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Meta-Analysis

Dynamics of changes in expenditures on medical services over the last ten years, their structure in parallel with the dynamics of changes in health indicators

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ABSTRACT

Despite increasing public spending on healthcare in Georgia, the country still needs to catch up to the world health organization's (WHO) recommendation of allocating at least 15% of public expenditure on healthcare. As a result, the population must pay high medical service costs. Additionally, the quality of healthcare in Georgia needs to improve. Chronic diseases are particularly prevalent, and lifestyle risk factors such as tobacco and alcohol consumption, low physical activity, and unhealthy diet contribute to their development. This study aims to assess the cost-effectiveness of state programs in Georgia and compare them with the best working model of world health recommendations. It also aims to identify factors contributing to the development of chronic diseases in Georgia. The research methodology is a meta-analysis, where have been used reports of the national health of Georgia, there have been discussed the results of all state programs operating in Georgia-to analyze the dynamics of changes in health indicators in Georgia over the last ten years. The study finds that public funding for healthcare in Georgia is increasing yearly, but the country still needs to catch up to the WHO's recommendation. The population must pay excessive costs for medical services, and the quality of healthcare remains low. Lifestyle risk factors such as tobacco and alcohol consumption, low physical activity, and unhealthy diet contribute to developing chronic diseases in Georgia. The study also finds that the cost-effectiveness of state programs in Georgia could be better compared to global best practices. The study concludes that despite increasing trends in public funding expenditures in Georgia, healthcare quality remains low. The development of chronic diseases in Georgia is due to lifestyle risk factors such as tobacco and alcohol consumption, low physical activity, and an unhealthy diet. The cost-effectiveness of state programs in Georgia needs improvement, and global best practices should be considered. The study highlights the need for increased public spending on healthcare in Georgia and better resource utilization to achieve better health outcomes.

Keywords: Healthcare services, Local government, Self-government, Public healthcare, Insurance

INTRODUCTION

Actuality of the topic

Georgia belongs to the group of low-middle income countries. Gross domestic product per capita in 2016 was $ 3853. Relative poverty in the country averaged 60%, up from 20.6% in 2016; Unemployment rates at 11.8%. Despite the significant growth of health indicators in recent years, Georgia ranks last among European countries in the share of health expenditures-both in total health expenditures (36%-2015) and GDP (in 2015-2.9%) and in the state budget (in 2015-8.6%).

Life expectancy at birth has improved significantly since the second half of the 1990s and reached to 72.7 years by

2016. The situation has significantly improved in terms of reducing maternal and child mortality. The under-five mortality rate in 2016 was 24.9 per 1,000 live births. In 2016, it was 10.7 and the maternal mortality rate in 2000 was 40.2 per 100,000 live births.

Non-communicable diseases are the leading cause of death. Thirty-five percent of deaths in 2016 were caused by diseases of the circulatory system and 13% by cancers. Respiratory diseases also play a significant role in mortality, accounting for 38-40% of all deaths.

The introduction of the universal health care program in 2013 has led to universal coverage of the population through state-funded medical services. The European bureau of the WHO recognized the universal health care program as a successful project in the 2015 health report of European countries. The best state of health is important for the well-being and socio-economic development of the country's population. That is why the dynamics of changes in health care costs and the dynamics of changes in health indicators at the same time have shown that all the steps taken in the form of health financing-the introduction of certain programs, have a positive effect on achieving a common goal such as prolonging life and reducing mortality.

The introduction of universal health care has significantly increased access to medical services in the country, and outpatient referrals in dynamics have been as follows: In 2012-2.3%, in 2015-4.0%. Hospitalization per one hundred people in 2012-8.0% and in 2015-12.6%. Practice has shown that the plan for regionalization of perinatal services developed in cooperation with international organizations (USAID, UNICEF, UNFPA) is a step forward in terms of improving the health of the population as well as health programs tailored to the needs of people living in mountainous regions and areas adjacent to conflict zones and people with disabilities.

Research goal

It is the dynamics of state expenditures in Georgia, the absorption of state programs by the population, and finally how the programs that the state creates for the health care system have affected the quality of patient services or the improvement of their health.

The following systemic problems can be overcome in terms of pharmacy regulation to protect the safety of patients-irrational pharmacotherapy, underuse of generic drugs, insufficient use of prescription mechanism, prohibitive cost of medicines and aggressive marketing of the pharmaceutical industry.

