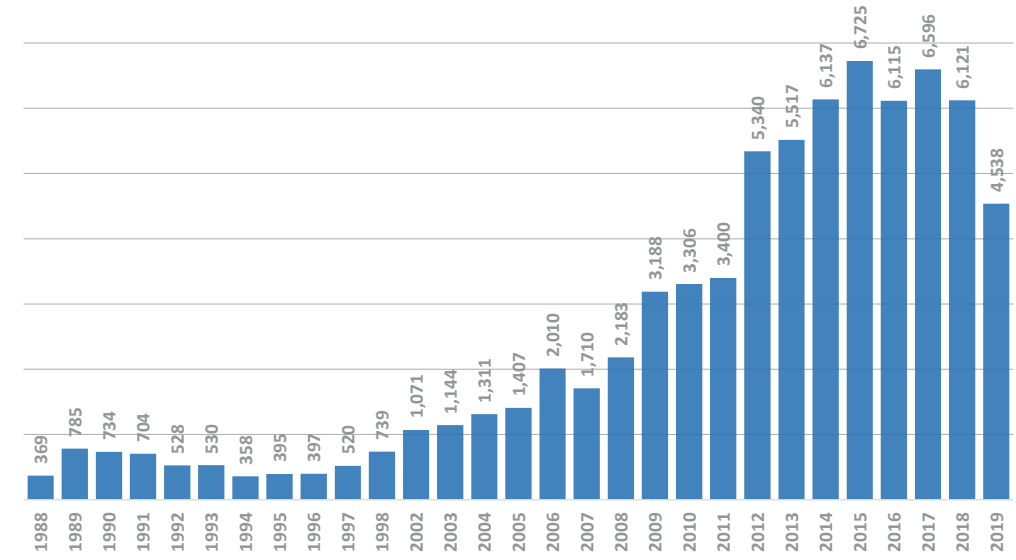
Graph #8: Circulatory system, diseases of the blood, blood forming organs (per 100,00)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

In 2017-2019, the morbidity rate caused by diseases of the nervous system and sensory organs increased by an average of 9.14 times compared to 1988-1990. The low incidence rate between 1992 and 1998 is more a result of problems with record-keeping than of the population's health.

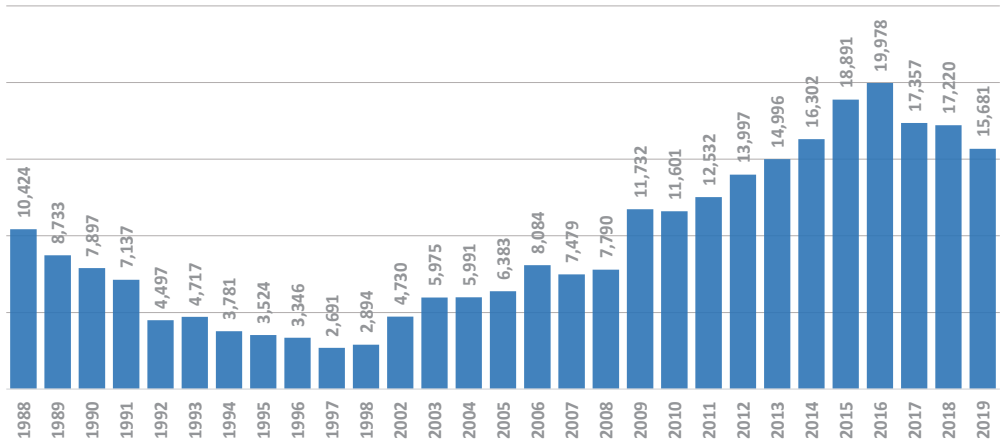
Graph #9: Diseases of nervous system and sense organs (Per 100,000)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

The morbidity rate caused by respiratory diseases in 2017-2019 has increased by 1.86 times on average compared to 1988-1990. The low incidence rate between 1992 and 1998 is more a result of problems with keeping records than of the population's health.

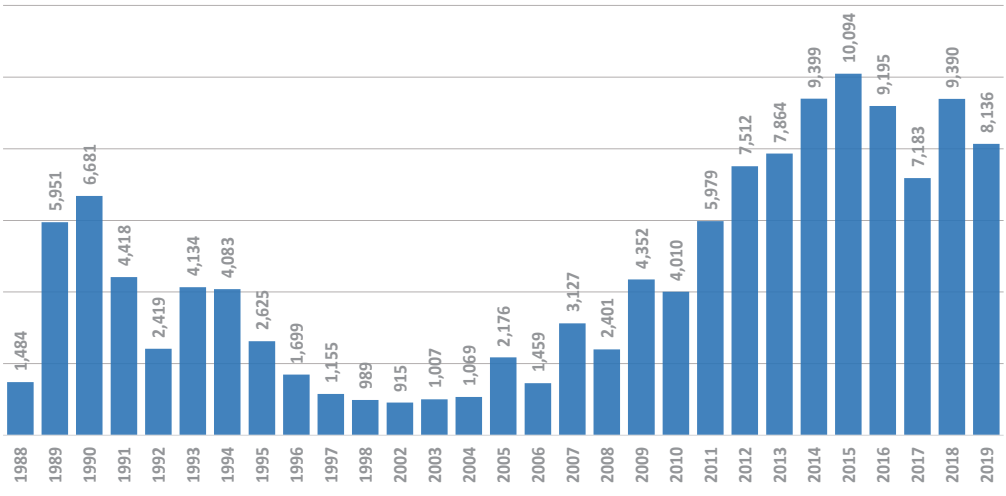
Graph #10: Diseases of the respiratory system (per 100, 000)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

In 2017-2019, the morbidity rate of diseases of the digestive system increased by 1.75 times compared to 1988-1990. The low incidence rate between 1992 and 1998 is more a result of problems with keeping records than of the population's health.

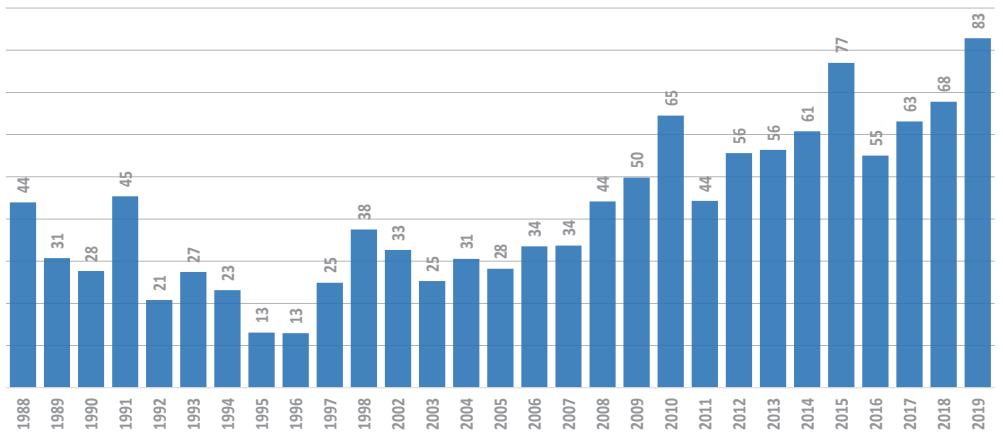
Graph #11: Diseases of the digestive system (per 100, 000)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

The incidence rate of congenital anomalies in 2017-2019 has increased by an average of 2.09 times compared to 1988-1990.

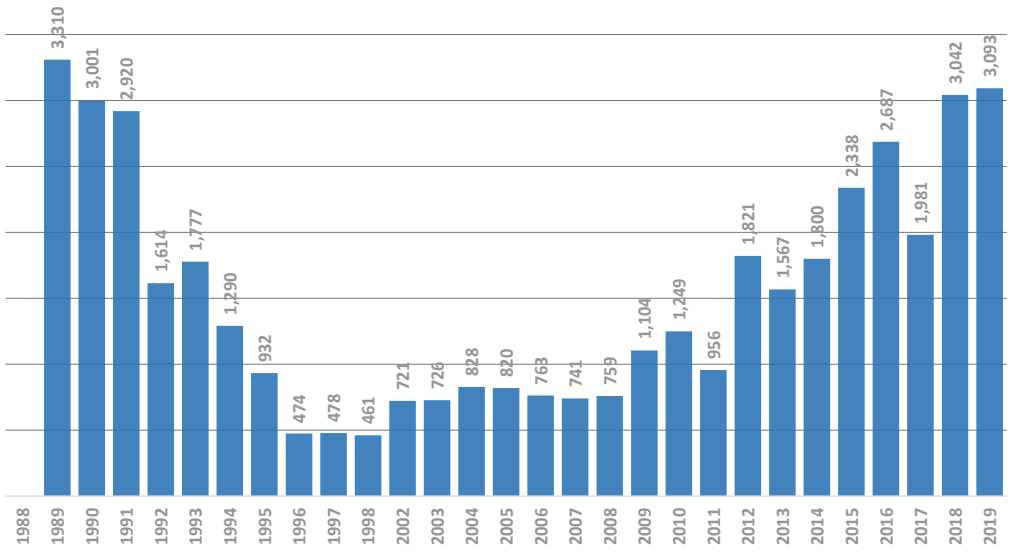
Graph #12: Congenital anomalies (per 100,00)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

External causes of injury and poisoning are the only indicators that have decreased by 14% in 2017-2019 compared to 1988-1990. The main reason for this decrease is probably that if the injury is not serious, the population refrains from going to the doctor because there is a common understanding that doctor visits or hospital visits require out-of-pocket costs.

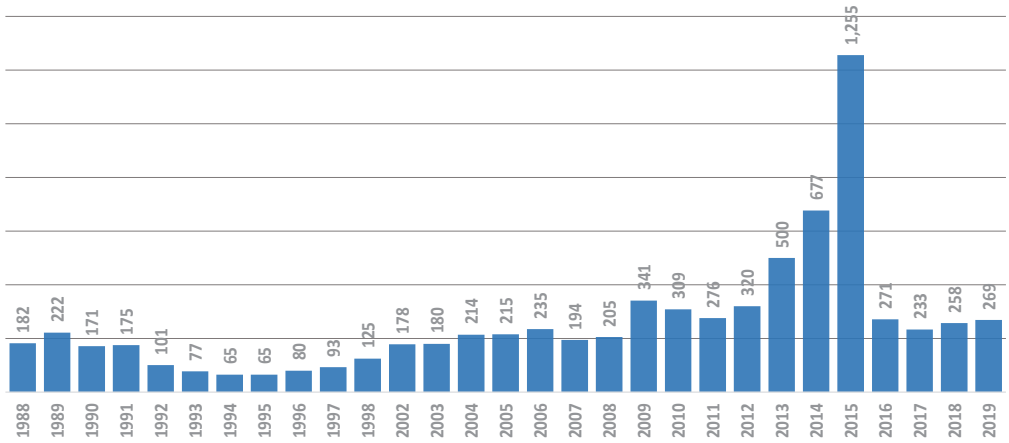
Graph #13: External causes of injury and poisoning



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

The morbidity rate from cancer in 2017-2019 has increased by 1.32 times compared to 1988-1990. The abnormally sharp increase in the morbidity rate in 2013-2015 is an accounting-reporting problem, since, according to the data of the Population Cancer Registry in 2016-2019, the level of morbidity with cancer documented is a completely different amount and thus closer to reality.

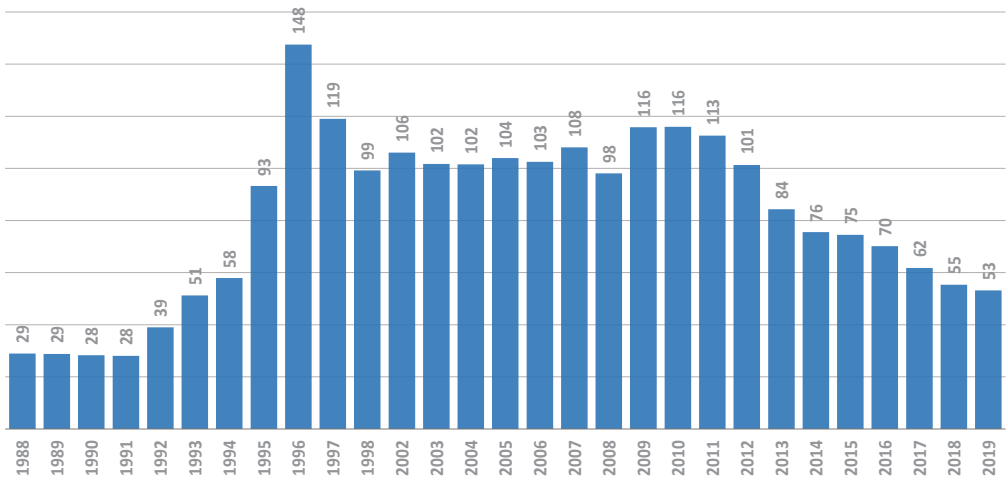
Graph #14: Incidence of cancer (per 100, 000)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

The rate of tuberculosis morbidity in 2017-2019 has increased by an average of 1.98 times compared to the rate in 1988-1990.