The cost of medicines is a heavy burden on the population, which has been increasing increasingly over the last 10 years, and studies have shown that it accounts for almost half of the costs incurred by patients on health care. The reform implemented by the state to finance medicines for diabetics over 65 years of age, as well as to provide 50% of medicines for pensioners and people with disabilities in chronicle diseases (cardiovascular system, diabetes T2, thyroid pathologies, pneumonia) will reduce the percentage of out-of-pocket expenditures on medications. It is necessary to raise public awareness about the problems of drug overdose (healthy living is the biggest cure) and to promote use of generic medicines.

METHODS

The research methodology of my paper is meta-analysis, and the paper examines the cost-effectiveness evaluation of all state programs in Georgia and compares them with best practice model of world health recommendations.

An important indicator of health care funding in the country is the share of total health care expenditures, government spending on health care. Total expenditures on healthcare include both public and private expenditures. According to WHO, public health expenditures should account for 40% of total health care expenditures. Public spending on healthcare in Georgia is 29.8%. Consequently, the share of state funding is significantly below the threshold set by the recommendation of the WHO. Compared to Georgia, the WHO recommendation threshold was exceeded by countries such as Armenia (41.7%), Kazakhstan (53.1%), Ukraine (54.5%), Kyrgyzstan (59%).

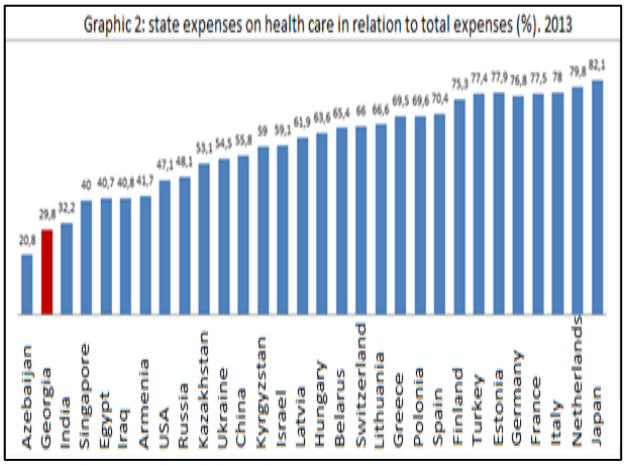

Figure 1: State expenses on health care in relation to total expenses (%) 2013.

Table 1: Share of total expenditures on health in GDP, Georgia.

Year	Total costs for healthcare (Million GEL)	GDP %
2006	1159.6	8.3
2007	1386.6	8.3
2008	1660.7	9
2009	1818.5	10.3
2010	2096.5	10.2
2011	2292.4	9.4

Important indicator of health financing is government spending on health in relation to GDP. According to health recommendations, share of state expenditures on GDP in should be at least 5%, which is 2.2% in Georgia.

In low-income countries, share of public spending on GDP in terms of GDP is up to 2%, although in this respect Georgia lags Kazakhstan (2.3%), Kyrgyzstan (3.9%), Belarus (4%) and Ukraine (4.2%) in 2015. Gross health expenditures relative to GDP show share of health care in country's total revenues. By 2011, it was 9.4%, which means that Georgia spends as much of its economy on healthcare as Europe does. Such high share of funds for health care from GDP, due to factors as unreasonable prices for innovative technologies, medicines.

A significant share of healthcare expenditures in Georgia is 65%-70% of private expenditures incurred by the population, which means that healthcare in Georgia is not considered a proper state policy priority.

RESULTS

Practically, the study of national health reports in Georgia revealed that health care in Georgia is not considered a proper state policy priority.

Table 2: Private spending on healthcare.

Years	Private spending on healthcare (Million GEL)	Share of private health care expenditures in total health care expenditures	GDP With prepaid schemes (Million GEL)	GDP With private advance payment schemes (%)	GDP other private expenses	Private expenditures on health care per capita GEL
2006	846.3	73.0	9.8	1	72	192
2007	1003.4	72.4	20.8	3	70	229
2008	1144.1	68.9	24.5	5	65	261
2009	1294.8	71.2	47.5	4	68	294
2010	1551.7	74	55.7	3	71	348
2011	1806.8	78.8	65.7			403

According to such a high share of private expenditures in total health expenditures, Georgia ranks eighth in the world. As a result, many families in Georgia are forced to refuse the necessary medical services because they cannot afford to pay for these services.

In 2016, there were 3.2 million people receiving outpatient services under the universal program. The number of visits has increased to 12.5 million to date. The number of referrals to health care service centers exceeds 25,000 every month. There were 262,665 applications for planned services during year fixed in 2016. And remunerated amount of the program was 667 552 415, 41 GEL. In addition to universal health care, latest programs are being added in Georgia, which we will gradually discuss: The hepatitis C program was launched in 2015.