Graph #15: Incidence of tuberculosis (per 100, 000)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

In general, the overall morbidity rate in 2016-2019 compared to 1988-1990 has increased by 2.33 times. The National Statistics Service explains the sharp increase in the overall rate of morbidity with the following factors:

1. Increased (improving) registration;

2. Increased access to and referral to the healthcare system;

3. Introduction of / expansion of the medical insurance system.

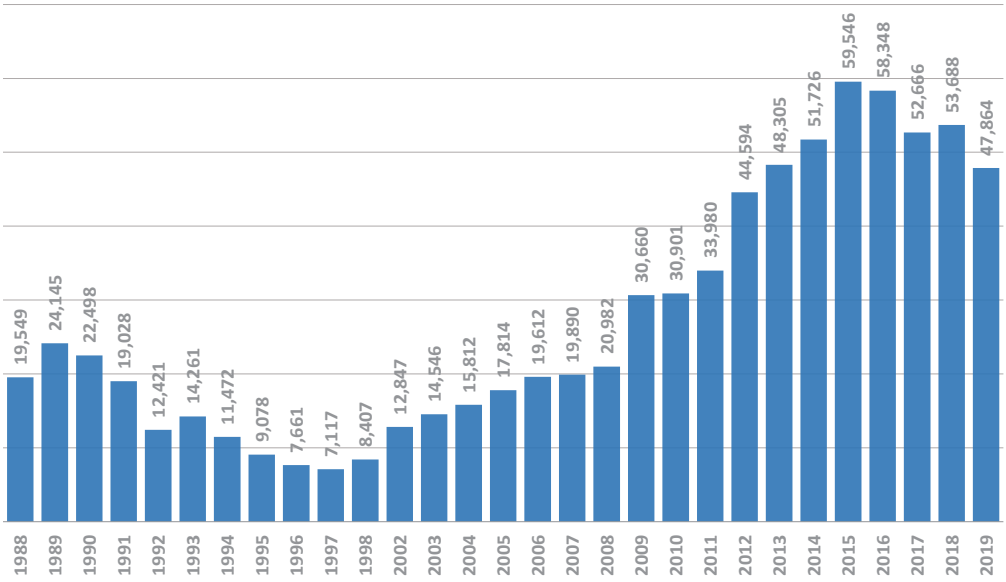
But these arguments correspond to the time series of 2002-2019. Compared to the years 1988-1990, the increase cannot be explained by these arguments, since in 1988-1990 the morbidity registration and reporting system was functioning properly. The increase in morbidity compared to 1988-1990 can be explained by the following factors:

1. **Lack of prevention** - one of the main focuses of the system operating until 1990 was prevention, which meant detecting diseases at an early stage and preventing them in easy ways. In the conditions of the current healthcare system, the prevention of diseases is practically neglected and it is entrusted to individual initiative. The result of such an approach will be discussed in later chapters;

2. **Separate exogenous factors** - unhealthy food, polluted air and water, ignorance of healthy lifestyle choices, and so on.

As a result, the morbidity level in 2016-2019 was 2.33 times the 1988-1990 level. It should be noted here that the maximum value of the level of morbidity was reached in 2015 when within the framework of the universal healthcare program, any sick person got full medical "service." Through regulations introduced in 2016-2019, uncontrolled spending of funds for treatment was limited and the registered morbidity rate has also decreased, but this reduction is more episodic than systemic since the system's orientation is unchanged and it is geared towards maximum profit, not a healthy population.

Graph #16: Total morbidity rate (per 100,00)



Source: 1988-1998 Data. Center of Medical Statistics and Information of the Ministry of Health, „Health and Health Protection" 1999; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

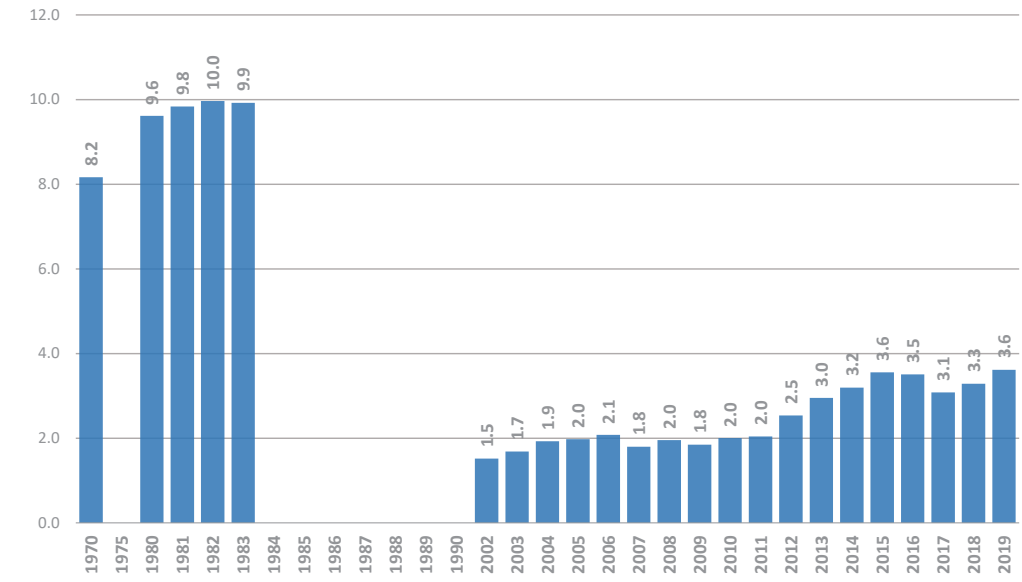
USE

For comparison, another important health indicator is the number of outpatient visits per person per year, which also includes visits for preventive purposes. Unfortunately, preventive visits are not separated in either the old or the new data, but the retrieved data represent two different eras. According to the data from 1970, 1975, and 1980-1983, during the era of the Semashko model of healthcare, the average person per year went to the doctor in an outpatient polyclinic institution 10 times. From 2002-2019 (the currently existing system), the average number of visits to a doctor in outpatient polyclinic institutions is increasing in frequency, but its maximum value in 2019 is 2.4 times lower than the previous lowest value in 1970, and 2.8 times lower than the 1982 rate. It is not directly visible from these data sets which specific visits or part of a single visit are preventive, but the fact is that such a drop in the frequency of visits is at the expense of eliminating preventative care.

The frequency of visits is also in decline since doctor visits are associated with costs and therefore are only done if necessary. The main purpose of these visits is to avoid more expensive hospital treatment. Most likely, these visits are not for preventative purposes.

The comparison of the retrieved data clearly shows the main difference between the two completely different models of the healthcare system, which is expressed in the minimization of the frequency of contact between the population and the healthcare system. Although the frequency of visits through the universal health program increased between 2013 and 2015 and peaked after a decline in 2017, the reason for these visits is substantially different from the reason for visits in the 1980s.

Graph #17: Number of outpatient visits per person per year (including prevention)



Source: 1940-1983 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1983 г., p. 261; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

Before 1990, the need for preventive examination was directly determined by the healthcare system. Old statistical references directly indicate how many citizens were covered by periodic medical examinations and how many citizens were subject to periodic medical examinations. After 1990, such an indicator no longer exists, however, within the framework of the survey of Georgian households, until 2011, a module on access to health care was included within the framework of the questionnaire "SHINDA 09", where one section of questions referred to access to preventive examinations. We determined the level of need for preventive examination using the following algorithm from the questions:

Question #31. Have you had a full or partial preventive examination in the past 12 months?

1. Yes
2. No

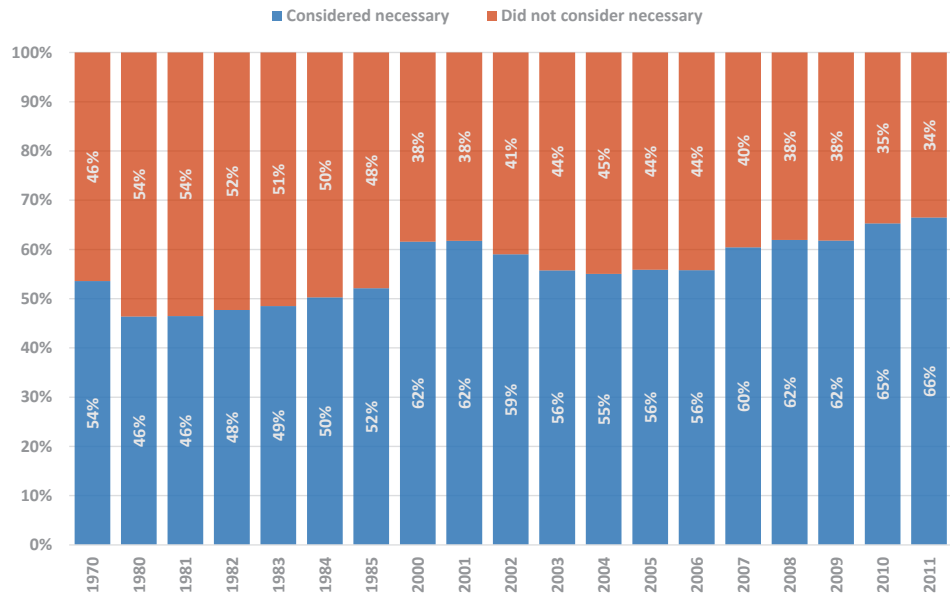
Question #34. Why did you not have a preventive examination in the last 12 months?

1. Because of poverty
2. I don't know where to apply
3. I couldn't find the time
4. I do not consider it necessary
5. Other

We considered the preventive exam necessary for those who had a full or partial preventive examination or did not have a preventive examination for all other reasons, except for answer 4 to question 34, when they did not have a preventive examination because they did not consider it necessary.

The need for a periodical physical exam as determined by the healthcare system would affect about half of the population, and the need for preventive exams according to self-assessment would affect about 60% of the population. Thus, these two rows are not directly comparable, but they give a certain idea of the extent of the need for preventive examination.

Graph #18: Population distribution according to self-assessment of the need for preventive examination

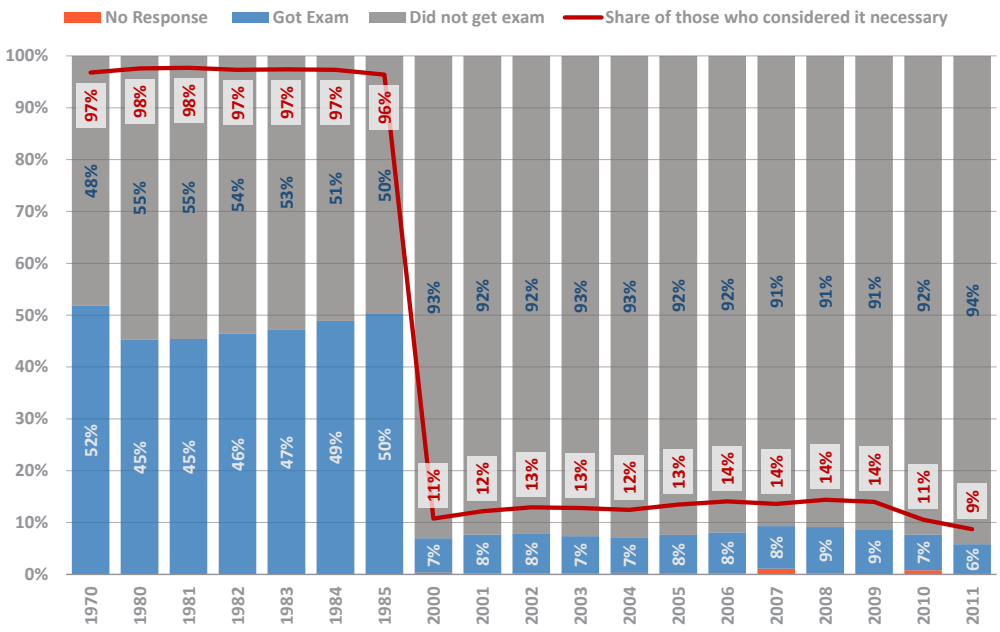


Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 г., p.252; 2000-2011 Data - Integrated Survey of Georgian Households Questionnaire SHINDA 09.

According to the periodic medical check-up, the coverage rate of the relevant contingent, that is, those who needed a periodic medical check-up was 96-98%, which was almost half of the total population, and from 2000-2011, the same rate decreased almost 9 times and fell to the level of 11-13%. Which is 6-8% of the total population. We mentioned above that one of the most important reasons for the increase in morbidity is the neglect of preventive healthcare, and this data shows the extent of this phenomenon. The recurrence of this is indeed at a systemic level, however, fact that we do not have data after 2011 is not decisive here. After 2011, there was no systemic change in healthcare.

If before 1990 periodic physical exams and prevention were the main focus of the system, in today's system it is an issue to be decided individually and is associated with quite significant costs, for which, as the diagram below shows, only 6-8% of the population is prepared to pay for.

Graph #19: Distribution of the population according to preventive exam



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 г., p.252; 2000-2011 Data - Integrated Survey of Georgian Households Questionnaire SHINDA 09.

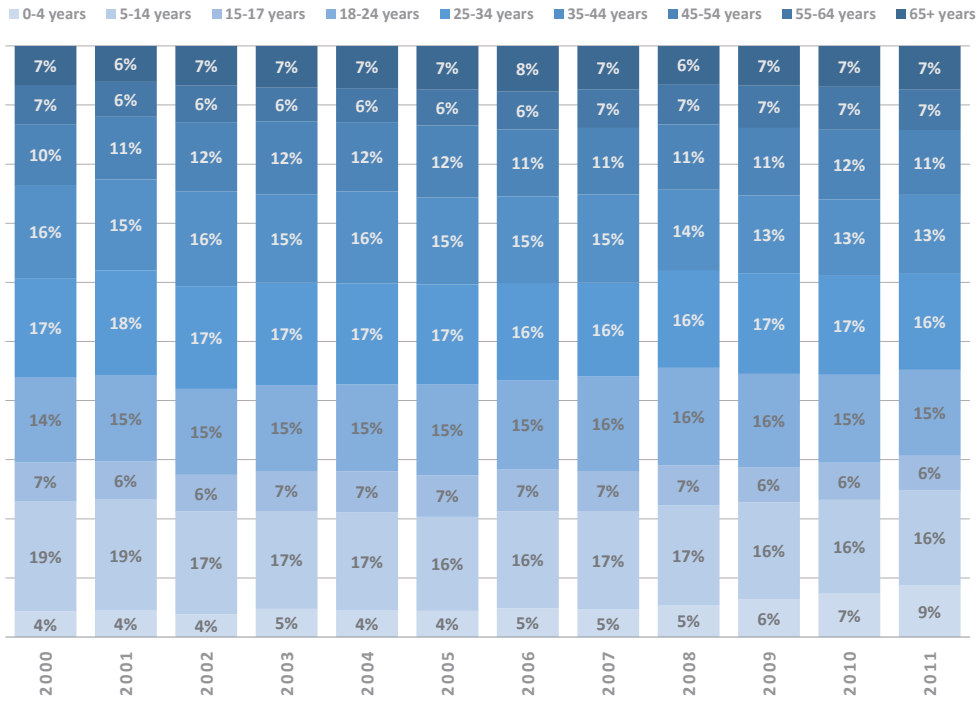
We mentioned above that in the data from 2000-2011, the level of the need for preventive examination was assessed based on subjective attitudes, which is already a central problem for determining need. As the distribution of the population in age groups shows, subjective assessment is a rather fragile basis for assessing real needs.