The second phase of hepatitis C was launched in 2016, where geographical access to users has increased as all patients have been included in the program, regardless of the severity of the liver damage. By the end of 2016, more than 23,000 beneficiaries had been surveyed before starting treatment and monitoring. At the same time - veterans, people with disabilities, incurred expenses incurred by patients without co-payments.

In 2016, 3610 beneficiaries received outpatient services under the HIV/AIDS program, and 754 patients were hospitalized.

By the end of 2016, 4,400 people were registered under the "implementation of substitution therapy" component for drug addicts, 419 received inpatient detoxification.

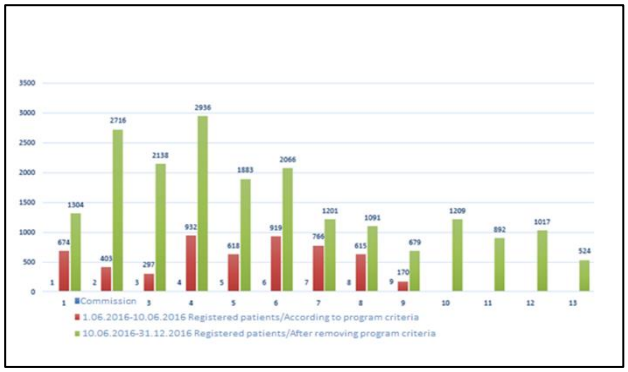

Figure 2: The hepatitis C program was launched in 2015.

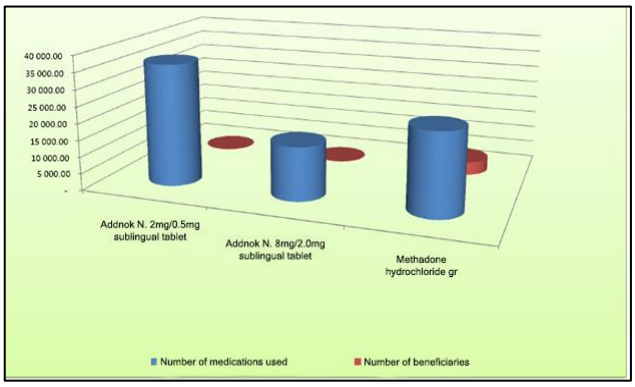

Figure 3: Implementation of substitution therapy

In 2016, with the technical and financial support of UNICEF, an electronic accounting system was introduced - an electronic module for monitoring maternal and new-born health. In the same year, 660 45 beneficiaries received services under the same program (158,114 visits were made); early detection of genetic pathologies was identified in 4509 beneficiaries (out of 4629 persons); newborns, children screening for hypothyroidism, phenylketonuria, hyperphenylalaninemia and mucoviscidosis-55,891 beneficiaries (total cases 54,489); 3136 cases (3866 beneficiaries) were registered within the high-risk treatment of pregnant women and mothers.

In 2016, 21,140 beneficiaries received outpatient services in tuberculosis program (cases 420691) and inpatient services-2047 beneficiaries (beds 98213).

The 5338 persons received outpatient services in both types of diabetes in 2016.

In case of pediatric diabetes - 903 beneficiaries.

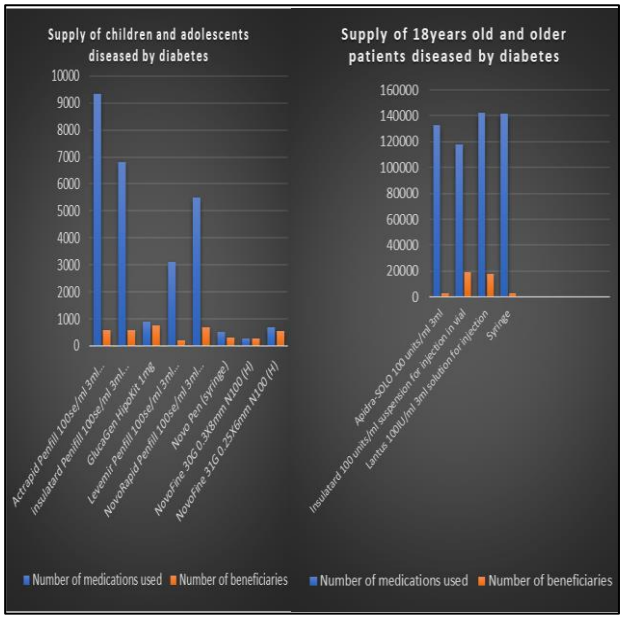

Figure 4: Supply of children/18 years old and adolescents/older patients diseased by diabetes.