First of all, it should be noted that the age structure of those in the population denying the need for preventive examination is almost unchanged throughout the analyzed period, if we do not take into account the trend of increasing the specific weight of the population aged 0-4. According to the distribution, about 22% of the population, who do not need a preventive examination are 5-17 years old. Until 1990, the school-age population was under necessary preventive medical observation.

About 40% of the population was 25-54 years old, and the population of this age is covered less by mandatory preventive examinations.

Thus, the level of the need for preventive examinations determined by self-assessment can be comparable to the level of the need for preventive examination in the period before 1990, but as the age distribution shows, these two groups are absolutely similar in terms of content, although this element is not of critical importance for the comparison.

Graph #20: Distribution of the population, who do not consider it necessary to carry out a preventive exam, by age groups



Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 г., p.252; 2000-2011 Data - Integrated Survey of Georgian Households Questionnaire SHINDA 09.

In general, the coverage of the population with preventive examinations has decreased 9 times compared to the period before 1990, and this is the most important and systematic result of the processes started in the 90s, which is an indicator of the complete dismantling of disease prevention and preventive healthcare.

The outcome is grave, but completely logical. Prevention-prophylaxis is not interesting from the point of view of business, since it is, on the one hand, less profitable, and on the other hand, the prevention-prophylaxis of diseases is also the prevention-prophylaxis of the future income of the medical "business".

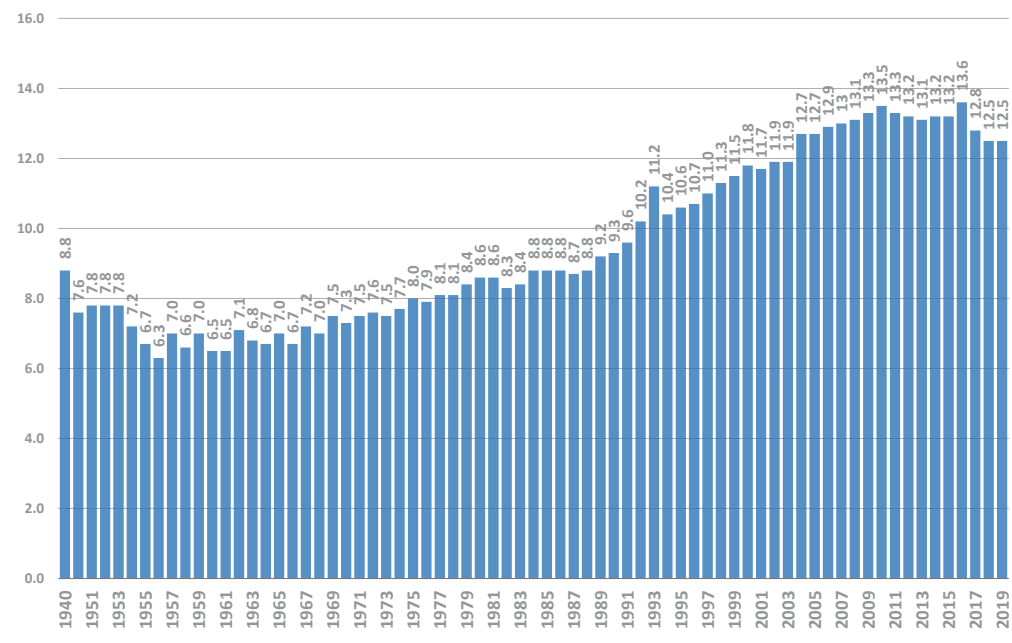
MORTALITY

One of the main outcomes of functioning healthcare is a low mortality rate. The level of mortality is not determined only by the working or failures of healthcare, but the effect of the healthcare system on this indicator is one of the critical factors.

According to the retrieved data, the death rate per 1000 people in Georgia was the lowest in 1956 - 6.3 per thousand. After that, the death rate began to rise and in the 80's it was stable in the range of 8.4-8.8 per thousand. We must take into account that the very low level of mortality in the 50s and 60s of the last century was not only the merit of the healthcare system. The low level of mortality in this period is mainly the result of the years 1941-1945, in which a significant part of those born in 1919-1923 died. The effects of World War II are visible in the long-term series of birth and death rates. According to the retrieved data, after a jump in 1992-1993, the mortality rate has been steadily increasing until 2016. From 1995-2016, it is worth noting the spike in the level in 2004 and 2016. Between 2017 and 2019, the mortality rate decreased significantly, which is most likely due to the universal health program, but in 2020, the rate returned to the level of 2016, which is due to the epidemic.

The indicators of the 80s can be considered as the characteristic mortality level for the model of the healthcare system before 1990.

Graph #21: Mortality Rate (per 1000)



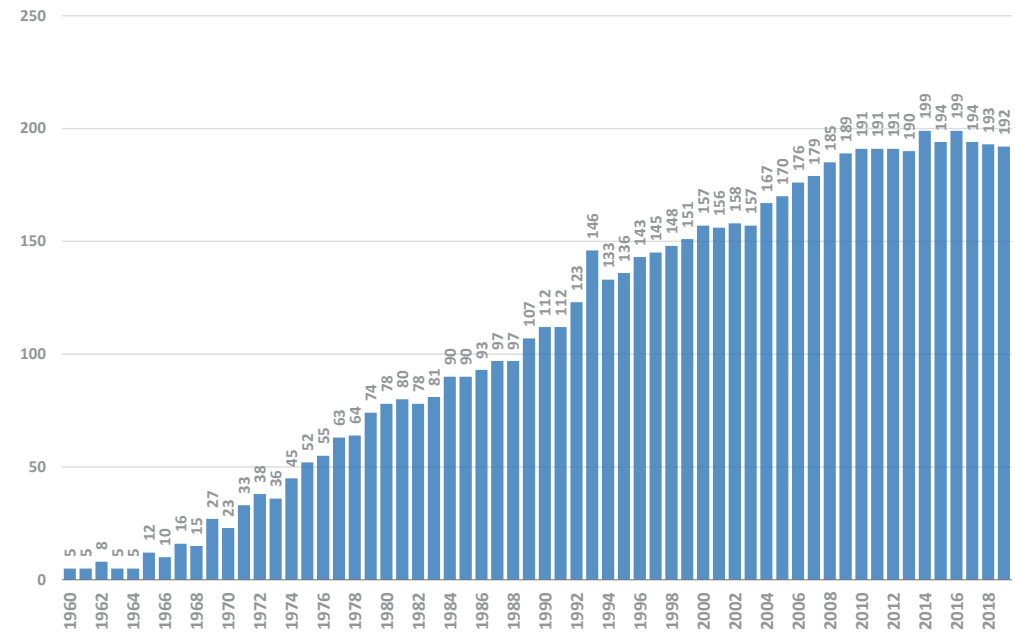
Source: 1940-1985 Data - НАРОДНОЕ ХОЗЯЙСТВО ГССР – 1985 Г., p.252; 1986-1990 Data – Georgia in Figures, 1990, p. 71; 2002-2019 Data - https://www.geostat.ge/ka/modules/categories/54/jandatsva

Along with the time series of indicators of Georgia, the place of Georgia in the world according to the indicator of mortality rate is also important. The death rate, crude (per 1,000 people) can be found in the World Bank database, where there is data for Georgia as well as other countries. The data covers the period from 1960-2019, however, it should be noted that the mortality level indicator in Georgia in the World Bank database is different from the indicators of the corresponding period provided by the National Statistics Service. That's why we used the data provided by the National Statistics Service during the ranking.

According to this data, as is demonstrated by low a mortality level in the beginning of the period 1960-1995, Georgia was in the top ten of the world. After the 1960s, the death rate in Georgia began to increase, and accordingly, the position of Georgia deteriorated. However, it should be noted again that the main determinant of the low value of the mortality rate in the early 60s was the war factor. In the 70s and 80s, the mortality rate in Georgia stabilized, and in the 80s, according to this indicator, Georgia was in the 80th - 90th position.

Georgia's position began to deteriorate significantly from 1990, and in 2010, Georgia was already 191st among 216 countries in the world in terms of mortality rate. After 2014, Georgia is steadily in the 190th - 200th position, which indicates a stable yet high mortality rate in the country.

Graph #22: Annual dynamics of Georgia's place in the ranking of 216 countries by mortality rate according to World Bank data



Source: World Bank: https://data.worldbank.org/

In general conclusion, it can be said that the tendency of the mortality rate in Georgia are far from optimal. Moreover, the trend of the mortality tendency in Georgia can be described as alarming.

The healthcare system is not the only factor determining the alarming tendency of the mortality rate, but it is one of the critical factors. There are several reasons for the high level of mortality including aging of the population, unhealthy lifestyle, access to safe food, and negative net migration; however, it is a fact that the current healthcare model cannot ensure a low level of mortality. An increase in the overall rate of morbidity contributes to the rise in the mortality rate.

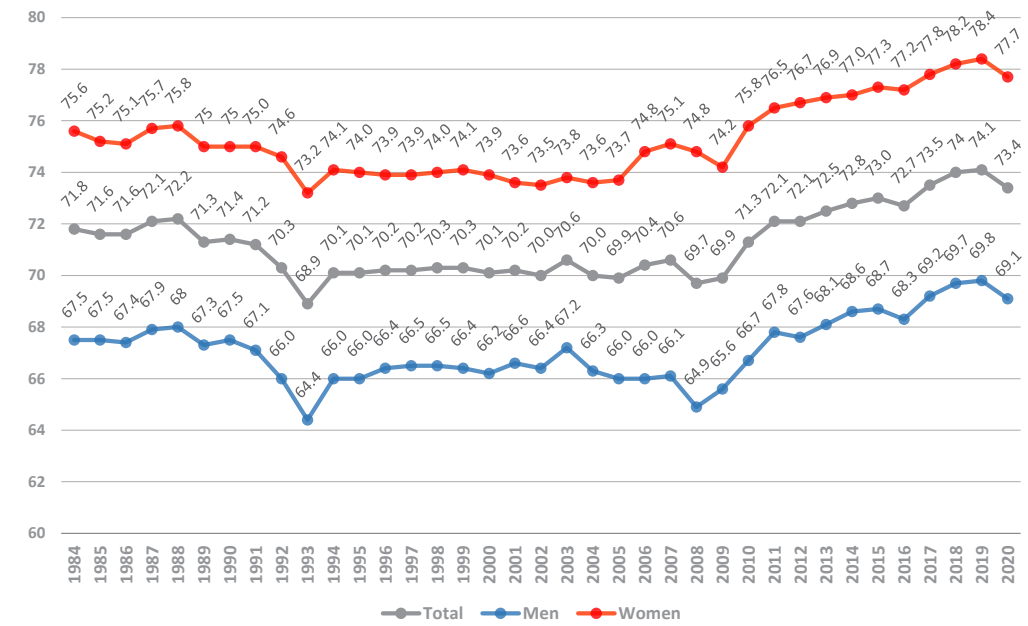
EXPECTED LIFE EXPECTANCY

One of the most important health indicators is life expectancy from birth. As can be seen from GeoStat data, the life expectancy rate in Georgia has remained almost unchanged over the last four decades. It is worth noting the decline in 1993 and 2008 respectively, which occurred as a result of wars. It is also worth noting the relatively high growth rate from 2011-2019.

The life expectancy in 2020 has decreased by 0.7 years compared to 2019, which is the result of the increased mortality rate in 2020 caused by the pandemic.

The highest value of life expectancy from birth in 1984-2020 was in 2019. It was 74.1 years on average. Life expectancy for men was 69.7 years, and for women 78.4 years.