In 2016, 22,353 beneficiaries received outpatient mental health services, and 5,248 beneficiaries received inpatient psychiatric services for children and adolescents.

In 2016, 133 beneficiaries under the age of eighteen received pediatric once hematology services. Incurable patient services-special palliative care services were provided to 892 beneficiaries (visits 17417) and 991 beneficiaries within the inpatient service.

The programs funded by the ministry of health, and the dynamics of the results in 2012-2016 are as follows.

Budget of the ministry of health for 2012-2016.

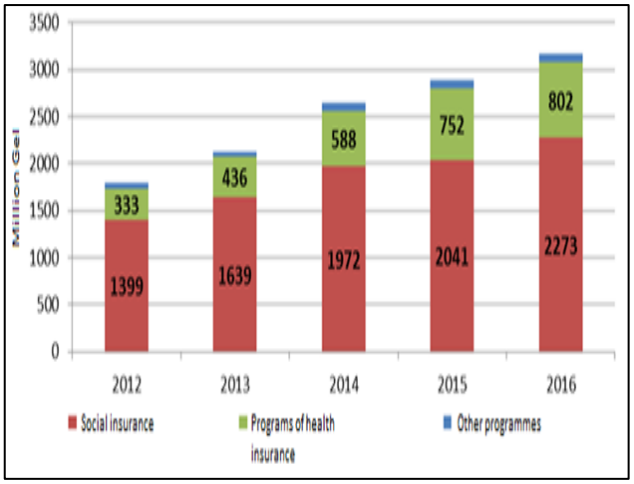

Figure 5: Budget of the Ministry of Health for 2012-2016.

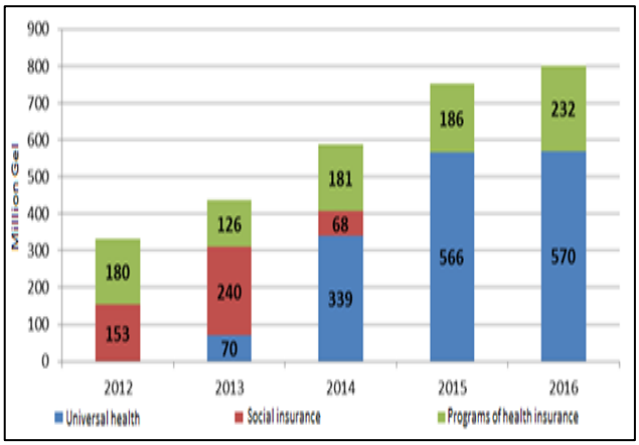

Figure 6Budget of the Ministry of Health for 2012 – 2016.

Funding has increased from 1.8 billion to 2.9 billion since 2013 and the number of outpatient visits has reached 12.5 million, so the structure of patient services is as follows:

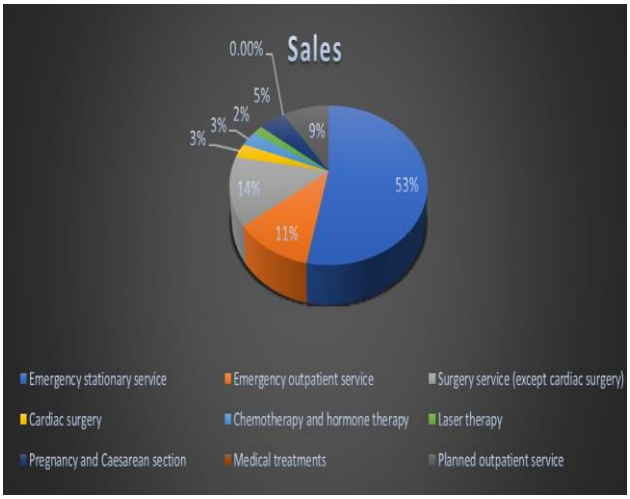

Figure 7: Structure of patient services.

Although funding is increasing from year to year, the goal of increasing the budget is only one thing-to improve the health of the population, reduce mortality and reduce the number of diseases. The amount of money spent on health care in this regard can really be considered as an investment in human capital. But outpatient referrals are still low and inpatient services are great. Expenditures on health programs account for 25% of the ministry's budget. 802 million GEL, of which 570 million GEL is spent on universal health care program.

Although it has been statistically proven that the increase in access to medical services is undeniable, access to medicines remains a problem. This problem can be solved by targeted and effective spending of funding allocated to the program. Studies have shown that patients who frequently consult family physicians had 33% lower health care costs and 19% lower mortality (than when referring to specialists, when health care costs are much higher - even if due to unnecessary examinations or even due to the expressed trust in them, in addition to increased cost of prescribing medications). In Georgia, it is necessary to develop cost-effective analyses of health programs, which implies the need for the primary health care and establishment of a healthy lifestyle of patient. For example, anti-tobacco measures will significantly reduce healthcare costs (due to cardiovascular disease) as well as prevent heart disease. This is why patient utilization should be increased in primary care dispensaries. Studies have shown that 22% (of those registered) applied to the outpatient clinic in 2014 and when the need arose. Consequently, disease prevention and planned outpatient monitoring will not take place.

Low referrals can lead to aggravation and complication of diseases. For example, anti-tobacco measures will significantly reduce healthcare costs (due to cardiovascular disease) as well as prevent heart disease. This is why patient utilization should be increased in primary care dispensaries. Studies have shown that 22% (of those registered) applied to the outpatient clinic in 2014 and when the need arose. Consequently, disease prevention and planned outpatient monitoring will not take place. Low referrals may lead to late detection of diseases, leading to increased costs for the next stage of treatment. Practical studies have shown that due to the excessive cost of medicines, target and age groups are unable to go to the doctor in many cases due to lack of funds. The idea of introducing a generic prescription system and a partial funding package for generic medicines is undoubtedly true in terms of cost-effectiveness.

Thus, comparing the costs of medical services over the last 10 years, their structure and health indicators-the following conclusion can be drawn that access to health care has increased compared to previous years, public health measures have increased. A health package has been created that covers the entire population, but: the programs are still being refined and studied. Evaluation criteria for its improvement are as follows: 1) Increasing financial access to public health and medical services; Creating a fundamentally affordable health insurance package based on patient needs, which also addresses the need for generic medications. 2) Development of medical infrastructure according to the needs of the population. Development of health information system, improvement of the remuneration system of medical service providers. Targeted use and quality control of medications. 3) Reducing the poverty and vulnerability of the population, improving the management mechanisms of the social system of the population, improving the pension provision of pensioners. Improving labor-related management mechanisms (Industrial trauma, etc.) Establish a system for assessing, planning, and delivering social service needs. Justification of priority: Low outpatient referrals 1.6% compared to Europe (7%) In case of illness 49% of the population does not consult a doctor, which leads to an increase in the vulnerability of the poor. In the case of hospitalization, the cost of out-of-pocket payments for the poor stagnates 2.8 times the cost of their income. And due to the excessive cost of medicines, more than 43% of the population does not go to the outpatient clinic. (And in extreme cases, patient goes to the doctor to get inpatient services for free treatment - which significantly harms both the state budget and the patient's health) The level of professional human resources is still low. The infrastructure of state-owned clinics is outdated, and the level of public administration efficiency is low. There are substandard medicines in circulation, 16% of the Georgian population is below the poverty line, working conditions are improving-which will lead to a reduction in industrial diseases.

The largest share of new cases is recorded in 2013, in parallel with the introduction of universal health care. Which is related to the increase in the number of people applying to outpatient services for outpatient services. Despite a wide selection of sophisticated technologies and medicines, 500,000 people die each year. Myocardial infarction is 62% of all cardiovascular diseases and ranks first. Mortality rates have dropped by 12% due to recent heart surgeries.

Recently, cases of intensity of respiratory diseases have become relevant, which is related to air pollution and tobacco consumption. In 2013, FKD was the third most deadly reason in Georgia. By 2015, FKD accounted for 70% of all deaths in Georgia.

Diabetes is the third leading cause of death according to world statistics. A total of 90,787 patients were registered in Georgia by 2015 including 20,955 first identified. The morbidity trend was growing in 2011-2015, which was related to the increase in outpatient referrals amid the proliferation of state programs and prophylactic examinations. Also important is the structure of f/g disease over the years. Here, too, the involvement of state programs in outpatient clinics played a significant role.