Graph #23: Life Expectancy

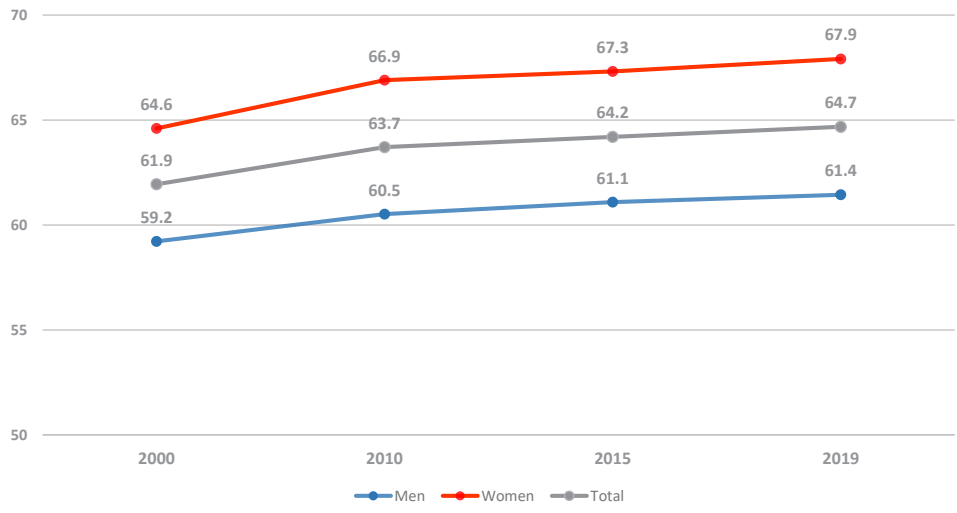


Source: GeoStat

An even more important indicator than the expected life expectancy is the healthy life expectancy (HALE) at birth. Unfortunately, this indicator cannot be found for years before 1990. For the period after 1990, the indicator is not calculated for every single year. According to the data from the World Health Organization in 2019, the healthy life expectancy at birth in Georgia was 64.7 years. According to the current conditions in 2019, men would live healthy for 61.4 years after birth, and women - for 67.9 years.

Overall, healthy life expectancy at birth has increased by 2.8 years since 2000, which is a substantial increase. Unfortunately, this indicator is not available before 1990, as it is impossible to compare two radically different periods. The given dynamics reflect the change of the indicator within the same system but does not provide any idea of what is happening in a different period when the healthcare system was built on completely different principles.

Graph #24: Healthy life expectancy



Source: World Health Organization, https://www.who.int/data/gho/gho-search

It can be concluded that life expectancy from birth increased by 1.1 years or 1.6% in the last decade of the current century compared to the 1980s of the last century. Life expectancy for men has increased by 1.3 years or 1.8%, and for women - by 2.0 years or 2.9%. It may not be correct to say that the increase in life expectancy at birth is the result of a change in the healthcare system. A considerable amount of time has passed between comparable periods, which means that the positive impact of scientific and technical progress achieved during this time should undoubtedly be taken into account. For example, 40 years ago heart bypass surgery existed only in the realm of fantasy, now these procedures are an everyday occurrence. Therefore, the change in life expectancy can be assessed as insignificant. We should take into account that both the 80s of the last century and the second decade of the current century are comparable in terms of peace time.

It is also worth noting that the expected length of healthy life from birth is represented by a smaller portion of the total length of life. In 2000, the life expectancy of an average Georgian citizen was 70.1 years from birth, of which the healthy life expectancy, according to the World Health Organization, was 61.9 years. This means that the average citizen would live 88.4% of their life in good health. In 2010, this amount increased to 89.4%, and in 2015 to 88.7%. It should be noted that in 2019 it decreased to 88.3%. We mentioned above that the period after the year 2000 represents changes in the indicators in the same system and is less interesting for our study, but the important fact is that the decreasing proportion of healthy life expectancy is not a positive trend. Thus, in the background of scientific and technical progress accumulated over 40 years, the slight increase in life expectancy and the decrease in the proportion of healthy life expectancy do not speak favorably of the existing healthcare system.

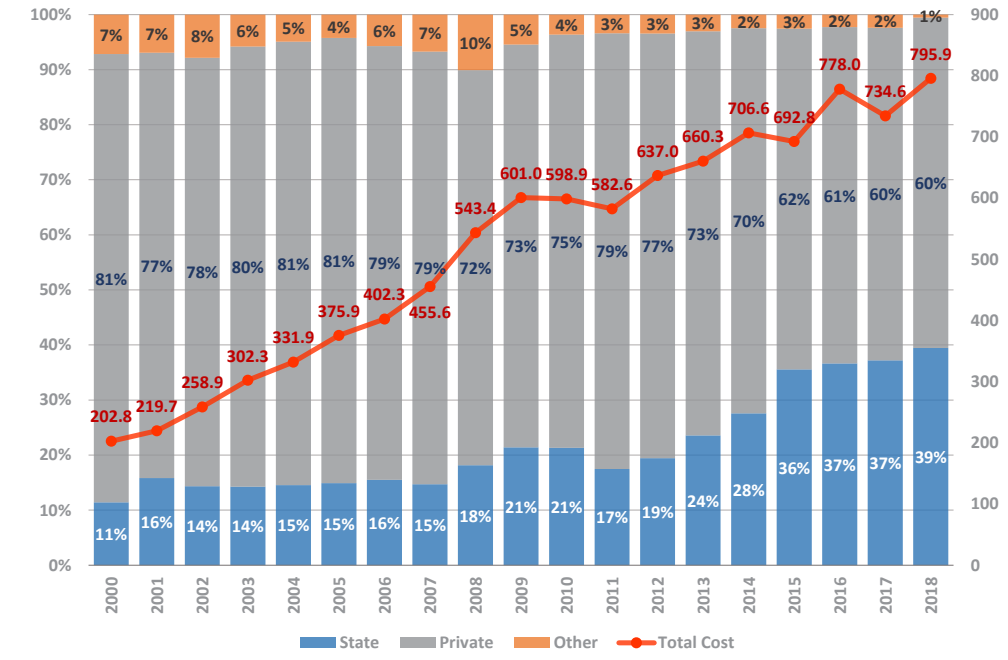
GOVERNMENT SPENDING

Analysis of healthcare expenditures is not a task of primary importance for this study. In the present study, we try to answer the question of what were the effects of the transition of the healthcare system to market principles. That is, what happened as a result of the transformation of the field of healthcare from the status of an necessary, universal right to the status of an ordinary commodity? We consider it completely natural that the expenses incurred in healthcare, both from the state and citizens, will be steadily increasing since these expenses are the profit of the "providers" of health care services, which are less subject to reductions.

Indicators taken from the World Bank database were used for the analysis, where health care expenditures are given not in GEL, but in current international US dollars, taking into account the purchasing power parity. Such an approach is used to enable international comparisons. The nominal amount of spending on health care is not essential, the trends are more important.

According to the retrieved data, health care expenditures in Georgia have been continuously increasing since 2000. From the structure of expenditures, the increasing proportion of expenditures made by the state in 2013-2018 is particularly noteworthy. In 2018, 39% of the expenditures on health care came from the state, and 60% from private sources. Private sources include both insurance companies and private spending.

Graph #25: Total Healthcare Spending (Current international US dollars at purchasing power parity)



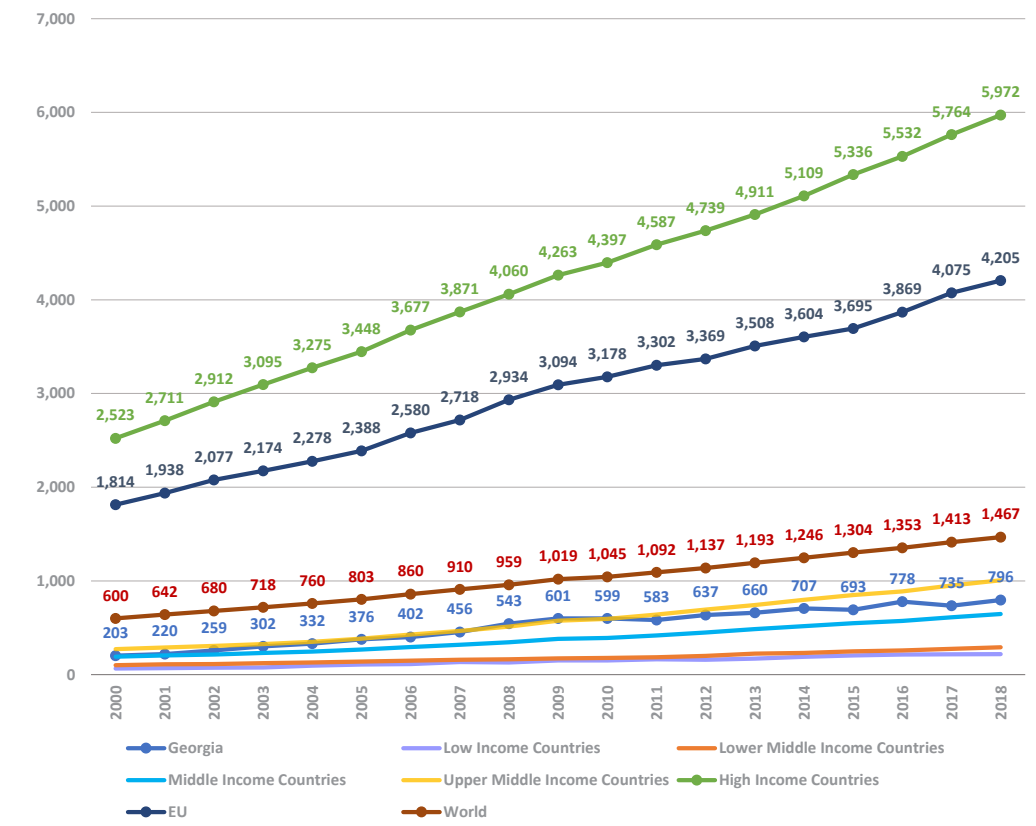
Source: World Bank, https://data.worldbank.org/

According to the expenses incurred, Georgia is the closest to the top group of middle-income countries. The tendency of the total expenditure on health care per person closely repeat the dynamics of the average indicator of this group of countries.

From the dynamics of the average indicator of different groups of countries and the world, it is worth noting the tendency of the total expenditure to increase steadily. It is also noteworthy that the world average is usually significantly higher than the average of all groups, and this difference is determined by the incomparably high level of spending on health care in high-income countries. It is somewhat lower than the average of high-income countries, although the level of spending on health care in EU countries is many times higher than the world average.

Therefore, spending on health care is one of the important discriminants of the country's development. Such a visible difference between costs is considered one of the perpetual arguments in the field of health care.

Graph #26: Total health care spending (current international US dollars at purchasing power parity)



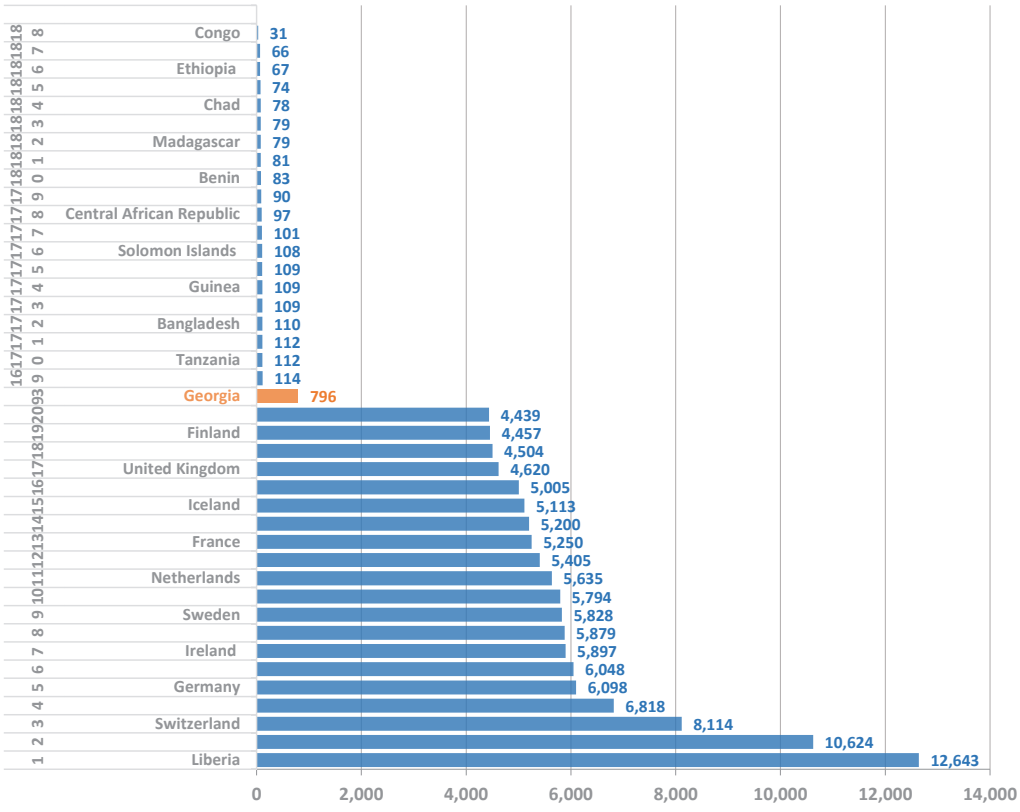
Source: World Bank https://data.worldbank.org/

According to data from 2018, Georgia was in 93rd place out of 188 countries in terms of the level of total health care expenses per person.

According to the 2018 data, Liberia was in the first place in terms of spending on health care, where 12,643 international US dollars were spent per year on health care at purchasing power parity. The second position was held by the USA with 10,624 USD. In the last position of the first twenty was Singapore with 4,439 USD.

The last twenty of this list is particularly pitiful, with South Sudan at the top with 114 USD per person per year in medical expenses, and Congo at the bottom with 31 USD. The situation is even worse if we take into account that the data are given in current international US dollars, taking into account the purchasing power parity, which differs substantially from the exchange rate of the US dollar usually in favor of the dollar in low-income countries.

Graph #27: Top twenty and bottom twenty of 188 Countries by Total Health Care Expenditure in 2018 and Georgia (Current International USD at Purchasing Power Parity)



Source: World Bank https://data.worldbank.org/

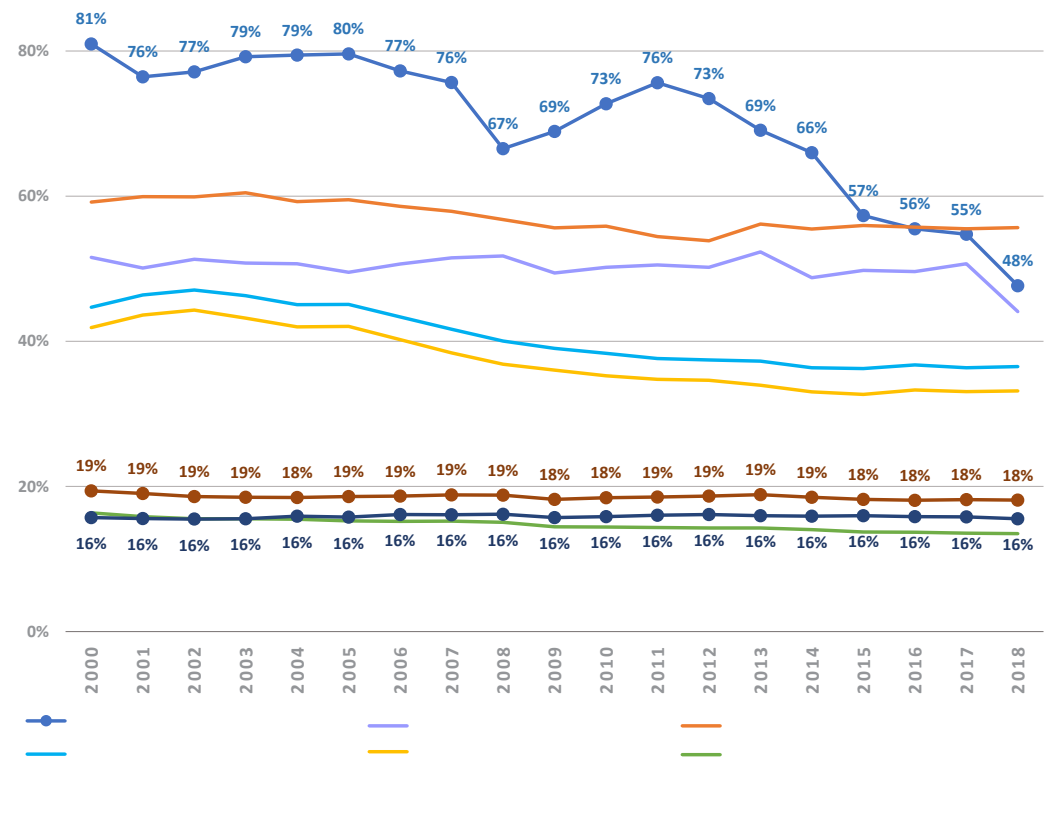
OUT-OF-POCKET COSTS

One of the important characteristics of healthcare expenditures is the share of out-of-pocket costs in total healthcare expenditures.

As World Bank data shows, the distribution of the proportion of out-of-pocket costs in countries by income level is exactly the opposite of the distribution of total health care expenditures.

The higher the income of the country, the lower the share of out-of-pocket health care costs. The proportion of out-of-pocket payments in Georgia is characterized by a decreasing trend, and the rate of decrease is particularly sharp after the 2012.

Graph #28: The share of out-of-pocket costs from total health care costs



Source: World Bank https://data.worldbank.org/

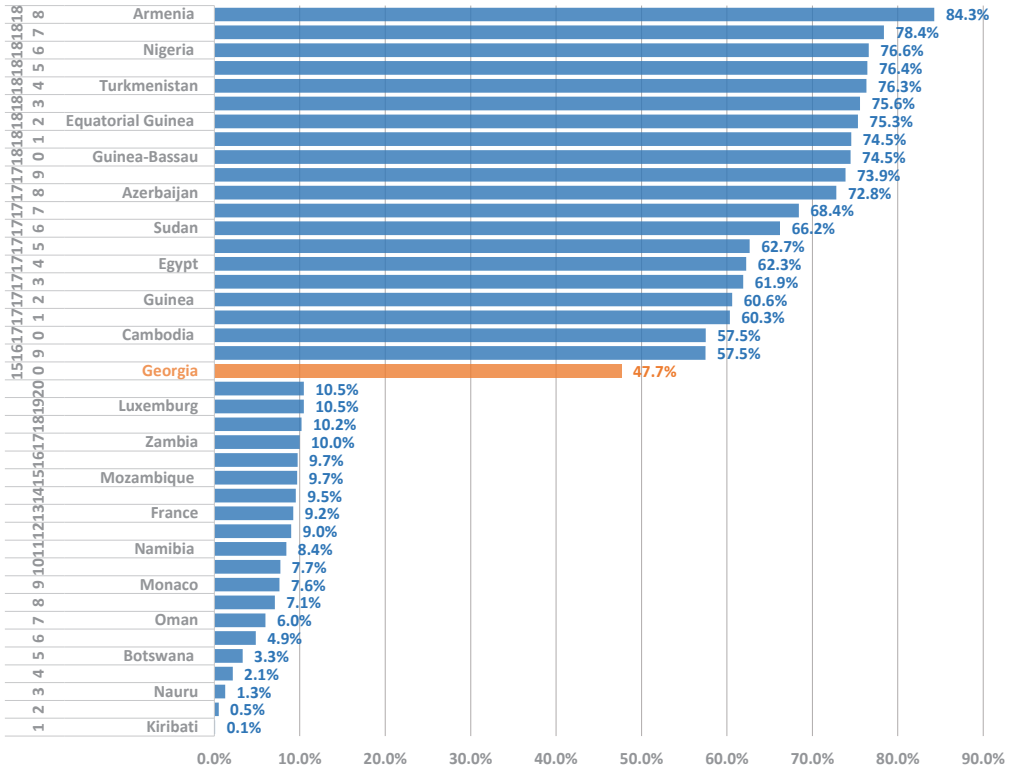
As of 2018, Georgia was in 150th place among 188 countries in the world in terms of the share of out-of-pocket expenses for health care.

Armenia ranks first in terms of the share of out-of-pocket costs, where 84% of total health care costs come from out-of-pocket costs. Afghanistan is in second place with 78%, and Guatemala is in the last position out of the twenty with 58%. Georgia is also very close to this indicator with a 48% share of expenses paid out of pocket.

Citizens of Kiribati & Tuvalu and Nauru pay almost no out-of-pocket costs for health care. On the bottom of the top ttwenty countries with the smallest share of out-of-pocket costs are Luxembourg and Croatia (with a 10.5% share of out-of-pocket health care costs).

This data is provided for informational purposes only, and we are not consciously evaluating the merits, since these details can distract us from the main issue and focus of the study. Whether a high share of out-of-pocket payments is good or bad is irrelevant in this case. What does total health care spending serve: Health or Profit? This is the main question. An increase in health care allocations by the state does not mean that these costs will be absorbed without a loss for patients care and not for companies profit.

Graph #29: Share of out-of-pocket payments from total health care spending in 2018 according to the top twenty and bottom twenty ranking of 188 countries and Georgia



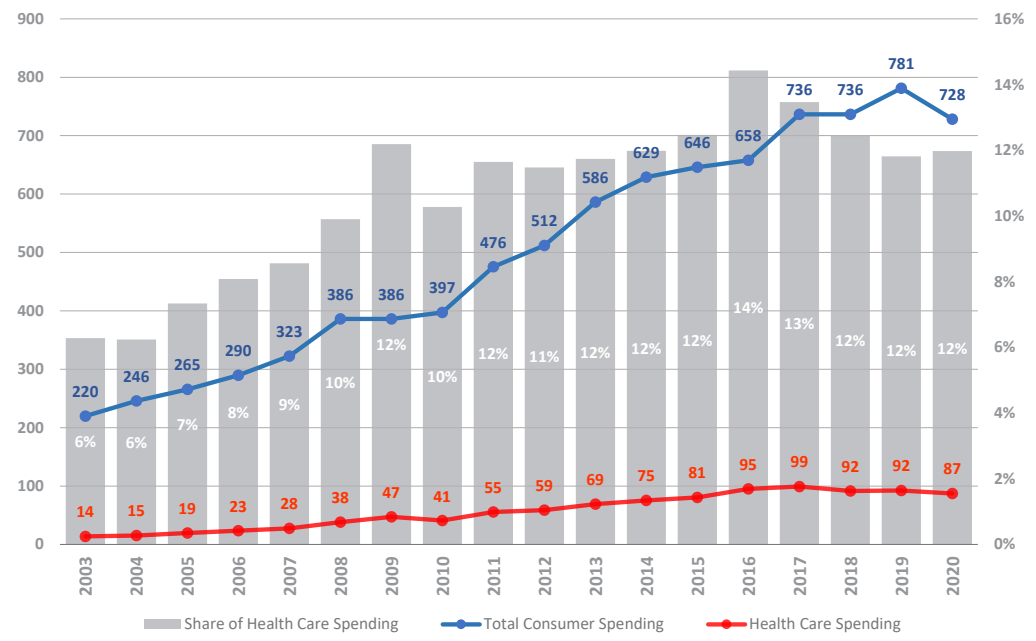
Source: World Bank https://data.worldbank.org/

According to the survey of Georgian households in 2020, 12% of the total consumer spending by the population of Georgia was spent on health care. Nominally these expenses amounted to 87 GEL per household on average per month.

Total nominal consumer spending per household has been steadily increasing since 2003. The only exception is 2020 when total consumer spending decreased. The decrease in 2020 is a direct result of pandemic restrictions, and the growth trend will likely resume after the crisis. Spending on health care was also characterized by an increasing trend, however, after 2017, the trend of reducing this spending was evident. Most likely, this should be the result of state healthcare programs.

As for the share of spending on health care from total consumer spending, its value had a sharp upward trend from 2003-2016, and since 2017, the trend has changed to the opposite sign, which is most likely the result of state health care programs.

Graph #30: Total consumer and health care spending per year (GEL/month per household)



Source: Integrated Survey of Georgian Households.

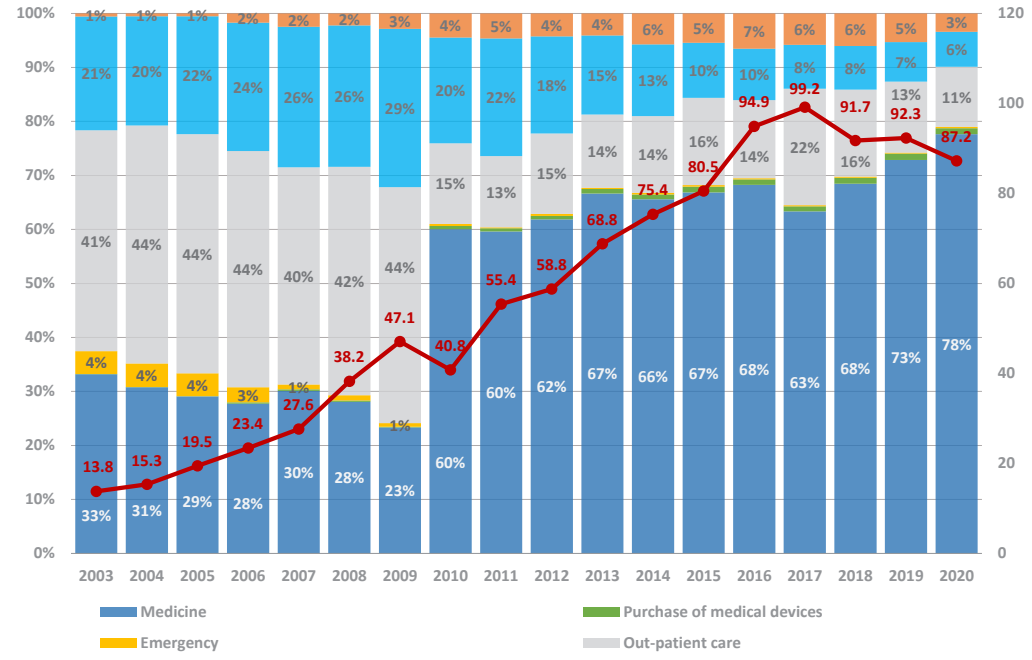
The structure of these expenditures is no less important than the volume of expenditures on health care. According to household survey data, the structure of out-of-pocket health care expenditures from 2003 to 2020 underwent a very interesting evolution.

In 2003-2009, a significant (40-44%) share of out-of-pocket health care expenditures came from the share of outpatient treatment, which decreased sharply in 2010, and in 2010-2020, the share of these expenditures is in the range of 13-16%. This change is the result of government health programs. This means that the burden of these costs has shifted to insurance companies or the state.

The share of out-of-pocket costs on hospital treatment is marked by a sharp decreasing trend, which is also the merit of the state health care and insurance programs. Hospital treatment at their own expense is rarely used.

Instead, medicine has increased dramatically since 2010 and, as of 2020, 80% of out-of-pocket healthcare spending came from drug costs.

Graph #31: Spending on health care by households per year



Source: Integrated Survey of Georgian Households

According to the 2007 data from the World Bank, 35.7% of the population of Georgia was at risk of facing catastrophic expenses due to surgical needs, and 12.5% of the population was at risk of falling into chronic poverty due to catastrophic health care expenses. According to the first indicator, Georgia was in the 78th position out of 216 countries in the world, and according to the second indicator - 54th.

Unfortunately, data for other years is not available on this indicator, but this data is enough to conclude. Under the conditions of the system operating until 1988, the out-of-pocket spending indicator was unequivocally and unconditionally equal to 0.

In general, spending on health care is growing both by the state and by households. However, not growing that sharply. With life expectancy and the declining proportion of healthy life expectancy in total life expectancy, it is difficult to say how much of an outcome these costs have achieved.

If we add the increasing mortality rate in the background of the sharp deterioration of the infrastructure indicators since 1990, it can be inferred that increased spending does not mean an improvement in mortality in any way, and financial indicators are not enough to describe the situation.