Based on my research and WHO recommendations, it can be concluded that despite the growing trend of changes in public funding expenditures in Georgia over the last 10 years, there are gaps in both management and misallocation of funding. Accordingly, the planning scheme of state programs should be improved, as well as the mechanisms for implementation in the target structures. The structure of the spread and solution of all major diseases was studied, in parallel with the dynamics of changes in health indicators, and it was found that the proper work of primary health care structures will really protect the society in different areas from complications of diseases. It is necessary to promote public awareness of risk factors (such as weight correction, healthy eating, smoking cessation, physical activity). Every person can make the right choices to maintain and improve their health. Unfortunately, regular population surveys are not conducted in Georgia to assess the prevalence of these risk factors, the knowledge of which and the development of a plan to reduce them are vital strategies for impacting the leading causes of mortality and morbidity. The way to solve the problem is the awareness of the beneficiaries, especially the studies showed that there is a general awareness among the beneficiaries about the functioning of the program, but there is low awareness about the program and funding of the medical services offered under the program. Fifty-two percent of respondents do not have information. Fourteen percent own partial and 34% own full information. To the question - what do you know about the universal health care program,

It is necessary to put on the agenda the development of prophylactic medicine, which is aimed at improving especially problematic aspects, since we have an excellent resource for this-in the form of primary health care centers; patient-oriented leaflets should be developed, and information should be disseminated about healthy lifestyle and modified risk factors. It is only necessary to formulate and develop appropriate policies from the state. There is also a need for a comprehensive approach to the population and important-what we need to keep in mind is that disease-this is a theoretical field, and illness-an imagination based on experience, which in many cases can be avoided by preventive measures. I see two main strategies for disease prevention and health promotion-1) Population strategy-Aims to reduce risk to the general population. 2) Strategy of high-risk groups - the goal is to prevent this or that problem in high-risk individuals. The vision of the Georgian healthcare system to improve the situation is as follows:

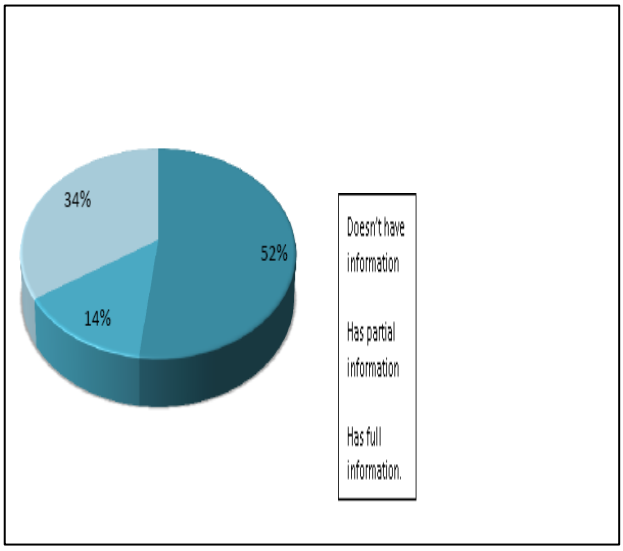

Figure 8: Patients knowledge about the universal health care program

Table 3: The vision of the Georgian healthcare system to improve the situation.

Indicator	Basic	Target 2013
Life expectancy at birth	72.7 (2016 GEOSTAT)	No less than 76
Average life expectancy for a healthy life	66.4 (2015 WHO)	No less than 70
Mortality rate for children aged 0-5 years per 1000 and live births	10.2 (2015 NCDC AND PH)	6
Neonatal mortality per one thousand live births	6.1 (2015 NCDC AND PH)	5
Maternal mortality rate per 100,000 live births	32 (2015 NCDC AND PH)	12
Adolescent birth rate per one thousand women aged 15-19 years	51.0 (2015 NCDC AND PH)	Decrease by 40%
The incidence of HIV / AIDS per 100,000 people	19.2 (2015 NCDC AND PH)	1.25
Tuberculosis incidence per 100,000 people	74.7 (2015 NCDC AND PH)	15
Prevalence of C hepatitis	Anti-HCV+7.7%, HCV RNA+5.4%, (2015, Sero prevalence study of hepatitis)	Anti-HCV+7.0% HCV RNA+ 0.5%
Mortality from cardiovascular disease per 100,000 people	562.7 (2015 NCDC AND PH)	Decrease by 1/3rd
Cancer mortality rate per 100,000 people	168.0 (2015 NCDC AND PH)	Decrease by 1/3rd
Mortality rate from diabetes per 100,000 people	26.8 (2015 NCDC AND PH)	Decrease by 1/3rd
Prevalence of lower respiratory tract diseases	2669.9 (2015 NCDC AND PH)	Relative decrease
Current age-standardized rate of tobacco uses in persons aged 15 years and older	31.0% (STEPS 2016)	<20%

Continued.