5
THE CONTEXT OF HEALTHCARE REFORMS

To better understand how and why the Georgian healthcare system made its way to commercialization, it would be useful to see the context in which the reforms took place.

The collapse of the Soviet Union was connected not only with the formation of newly independent states but also with their transition from a planned economy to a market economy. They had to face this change through standard, universal reform[11] packages developed by international financial institutions (World Bank, IMF) in the 1980s. These prescriptions developed based on neoliberal economic doctrine are known as the "Washington Consensus". Proposed "structural adjustment" programs meant expert and financial support for reforms in the form of loans and grants. In the post-Soviet space, these reforms were called shock therapy (Marangos, 2007). Their goals included rapid and comprehensive privatization, trade and price liberalization, and macroeconomic stability. The reformers were well aware that their reforms would not have broad public support. That's why they had to give themselves a quick "shock" so there would be no resistance[12] (Balcerowicz, 1994).

Regardless of the subjective or objective factors hindering the implementation process, the political elite of Georgia and all post-Soviet countries met the proposed reforms with great enthusiasm. There was a kind of mechanical belief that the more the reform was different from the social and economic model of the Soviet Union, the more the level of prosperity would increase. At each stage, the unsatisfactory results were explained by the less radical nature of the reforms. Several post-Soviet countries, and Georgia is a clear example of this, even prided themselves on the degree of the radicalism of reforms, which often went much further than international financial institutions implied (Appel and Orenstein, 2018). The expectations of international financial organizations and foreign advisers and reformers that the short-term economic stagnation of shock therapy would be followed by rapid and continuous growth did not materialize. If, for example, after the Great Depression in the United States of America, it took 10 years for the country to return to the pre-depression level of GDP per capita, in Georgia and similar post-Soviet countries, this indicator decreased from 40% to 60% on average, and today it is 15% behind the 1989 level indicator (Ghodsee and Orenstein, 2021).

Reformers believed that rapid privatization would create self-sustaining private companies that would be more productive and ultimately profitable. As a result, there would be an accumulation of funds in the state budget at the expense of taxes, and despite the small amount of social responsibility characteristic of capitalism, the state would continue to fulfill

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11 The reforms known as the "Washington Consensus" were initially created for Latin American countries, but soon there was a sentiment that they could be extended to post-Soviet countries as well. https://www.britannica.com/topic/Washington-consensus

12 In 2000, Leshek Baltserovich was the advisor to the President of Georgia on economic issues.

its obligations to citizens. However, different opinions existed. According to Joseph Stiglitz, winner of the Nobel Prize in Economics, countries were not ready for rapid privatization and shock therapy. There was no institutional environment, which is formed over a long period and is vital for the functioning of a market economy (Stiglitz, 2002). In the end, we can say that the goal of the reformists was determined by more ideological factors and served not to improve the economy, but to destroy the economic system of the Soviet Union once and for all (Klein, 2007).

As soon as the Soviet Union collapsed, production and economic ties began to break, which was accompanied by a currency crisis (Papava, 2015). The situation in Georgia was further aggravated by the civil strife and armed conflicts that occurred in the early 1990s. Hundreds of thousands of people were displaced from their homes. It can be argued that these armed conflicts formed the basis of the destruction of Georgia's economy. However, if we look at other post-Soviet and post-communist countries, where either this scale of the conflict took place or there was no conflict at all, we will see that the situation was similar (Kristen Ghodsee, 2021). Against this backdrop, ill-advised privatization led to complete de-industrialization and disruption of the production process. As a result, both the economy and the social system as a whole, as well as health care, were left in a deplorable state.

6
SOCIAL DETERMINANTS OF HEALTH

A completely new social order was being formed, which was based on the market economy, at the expense of increasing individual irresponsibility and, accordingly, reducing the role and responsibilities of the state. These changes affected not only individual economic activity but also the social determinants that influence human health.[13] Housing, employment, decent working conditions, food quality, hygiene - this is a small list of social determinants that fundamentally influence and determine human health. If earlier the state took responsibility for all of these needs as social provisions, now they are all the responsibility of individuals. It is difficult to say whether such transformation of the state was caused only by a lack of funds, or if it was caused by an ideological spirit. However, it is clear that at the initial stage of the reforms, unemployment, poverty, and inequality increased catastrophically.[14] Beyond just a decrease in incomes, people lost their sense of self and function in society. This downward shift in class position unleashed an across-the-board increase in psychosocial stress. More than one study shows the relationship between low income, social status, and poor health. As a result, morbidity and mortality rates have increased throughout post-Soviet countries (Brainerd, 2005). The experience of the post-Soviet countries in the process of economic transformation once again exposed the anti-human nature of the neoliberal social order. It became abundantly clear that the deterioration of people's health was related to the decline in the standard of living and the loss of their social status, and not to their individual choices and lifestyles. As the state was thrown into a terminal crisis, unable to manage its previous functions, the epidemiological situation also worsened. Those who authored these neoliberal economic reforms believed that the transition from a planned economy to a market economy would lead to an "epidemiological transition", as in Western Europe, when modernization led to a decrease in mortality (Lawrence King, 2009).

This attitude also indicates the carelessness of the reformers. They lacked a comprehensive understanding of the Soviet social order and public health system. It was already considered a modern system, and its comparison with the pre-modernized public health system of Western Europe was, to say the least, inappropriate. After all, the Washington Consensus reforms were standardized, which flattened an approach to the needs of countries regardless of experience, past, and development levels. Therefore, it is not surprising that the process of reforms in both health care and other areas caused problems on a massive scale. Additionally, along with the deterioration of the social determinants of health, the healthcare system also collapsed.

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13 Determinants of health (who.int)

14 Quantitative data on the economic and social results of reforms in Eastern Europe and post-Soviet countries can be found on the website:Data — Taking Stock of Shock

HEALTH CARE TRANSFORMATION

The Soviet healthcare system was based on a strictly centralized model, where both the purchaser and provider of health care services were the state. The goal was universal coverage and access to the population, with a special emphasis on preventive medicine. Although theory and practice were often at odds with each other, the Soviet healthcare system was more or less successful in achieving its stated goals. The system's stagnation began in the 1980s (Field, 2002). During this period, the Soviet government had other priorities. At the expense of other state obligations, military expenditures were steadily increasing (Steinberg, 1990). This is in the background when the growth of the Soviet economy was slow.[15]

After the collapse of the Soviet Union, the situation in Georgia became even worse. The healthcare system was facing collapse. The extant economic situation and lack of funds directly affected resources, and the social condition of the health workers working in the healthcare system. The breakdown of trade relations between the former Soviet republics has led to a significant reduction in the provision of basic medical supplies. The material and technical base also depreciated. Public funding for health care was drastically reduced, falling from 130 USD per capita in 1990 to 0.45 USD in 1994. In 1994, the share of the state in total health expenditures was 4.9%, which was only 1.3% of the state budget that year (Jorbenadze, 2021). Almost 90% of healthcare costs were covered by citizens from their own pockets and only available for those that could pay. Due to the deteriorating social determinants of health, the pressure on the health system was increasing. The existing situation required a response.

Healthcare system reform began in the early 1990s in Georgia. The goal of the reform was to transition from the Soviet centralized and planned model of health care, the aforementioned Semashko model where the state was the owner of both the purchasing and care facilities, to the "modern" system aligned with the new economic order.

Avtandil Jorbenadze[16] names 5 reasons for the need for reforms (Jorbenadze, 2021):

1. There was an imbalance between the obligations assumed by the state in health care and their actual financial provision;
2. There was an imbalance between labor and material resources in the system and the real needs of the population
3. Healthcare operating in the country could not ensure the optimal use of existing resources due to the lack of corresponding economic motivation;
4. The strategic direction of the country's overall development (transition to market-economic relations, the process of establishing a democratic society, etc.) was incompatible with the current healthcare system;

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15 Economic Growth, Soviet | Encyclopedia.com

16 Avtandil Jorbenadze - Minister of Health and Social Affairs of Georgia in 1995-2001

5. The current legislation in the field of health protection contradicted the socio-political direction of the country's development.

Since then, the healthcare system has gone through several stages of reform that are different from each other. Each stage is a reflection of the spirit and radicalism of neoliberal reforms which accompanied general economic reforms at a particular stage. That is, as far as the reform went in terms of privatization and introduction of market mechanisms, the commercialization of health care also went that far. This very fact indicates that a radical rethinking of the function of the healthcare system has taken place. Health care was no longer a public good, it was already one of the branches of the economy.

Therefore, we have divided the reforms into three stages: the period of toying with neoliberalism from 1994-2003, the period of militant neoliberalism from 2004-2012, and the period of soft neoliberalism 2012-present.

It should be noted that thinking about reforming healthcare had already begun in the Soviet Union in the 80s. According to Irakli Menagharishvili, the existing situation did not allow for effective resource mobilization and optimization. Presidium of the Supreme Soviet ordered the creation of several experimental models, from which the best would be selected. Among them, one was in Riga, which was introduced to the Georgian delegation. In Georgia, reforms were also being discussed. This reform group was composed ideologically of people who were opposed to the communist ideology and were from the opposite, pro-market camp. The members of the group were strongly opposed to the Soviet system. Therefore, representatives of the old system were not included in this group of reforms. It should be noted that the first group of reforms included almost no health specialists and the group was composed of economists who were brought to the Ministry of Health in 1987-1988. There were expectations that the Soviet system itself would reform because before 1991 there was no popular idea that the USSR would collapse. At time within the framework of the existing legislation, the introduction of the economic report was considered a cure for all problems. The centralized planning system was considered the main problem. Therefore, its antithesis was the market, and the goal of the reform was precisely the gradual introduction of the market system. Privatization was not the most popular term, although the situation at that time seemed so unbearable that certain deviations like thinking about privatization in health care were also observed.[17]

The Soviet Union collapsed so quickly and suddenly that existing ideas regarding the transformation of the Soviet healthcare system were shelved.

Georgia returned to more or less stability only in 1995. That year, a constitutional amendment took place and the first state budget was approved. In 1994, the structural adjustment program of the World Bank began. If before that international organizations were mainly engaged in humanitarian assistance to Georgia, they moved on to working with the govern-

17 Irakli Menagharishvili - Minister of Health of the Georgian SSR from 1986 to 1991. He held the same position in 1992-93. Interview 02.11.2021

ment on structural adjustment reforms, the main driver of which was the privatization of state assets (The World Bank in Georgia 1993-2007 Country Assistance Evaluation, 2009). Since our research is about the commercialization of healthcare and the privatization of healthcare institutions, it must be said that there is no universal attitude regarding this issue. In the article, Can Questions of the Privatization and Corporatization, and the Autonomy and Accountability of Public Hospitals, Ever be Resolved? 2,319 scientific articles related to the issue of privatization of health care facilities were reviewed. According to the conclusions, there is no unequivocal argument in favor of privatization, and opposing positions are due to different ideological views (Jeffrey Braithwaite, 2011).

If we look at all three stages of health care reforms, we will see that what unites them is an inexorable move towards privatization. The next part is devoted to these stages.

7
THREE STAGES OF REFORMS

7.1 TOYING WITH NEOLIBERALISM: 1994 – 2003

Since 1994, together with the World Health Organization and other donor organizations, several goals for reforming health care have been defined: the system should be aligned with the country's economic development course; the scope of health care service delivery should be in line with the existing financial and human resources; control mechanisms for the rational utilization of resources must be established (Giorgi Gotsadze, 1999).

The health policy of the state was determined by the constitution. If according to the 1964 Constitution of the Soviet Union, the Soviet state was responsible for the unlimited provision of health care services to all citizens without any co-payments, the new Georgian Constitution adopted in 1995 recognized the citizen's right to affordable and high-quality health care services within the scope of the state's capabilities at that particular time (Zorbenadze, 2021). To realize these goals, the following steps should be taken:[18]

- Decentralization of management of healthcare institutions;
- Privatization of medical institutions and reduction of beds to optimize costs;
- Transition from general state funding to program-targeted funding;
- Implementation of standards and regulatory framework compatible with market principles;
- Creation of the state health insurance company and financing of health care services based on insurance contributions;
- Increasing the role of primary medicine, introducing the institute of family physicians.

All these reforms were consistent with the architecture of economic shock therapy. Therefore, the role of international financial and donor organizations in this process should be emphasized.[19] Although the International Monetary Fund did not go into the details of sectoral reforms, in terms of structural reforms, to reduce the burden on the budget and improve cost efficiency, it favored the privatization of medical institutions.[20] Already in 1994, a meeting was held between the Minister of Health and donor organizations regarding the reform of the healthcare system (Jorbenadze, 2021). According to Avto Jorbenadze, if the government worked

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18 In addition to the listed reforms, many useful steps were taken: including the introduction of the assessment system, which was the only solution when moving to the existing financing model; licensing of healthcare facilities based on modern standards; continuing medical education; Reorganization of public health. See details: Jorbenadze, A. (2021). How a New HealthCare System Was Created. Tbilisi.

19 Giorgi Shakarishvili Tbilisi Global Health Institute: https://forbes.ge/health/chikagoeli-bitchebidan-mesame-gzam-de-qarthuli-jandatsvis-strategiuli-zigzagebi/

20 Giorgi Gotsadze - Healthcare expert, president of the Curatio International Foundation. Interview 18.10.2021.

with the World Bank and a consensus was formed between them, then they would support reforms. Due to the lack of sufficient knowledge and experience, donors provided the government with expertise. After the development of an action plan, the World Bank representative checked the progress of the reforms. The conditions were agreed upon with the government. To achieve the above goals, in 1995 the World Bank approved a loan to the government to reform the healthcare system (Laura Rose, 2001). After that, reforms began in full swing.