Indicator	Basic	Target 2013
Alcohol consumption per capita (aged eighteen and over) during the calendar year (alcohol in litters)	6.4 litters (STEPS 2010)	Decrease by 10%
Mortality rate from household and environmental air pollution	292.3 (2012 WHS 2016)	65
Mortality rate related to hazardous water, lack of sanitation and hygiene (hazardous water, sanitation, and hygiene (wash) services for all people)	0.2 (2012 WHS 2016)	0.2
Total number of PJD visits per capita	4.0 (2015)	No less than 8
Standardized mortality rate per 100 000 people	984 (2014, WHO/EURO)	Decrease by 1/3rd
Cases of hospitalization with diagnosis of complications of diabetes (ACSCs) per 100000 people	42.6	<5%
Cases of hospitalization with a diagnosis of chronic hypertension per 100 000 people	93.8	<5%

DISCUSSION

In this part, I want to draw a parallel between the expenditure on medical services of world health and the expenditure on the health care of Georgia.

Based on my research, it is possible to conclude that in the last ten years, medical services' costs have increased significantly worldwide. According to the national health expenditure account (NHEA), national healthcare spending in the United States was $3.5 trillion in 2017, nearly triple the amount spent in 1990. This increase is due to factors such as the aging: population, Advances in Medical Technology, and the rise of chronic diseases.

The structure of medical costs has also changed over the last decade. Outpatient care and prescription drugs have shifted, and inpatient care costs have decreased. Outpatient treatment has become more popular due to its convenience and lower costs, and the development of new drugs and therapies has increased the prescription drug costs.

The increase in spending on medical services had a positive impact on health indicators. For example, life expectancy continues to increase, and infant mortality has decreased. In addition, the quality of care and the number of deaths has also improved. Increased spending on medical services has also led to improved health outcomes for people with chronic conditions.

However, there are still challenges that need to be addressed. Despite increased spending on medical services, disparities in health outcomes exist by race, ethnicity, and income. In addition, the cost of health care continues to burden many Americans, especially those who are uninsured.

Overall, the dynamics of changes in healthcare spending over the last ten years were determined by a combination of factors and positively impacted health indicators. However, more work must be done to address the challenges of healthcare costs and disparities in health outcomes.

As for the review of the example of Georgia over the past ten years about the dynamics of the changes in the costs of medical services and health services at the same time,

Over the last decade, the structure of medical costs has changed with a shift to outpatient care, which has led to a decrease in the cost of inpatient care.

The increase in spending on medical services had a positive impact on health indicators in Georgia. For example, life expectancy increased from 72 years in 2010 to 74 years in 2020, and infant mortality decreased from 13.4 per 1,000 live births in 2010 to 9.5 per 1,000 live births in 2020. In addition, the quality of care has improved and reduced the number of preventable deaths.

In 2010, the total cost of healthcare in Georgia amounted to 1.16 billion GEL, and in 2019, it increased to 3.2 billion GEL, which increased by 176%. This increase can be attributed to several factors, including an aging population, chronic diseases, and rising healthcare costs.

According to the 2019 report of the National Health Accounts of Georgia, the largest share of healthcare expenditures in Georgia is inpatient care (42.3%), followed by outpatient care (23.7%) and prescription drugs (16.2%). The remaining expenses are for medical supplies and other health care services. Regarding health indicators, there have been improvements in some areas, but challenges remain in others. For example, the infant mortality rate decreased from 13.4 per 1,000 live births in 2010 to 9.5 per 1,000 live births in 2020. The maternal mortality rate decreased from 41.6 per 100,000 live births in 2010 to 206 in 2010. In addition, life expectancy at birth increased from 72 years in 2010 to 74 years in the 2020.

However, challenges still need to be addressed regarding access to health care, especially in rural areas with a shortage of medical personnel and facilities. There are also challenges in financing the healthcare system. The government has also increased spending on health care; 1.5 billion GEL has been allocated from the budget in 2021.

They had a positive impact on health indicators. However, challenges still need to be addressed, including access to healthcare and financing of the healthcare system.

Another challenge is the low quality of healthcare services in the country. Despite the increase in funding, the healthcare quality in Georgia still needs to improve due to several factors, including inadequate infrastructure, shortage of medical personnel, and poor management of resources. The inadequate quality of health care has led many people to seek medical care abroad, further exacerbating the financial burden on the population.

In addition, lifestyle risk factors contribute to the development of chronic diseases in Georgia. These risk factors are the use of tobacco, drugs, and alcohol, low physical activity, unhealthy diet, overweight and obesity, high blood glucose and cholesterol levels, and low awareness of the population about the use and role of state programs. A healthy lifestyle in improving health, addressing these risk factors through public education campaigns, and encouraging healthy behaviors can help improve the population's overall health.