Independent Georgia could not maintain the existing number of health facilities and beds with the budget funds available at that time. It should also be taken into account that as a result of the audit conducted by the company "Siemens", a large part of the infrastructure was decaying and required modernization.[21] In Soviet Georgia, the suitable number of beds was determined not only by the needs of civilians but also by the military.[22] Therefore, it is not surprising that there were more beds than were needed. In addition due to modern medical achievements, patient hospitalization time was overall reduced. Accordingly, the trend of reducing the number of beds existed in other countries as well. But where this has occurred, different additions of care have additionally been created due to the aging population whereas primary health care has become the most important (McKee, 2004). Therefore, the decision to reduce the number of beds was determined by the current economic situation and the desire to mechanically approach[23] the modern international standards of utilization, rather than due to the readiness of the Georgian healthcare system. No one could have known how many beds would be needed in the country if the healthcare system functioned fully along with full financial access to treatment.

Decentralization of the management of healthcare institutions, the reduction of beds and privatization were directly related to each other. The issue of privatization was soon resolved and was already reflected in the action plan of the Ministry of Health in 1994 (Giorgi Gotsadze, 1999). This decision is reflected in the 1997 Law on State Property, where healthcare institutions are not included in the list of state property that is not subject to privatization.[24] Medical institutions were divided into three types: in the case of privatization, one part had to maintain its profile forever, the second part was obliged to maintain it only for 10 years, and the third part was sold as ordinary real estate. The money raised was to go into a newly created health fund, on the basis of which the remaining state-owned health facilities were to be modernized (Laura Rose, 2001).

As a result of decentralization, state clinics were to be managed by an elected supervisory board, and their legal status was defined as a public legal entity with the status of a fiscal enterprise. The medical staff was no longer a civil servants, but was employed under a labor contract. With this step, the state rid itself of both financial and institutional management responsibilities because the clinics have already switched to generating revenue from fees. At the same time, the shadow payment system was legalized.

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21 Avtandil Jorbenadze - Minister of Health and Social Affairs of Georgia in 1995-2001. Interview 06.12.2021

22 Amiran Gamkrelidze - Director General of the National Center for Disease Control and Public Health, First Deputy Minister of Health Protection of Georgia in 1997-2001; In 2001-2004 - Minister. Interview on 25.10.2021

23 After the collapse of the Soviet Union, there were 10 beds per thousand inhabitants. The average rate in the OSCE countries was 2.5 beds.

24 https://matsne.gov.ge/ka/document/view/29920?publication=35

It can be said that the privatization process failed.[25] Until 1997, only dental institutions and the pharmacies were privatized. According to the former Minister of Health, Aleksandre Kvitashvili, the then government failed to take political responsibility for the privatization and reduction of the number of clinics, because many people lost their jobs.

After the failed attempt, the issue of privatization and reducing beds was again on the agenda. In 1998, on the order of the World Bank, the American medical company "Kaiser Permanente" made another assessment of the current situation in the health sector,[26] followed by the restructuring program of hospitals, which was to be implemented within the third transaction of the World Bank's structural adjustment program. According to the program, the remaining state-owned health facilities were supposed to be self-financing (World Bank, 1999). As a result, the state-owned healthcare institutions changed their status and turned into limited liability and joint-stock companies. A hospital restructuring fund was created. The scheme of the geographical distribution of medical institutions was defined. Since hospitals and polyclinics were located in buildings in prestigious locations in Tbilisi, they had to be attractive as real estate to potential investors. Therefore, according to the recommendations, the second wave of privatization should have started in Tbilisi. Out of 8,770 beds in Tbilisi, 3,600 beds should remain. 12 hospitals were to be retained by the public sector, 7 hospitals were to be privatized (with the condition of maintaining the medical profile), and the remaining 27 were to be sold. The money received would be accumulated in the restructuring fund created under the Ministry of Health, from which compensation would be given to the victims left as a result of the restructuring or their retraining. In addition, this amount would be used for the renovation and development of strategic hospitals.[27] These recommendations were reflected in the health development strategy 2000-2009. According to the strategy, the state aimed to promote privatization in the healthcare system while seeing its role in promoting healthy living, immunization, and regulation, in health care facilities and research (Strategic Health Plan for Georgia 2000 - 2009).

The financing scheme also did not work. Due to the high rate of informal employment and unemployment, it was not possible to mobilize sufficient funds in the public healthcare fund.[28] The development of the private insurance system did not change the picture either. In 2003, only 14% of total healthcare costs were financed from public funds. The remaining part was represented by the out-of-pocket costs of the population.[29]

It is difficult to evaluate the reforms implemented in the primary healthcare system in this situation. Unfortunately, there is not enough literature on the topic. It seems that the main focus of

25 Aleksandre Kvitashvili - Minister of Labor, Health and Social Protection of Georgia in 2008-10. Interview on 16.10.2021. In addition, the general resistance of the public to the commercialization of the healthcare system and the insufficient commercial interest of investors can be mentioned as part of the environment hindering privatization of hospitals. Here we have to consider the new medical treatment evaluation system, which did not guarantee a quick and rich profit.

26 http://curatiofoundation.org/development-of-hospital-master-plan-for-georgia-1998-1999/

27 Amiran Gamkrelidze - Director General of the National Center for Disease Control and Public Health, First Deputy Minister of Health Protection of Georgia in 1997-2001; Minister from 2001-2004. Interview on 25.10.2021

28 The State Health Fund was established in 1995 and since 1996 the State Health Insurance Company.

29 https://data.worldbank.org/

both the specialists and the government was the reform of the hospital sector. The way this was done was through the idea that the polyclinic and district doctor of the Semashko Model, where each citizen was connected by the principle of strictly defined territorial distribution, should be replaced by a family doctor. This doctor was supposed to be the recordkeeper of the hereditary diseases of the family and the guarantor of continuous treatment.[30] The patient was allowed to freely choose a doctor. In our opinion, the privatization of polyclinics and the emergence of the possibility of changing doctors, in the absence of an electronic database of patients, became one of the reasons for the fragmentation of the healthcare system and the disruption of continuous treatment.

The fact that the full privatization of healthcare institutions could not be implemented before 2007 does not mean that this was not the main goal of the reforms in 1994-2003. They were a practically independent limited liability and joint-stock companies, only the land and building remained state property. Just because a medical treatment assessment was done does not necessarily mean that it was regulated with high quality. One is the price of a medical procedure, and the other is the number of performed procedures, which in the case of privatization to increase income creates a motivation for unnecessary medical intervention (Marion Grote Westrick, 2019).

7.2 MILITANT NEOLIBERALISM: 2004-2012

The process of complete privatization of medical institutions was the crowning achievement of the government that came as a result of the "Rose Revolution" in 2003. If before the World Bank, the International Monetary Fund, and other international donor organizations were the locomotive of neoliberal transformation, now the Georgian government had taken the initiative. The goal was to attract investments at any cost. This should have been done with even faster, large-scale privatization, complete deregulation of the economy, and minimizing the social responsibility of the state. Accordingly, areas, where the state is traditionally responsible in all societies, should be subordinated to market principles. The spirit of the government can be seen in the words of the then Minister of Economy and the main architect of reforms, Kakha Bendukidze: to demand something from the government is the same as letting a drunkard perform brain surgery.[31]

Almost all regulatory bodies and regulations have been cut or eliminated, be it for occupational safety, food safety, or the environment. The antimonopoly agency was also abolished. A flat tax was introduced instead of a progressive tax. The reforms were going much further than the international financial organizations had imagined. According to the IMF, it was not the regulations themselves that hindered investments, but the unpredictable legal environment.[32] In parallel with this position, the officials of the organization could not hide their admiration for the pace of privatization of the new government (IMF, 2004). The quintessence of neoliberal re-

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30 Amiran Gamkrelidze - Director General of the National Center for Disease Control and Public Health, First Deputy Minister of Health Protection of Georgia in 1997-2001; Minister from 2001-2004. Interview on 25.10.2021

31 "The Biology of Business" (in Russian), Vedomosti, Nov. 22, 1999. http://www.vedomosti.ru/newspaper/article/1999/11/22/12688

32 IMF, Georgia – Joint Staff Assessment of the PRSP Preparation Status Report, 27 June 2002.

forms was the so-called "Liberty Act". According to it, the government could no longer introduce new taxes or increase existing ones, except for excise. And according to fiscal rules, the deficit could not be more than 3%, and government spending was determined by a maximum of 30% of the GDP.[33]

The firm belief in the infallibility of the market also manifested itself in health care reform. For the government, health care was the same market commodity as, for example, vegetables.[34] Therefore, the pressing goal of reducing public spending on health care coincided with the ideological view that the market could better provide quality health care.

In 2006, within the framework of the World Bank's Structural Reforms Support Program, the organization "Scandinavian Care" once again studied the Georgian hospital sector and issued recommendations. As there were already negative experiences from past reforms, the study warned the Georgian government that privatization would lead to further fragmentation of already fragmented healthcare. It would break the link between the primary healthcare system and hospital care. It would lead to "perverse" consequences of the implementation of market principles in health care, which would put a heavy burden on patients. Therefore, there was a need to strengthen the regulatory framework and increase public funding of health care (Scandinavian Care, 2006).

The then government did the opposite. As a result of the reforms, the number of licenses was reduced including in health care. Only 42 of the 302 licenses remain (Tata Chanturidze, 2009). The social tax was eliminated; therefore, the state health insurance company was also eliminated. It was replaced by private insurance companies. From now on, the state only financed a limited insurance package for children, students, pensioners, policemen, soldiers, teachers, and citizens living in extreme poverty. The rest of the population either had to pay for the service out of pocket or purchase the insurance package themselves. As a result, half of the population remained outside public financing. Among them were those unemployed who could not be included in the extreme poverty category due to not meeting the criteria.

The financing reform was directly related to the complete privatization of hospitals. There was a belief private insurance companies would perform the function of controller and regulator of healthcare services better than the state.[35]

Based on the general plan for the restructuring of hospitals approved in 2007, the complete privatization of state medical institutions began.[36] By 2009, 80% of institutions were already privatized (Tata Chanturidze, 2009).

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33 „ეკონომიკური თავისუფლების შესახებ | სსიპ "საქართველოს საკანონმდებლო მაცნე", About Economic Freedom JSC „Legislative Herald of Georgia" (matsne.gov.ge)

34 Regarding food safety, the then Minister of Economy, Kakha Bendukidze, said that if someone were to get poisoned in a restaurant, they simply should avoid the restaurant next time. Therefore, he did not see the need for a food safety administration (European Stability Initiative, 2010).

35 Zurab Chiaberashvili - Minister of Labor, Health and Social Protection of Georgia (2012). Interview 06.10.2021

36 Resolution of the Government of Georgia N11. On the approval of the general plan for the development of the hospital sector. January 26, 2007 საქართველოს მთავრობა – საქართველოს მთავრობის 2007 წლის დადგენილებები (www.gov.ge)

The reform became known as "100 hospitals."[37] As a result of privatization, the number of both institutions and beds had to be reduced. 77 new hospitals with 4,185 beds were to be built in Tbilisi, and 23 hospitals with 3,615 beds in the regions. The state, without the obligation to maintain the profile, would transfer the existing hospital building in the form of real estate to investors. Instead of paying with money to the budget, the investor was required to build a new private hospital.

The hospital plan did not proceed at the desired pace. Investors showed less interest in real estate in the regions. In addition, after the 2008 Russia-Georgia war, the total volume of investments decreased. To speed up the reform, the government allowed insurance companies, and later pharmaceutical companies, to build and manage hospitals. There was a vertical integration of the healthcare units, which were supposed to control and hold accountable each other Obviously, this circumstance harmed the quality of services provided to patients. In 2013, 42% of hospitals were owned by insurance companies, 29% by individuals, and 18% by other types of commercial organizations. Only 8% was owned by the state (Transparency International Georgia, 2012).

Could the state reform, for example the "100 New Hospitals," with its funds instead of through privatization?

According to the former Minister of Health, Aleksandre Kvitashvili, the average cost of creating one bed in Georgia is 40,000 GEL or about 25-28,000 dollars (according to the standard of the European Union, for example, Bulgaria). The country needed a total of 7,500 beds under the "One Hundred Hospitals" program. It was about 187 million in total.[38]

In 2007, compared to 2003, the gross national domestic product of the country increased by almost 7 billion, from 3 billion 991 million to 10 billion 175 million US dollars. Taking into account the exchange rate of GEL at that time,[39] this roughly amounted to 17 billion 297 million GEL. In 2007, the budget was set at 3 billion 712 million GEL, which was only 21% of the total national domestic product. That is, even in the case of implementation of 100 new hospital projects at once, the state would need roughly 320 million GEL, which would increase the state expenses by only 2% to the total national domestic product. But this was unacceptable for the neoliberal state.[40]

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37 Government of Georgia - News of 2007 (www.gov.ge)

38 Aleksandre Kvitashvili - Minister of Labor, Health and Social Protection of Georgia in 2008-10. Interview 16.10.2021.

39 In 2007 the average value of 1 dollar was 1.7 GEL.

40 On average, worldwide government spending per year is 35-40% of GDP. www.imf.org

7.3 NEOLIBERALISM WITHOUT CONVICTION: 2012 –

On October 1, 2012, the government changed. Since a large part of the population could not afford healthcare costs, one of the main promises of the political force that won the elections was to reform the system and develop a universal healthcare program.

In the first stage, the healthcare financing scheme was changed. Instead of private insurance companies, the Ministry of Health was now the single-payer. As a result, financial barriers to access have been reduced and services have increased particularly for people previously not covered by public funding. Achieving this result was possible at the expense of a rapid increase in state funding of healthcare. If in 2012 this figure was 400 million, in 2019 it reached 1 billion 300 million (Galt & Taggart, 2020). Therefore, it is difficult to discuss this change as a fundamental reform.

Healthcare costs were increasing year by year, but it was not possible to provide the population with full-fledged healthcare services and reduce the share of out-of-pocket payments at the desired pace. To contain costs, the state returned from the principle of universal financing to a targeted financing scheme in 2017. The full package of healthcare financing was retained only for the socially vulnerable, internally displaced persons, children, students, teachers and pensioners. And for the rest of the population, the state-sponsored healthcare package was differentiated according to income tax amounts (Ketevan Goginashvili, 2021). The share of out-of-pocket payments in current health expenditures decreased from 80% (2005) to 66% in 2008, then increased to 76% in 2011, and decreased again to 48% in 2018, which is much higher than the same figure in the European region. (30%) (Ketevan Goginashvili, 2021). This is against the backdrop of the fact that the state funding of health services has almost tripled since 2007.

If we compare the amount of state spending on healthcare in relation to the total national domestic product, in Georgia this figure is still low and amounts to 2.8%, while the average figure in the European region is 4.9% (Ketevan Goginashvili, 2021).

The fact that universal coverage of the population with a full-fledged healthcare package could not be implemented is not only the lack of public spending on healthcare services. The main problem is the commercialization and deregulation of the system. As the size and quantity of medical facilities required by the country are still not regulated by the state, in recent years, new, small, often ill-equipped medical facilities have sprung up with the hope of guaranteed profits generated by public spending, which increases costs and further exacerbates the fragmentation of the system.

After 2012, the number of regulations in force in the country increased slightly including in the direction of labor safety, food safety, ecology, and construction standards. But if we look at the context, we will see that their implementation is not related to the change of the general economic course by the government, but the obligations assumed within the framework of the Association Agreement[41] with the European Union. At the same time, the flat tax

41 In 2014, Georgia signed an Association Agreement with the European Union.

is maintained. There is still no minimum wage, companies are exempt from tax on reinvested profits, and the Economic Liberty Act is still in effect.

Despite the increase in public spending on healthcare, the degree of commercialization of the system has not changed. Therefore, taking into account the general context mentioned above, it can be said that the government has remained committed to neoliberalism.

8
OVERVIEW OF RESULTS

What follows are our conclusions in terms of beneficiary groups. We consider three groups of beneficiaries:

1. Population;
2. Health Workers;
3. Provider - clinic owners and managers, doctors engaged in individual practices;

The analysis of the indicators discussed above reveals that the population has seen more losses than benefits from the above-mentioned transformation of the healthcare which manifests in the following:

- Average death rate from 8 per thousand to 12 per thousand or 1.5 times increase;
- A slight increase in the indicator of life expectancy from birth;
- 2.3 times increase in morbidity level;
- Incessant increase in healthcare costs

There are many reasons for these undoubtedly negative trends, but one of the main reasons is the almost ninefold decrease in the number of preventive examinations, which ensures the detection of diseases at an early stage and relatively easy treatment.

As a result of the transformation that took place over the past 30 years, the largest part of the health workers also did not benefit. Working conditions for medical staff worsened, and real income decreased. Despite the small number of nurses, their salary ranges from 312.50 GEL to 633.75 GEL (Solidarity Network, 2021). The average monthly salary of employees in the medical field still lags behind the average salary in the business sector (Galt & Taggart, 2020).

As for the state, it was freed from a very large amount of assets that would've required quite large expenses to operate. As a result of the transformation, hospital beds were reduced by 2.4 times. At first glance, this is a benefit, but it can be considered as a benefit only in the financial dimension, and only if we consider the state as a normal commercial structure focused on profit, without any social obligations.

Pharmaceutical companies, owners of private practices, clinics, and investors are probably the only groups that have benefited from the results of the transformation of the last 30 years. Consolidated spending on healthcare has been steadily increasing since 2000, and in 2019 it was almost 4 times higher than in 2000. In this situation, the increased costs mean an increase in the profits of the clinics and the pharmaceutical sector (Galt & Taggart, 2200).

In conclusion, we can say that a commercialized, profit-oriented healthcare system, especially under the current actual cost-reimbursement system, increases costs, fragments the system and encourages the creation of small commercial medical facilities, which further increases healthcare costs; increases the motivation for unnecessary high-tech expensive medical interventions.

Due to its labor-intensive and less technology-intensive nature, primary health care is not prioritized especially in the conditions of the existing modest capitation payment system; Underdeveloped primary health care, along with the deterioration of social conditions, increases the pressure on the hospital sector; Fragmentation of funding sources and providers prevents integration of outpatient and hospital services and continuous care, which in turn creates uncertainty for patients and bureaucratic barriers; Concentrates healthcare facilities and services in settlements with a large population and high purchasing power, where profits are guaranteed; Sub-optimally distributes healthcare costs. As a result, a large part of the population remains without comprehensive medical care.

It should be noted that the trend of the inflow of private capital and the introduction of market mechanisms is also characteristic of the healthcare systems of developed, industrialized countries. Interviews, recommendations and reports of international financial organizations show that international financial organizations have contributed to the implementation of these reforms. Was it due to Georgia's budget deficit and macroeconomic parameters, or due to ideological factors, is the subject of another study. In the first period, it can be said that the prevailing ideology supported the reforms caused by the lack of state funds. Considering the nature of general reforms, a more ideological component prevailed in the second stage of healthcare reform. In the third stage, despite the significant increase in budget funding, the system remained faithful to the market.

9
RECOMMENDATIONS

First, we must agree that the starting point of the healthcare system is human health, not commercial activity. In healthcare, it is not financial gain, but rather ethical and existential factors that must drive motivation and performance.

Human health is determined not only by proper medical infrastructure, but also by social determinants of health: decent housing, employment, education, nutrition, hygiene. Studies confirm that the impact of medical care on human health does not exceed 12-18%. Therefore, the care of the state should be directed, first of all, to the provision of appropriate conditions.

And now we will touch on several that can improve the functioning of the healthcare as it currently exists.

ACCESS TO MEDICINE

According to the research on the pharmaceutical market by the Competition Agency of Georgia, the price of medicines in Georgia is much higher than in other countries (National Agency of Competition of Georgia, 2021). 69% of the population's out-of-pocket costs are for medicines (Ketevan Goginashvili, 2021). The reason is not only the integration of retailers and wholesalers and healthcare providers often under one business entity, the commercial interest between doctors and pharmaceutical companies, or the unpopularity of generics, but the failure of the system as a whole. The wholesale purchase of medicines is determined not by systematic and clinical research, but by the interest in obtaining commercial benefits arising from the asymmetric information[42] of the health sector.

In addition, the fragmentation of purchasing organizations due to economies of scale further increases the wholesale purchase price. And the underdevelopment of the primary healthcare sector because of the commercial interest of doctors and private hospitals, makes patients hostage to expensive medicines. Consequently, neither the promotion of generics nor

42 Healthcare economy is characterized by asymmetric information. Usually, the patient does not know what type of treatment they need, they are relying only on the good faith of the doctor. For example, when we buy food, we know its taste and properties, so it is difficult to deceive us. In health care, we do not have this information, only the doctor does. This can become the basis of excessive spending and deception for the sake of profit. In addition to information asymmetry, the health economy is characterized by another peculiarity - for example, if I can roughly determine when I will need a product and take into account the costs of its purchase in advance, I cannot determine what disease I may get or when I will get sick. That's why I can't determine either the time of the expense or its volume, unlike other commercial relationships. Because treatment is expensive and involves unexpected costs, collective responsibility systems are created to provide health care to prevent sudden impoverishment or inability to pay.

the introduction of only the external reference pricing system[43] can eliminate the problem. Flattening informational asymmetry and reducing prices are feasible only based on evidence-based consolidated procurement of medicines by the state and the establishment of ceiling prices in the retail market. As a result, the wholesale purchase price will decrease and the wholesale and retail segments will naturally be separated. Profit margins would be determined for retail trade facilities to carry out their activities. As a result, the optimal integration of medicines into state programs will take place.

HEALTHCARE FINANCING

The medical market is not an ordinary consumer product market where competition gives better results. Here the price of entering and exiting the market is much higher. Therefore, where the medical capacity required for the healthcare system is not defined and regulated, competition in the market between commercial organizations, both medical facilities, and insurance companies, fragments the system, increases both capital and operational costs, and leads to oversupply. This increases the number of medical facilities and beds, often unjustified expenditure on medical equipment, and expensive and inadequate insurance packages.

Although our study was mainly devoted to the privatization of medical facilities, this part of the recommendations concerns financing. Today's healthcare system is characterized by diverse, disproportionate, and fragmented purchasing agencies. Funding sources are scattered in the central, local budget and private insurance companies. About 50% of the costs are paid by the patient out of pocket. Given the abundance and fragmentation of provider clinics, this circumstance prevents full communication between the buyer and the service provider and prevents the consolidation of information about the patient's condition and continuous treatment. In addition, it weakens the state's ability to develop and fully implement health policy. It also creates additional bureaucratic barriers for patients and imposes additional costs on them. Therefore, it would be better to concentrate the procurement in the central budget, considering leaving the authority to purchase extra medical service to the insurance companies.

Due to several factors, the social medical insurance model would likely not be successful in Georgia. Leaving aside the historical and cultural factors, the high rate of unemployment, and the specific share of the informal sector of the economy are still serious factors hindering the full implementation of this system. From the point of view of social justice, it would be beneficial to introduce a progressive income tax, which would fairly distribute the costs incurred by society on healthcare.

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43 External reference pricing policy: A Possible Mechanism for Regulating Drug Prices for Georgia Curatio International Foundation (curatiofoundation.org)

OPTIMIZATION OF COSTS

First, evidence-based medical capacity needs to be determined/regulated and national health goals developed. Without these conditions being met, even under public funding due to the same informational asymmetry, profit-oriented medical institutions will always be predisposed to high-profit margins, inappropriate medical interventions, and oversupply. They know that the state still pays. A clear proof of this is the excess of cesarean sections, which has been confirmed[44] by numerous studies, including in Georgia (Ingvild Hersoug Nedberg, 2020).

Therefore, the main way to optimize costs is not the reduction of beds but by creating a proper healthcare budget. Because the financial situation of the population is difficult, and the need for out-of-pocket payments is high, we cannot know exactly how many beds or how much infrastructure we need. This should not be determined by mechanical comparison with the same indicators of other countries, but by research. To optimize budget expenditures and reduce the pressure of out-of-pocket payments, it would be useful to implement a funding method for the diagnosis-related group (DRG) (John C. LangEnbrunner, 2009). However, the implementation of the DRG method would not affect the unnecessary and expensive medical interventions made by private clinics, because to maintain the profit margin, the emphasis would be placed not on the cost of medical intervention, but the quantity. Within the framework of the general budget, the marginal budget of the hospital would be determined from the beginning, taking into account both current and capital costs between the state and the service provider. Based on selective contracting, only those clinics that meet these criteria would be included in the state financing program. To increase motivation in this model, a system of bonuses related to the performance of indicators defined by the state can be considered.

PRIMARY HEALTH CARE

Primary health care has become a kind of Achilles' heel for the Georgian healthcare system. Here too we face the problem of high fragmentation. Without the elimination of fragmentation, the increase in capital financing and the modernization of equipment and infrastructure of the primary medical institution will not give us the desired result. The function of the primary healthcare system is not only to detect the disease in the early phase, but it is a kind of history file of the patient's health condition. In the absence of a unified state information digital database, information between different private or state medical companies from out-patient providers to the hospitals is rarely reached. Given the fragmentation of funding sources mentioned above and the chaotic system of contracting providers by the purchaser, it can be assumed that patient information does not fully flow from one level to another, which is vital for appropriate and continuous care. Already, due to low-profit margins, private medical companies are less focused on investment and development in primary medicine. Therefore, it would be best for the state to gradually buy out private institutions and introduce a performance-based financing system.

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44 Hoxha I, Syrogiannouli L, Luta X, Tal K, Goodman DC, da Costa BR, Jüni P. Caesarean sections and for-profit status of hospitals: systematic review and meta-analysis. BMJ Open. 2017 Feb 17;7(2). https://pubmed.ncbi.nlm.nih.gov/28213600/

To detect disease in its early phases and prevent complications, especially at the workplace, proactive examination and the dispensary system should be rehabilitated.

WORKING CONDITIONS OF HEALTH WORKERS

All studies indicate that the salaries of low and mid-level health workers are very low. Therefore, the minimum wage should be determined at the sectoral level, and the scope of work of health workers should be regulated. Otherwise, medical brain drain will become inevitable.
Privatization and the motivation of guaranteed profits in the early stages of reforms may have succeeded in rapidly modernizing and retooling the medical infrastructure. But we must not forget that this was done mainly through budgetary funds. The reforms mentioned above would minimize the possibility of unnecessary and expensive interventions by private companies, the freed-up funds would increase universal healthcare coverage, decrease the rate of out-of-pocket payments, system integration would take place, and the condition and productivity of low- and middle-ranking health workers would improve, and the state would make it easier to implement policies, at least in such a spontaneous situation as it is a pandemic.

Implementation of the proposed reforms may reduce the interest of private companies in medical activities. The state may automatically be faced with the necessity of gradual buyout of private institutions, which is completely possible in the medium term and beneficial for the healthcare system.

In conclusion: the goal of healthcare is first human health and then cost optimization. To the extent that the state's responsibility towards citizens is equal and universal, the trust between people and state institutions is greater (Bo Rothstein, 2003). The pandemic and the flaws in the vaccination process have proven this once again. Although the system is tired of continuous reforms, the real reform should be devoted to increasing the role and responsibility of the state, both in terms of financial provision and implementation of health care services. Otherwise, a profit-oriented commercialized healthcare system will tend to produce sick people for profit.

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