CONCLUSION

During the last ten years, the changes in expenses incurred on medical services in Georgia have been a topic of significant interest in recent years. Despite the significant increase in government spending on health care, several challenges still need to be addressed to improve the country's overall quality of health care. One of the primary challenges is the low share of health spending in total government spending. According to the WHO, the recommended share of public spending on health care is at least 15%. However, Georgia's share of state spending on health care is only 6.9%, significantly lower than the recommended amount. This low share of government spending on healthcare has resulted in the population paying high medical care costs, making healthcare services less accessible and affordable for many. Another challenge is the low quality of healthcare services in the country. Despite the increase in funding, the healthcare quality in Georgia still needs to improve. This is due to several factors, including inadequate infrastructure, shortage of medical personnel, and poor management of resources.

The WHO has already concluded that countries with lower public spending on health care have higher disease rates. For example, in rich countries, where health expenditure accounts for 87% of global expenditure, the share of the burden of disease is low. In contrast, in poor countries, health expenditure is 13%, and the disease burden is 90%. From the national health reports, the study showed that although the share of public health financing in Georgia is increasing yearly, it is far below the recommendation of the WHO and many low-income poor countries.

Based on my research, despite the increasing trends of changes in state financing costs in Georgia over the last ten years, the quality of healthcare is extremely low. The structure of the prevalence and consequences of all major diseases was studied, along with the dynamics of changes in health indicators, which showed that the formation of the health of the population is determined by many factors: socio-economic, ecological, and lifestyle.

According to available data, the efficiency of medical services in Georgia has improved in some areas over the last ten years. There have been positive changes in health indicators, such as reductions in infant and maternal mortality and increases in life expectancy. This may be due to the increased cost of medical services and the government's health care reforms.

However, challenges remain regarding access to health care, especially in rural areas with a shortage of medical personnel and facilities. The government has tried to address this issue, but more needs to be done to ensure equal access to healthcare for all citizens. Increased government spending on healthcare and healthcare reforms is a positive step toward addressing challenges in the healthcare sector. It will be essential to monitor the effectiveness of medical services in Georgia in the coming years and make the necessary adjustments to improve health outcomes for the population.

Recommendations

Based on the review and analysis of the dynamics of changes in medical services in Georgia over the last ten years, the following recommendations are proposed to improve the healthcare system in the country:

Improving access to health care: The Georgian government should take measures to improve access to health care, particularly in rural areas with limited medical personnel and facilities. This may involve constructing new health facilities and implementing policies encouraging healthcare professionals to work in these areas, such as offering incentives.

Increasing health funding: To ensure adequate resources for quality health services, the government should increase health funding. This may include increasing the budget allocated to health and exploring alternative sources of health financing, such as health insurance or public-private partnerships. The WHO recommends that at least 15% of public spending be allocated to the health sector.

Addressing the Health Workforce Shortage: The Georgian government should tackle the issue of the shortage of health professionals in the country, particularly in rural areas. Incentivizing healthcare professionals can do this to work in rural areas, increasing the number of medical schools and training programs, and enhancing the skills of existing healthcare personnel.

Improving healthcare quality: Georgia should enhance the quality of healthcare services provided to its citizens by implementing quality assurance measures such as accreditation programs for healthcare facilities and training and support for healthcare professionals to improve their qualifications. Upgrading existing facilities and building new hospitals, clinics, and medical centers can also improve healthcare infrastructure.

Promoting partnerships: The Georgian government can form partnerships with private healthcare providers and international organizations to improve the quality and availability of healthcare services. This can involve exploring public-private partnerships to develop healthcare infrastructure and collaborating with international organizations to gain expertise in improving healthcare.

Developing a comprehensive healthcare system: Georgia should establish a comprehensive healthcare system that provides universal coverage to all citizens, including preventive, curative, and rehabilitative services. This system should be based on solid policies and supported by adequate funding and infrastructure.

Increasing the health workforce: Georgia should increase the number of health professionals, including doctors, nurses, and other healthcare workers, to meet the growing demand for health services in the country. Incentivizing students can achieve this to pursue healthcare careers, investing in medical education, and enhancing skills development programs.

Focusing on preventive care: Preventive care should be emphasized in Georgia to reduce the country's disease burden. This can include promoting a healthy lifestyle, providing public health education, and implementing preventive health programs.

Utilizing technology to improve healthcare: The Georgian government should invest in health technologies such as electronic health records, telemedicine, and digital health solutions to improve access to health services and reduce costs.

In conclusion, by implementing these recommendations, Georgia can improve its healthcare system and the health outcomes of its citizens. These actions require a concerted effort by all stakeholders, including the government, the private sector, and international organizations, to achieve meaningful and sustainable change.

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