#### **Economics**

# Health Financing Policy in the South Caucasus: Georgia, Armenia, Azerbaijan

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ABSTRACT. After gaining independence, the crises in the healthcare systems of Sauth Caucasian countries: Georgia, Armenia, Azerbaijan, reqiured fundamental reformation of the sector. Over the past 25 years all three countries of the South Caucasus passed through specific ways to healthcare system reformation. The main objective of the reforms was to restore the order in the field functioning in an unorganized manner, to establish qualitatively new relationships in the system, corresponding to the requirements of the country's political and economic development. In this respect, a comparative analysis of healthcare system financing in all three countries is very interesting. Despite increased government spending on healthcare in the countries of the South Caucasus, the share of government spending on health care is significantly lower not only compared to the margin recommended by WHO, but compared to the indicators of many low-income, poor countries. Therefore, the population has to bear substantial costs of medical services itself. It is reasonable to make healthcare a budgetary policy priority in the South Caucasus and to ensure that WHO recommendations on minimum margin of state healthcare financing are taken into consideration. © 2017 Bull. Georg. Natl. Acad. Sci.

Kay words: healthcare financing, healthcare expenditures

After gaining independence, the crises in healthcare systems of Sauth Caucasian countries required a fundamental reformation of the sector. The lack of financial means practically ruled out comprehensive medical care, characteristic of the Soviet System. As a result, it became necessary to balance government obligations with its capacity in the health care.

Over the past 25 years, all the three countries of South Caucasus (Georgia, Armenia, Azerbaijan) went

through specific ways to health system reformation. The process of health care system reorientation began in 1995 in Georgia, in 1997 – in Armenia, and in 1998 - in Azerbaijan. The main objective of ongoing reforms in the above-mentioned countries was to restore the order in the field functioning in an unorganized manner, to establish qualitatively new relations, corresponding to the requirements of the state's political and economic development.

In this regard, a comparative analysis of the

healthcare system financing in three countries is quite interesting. Correspondingly, for evaluation of healthcare financing, the following internationally recognized Health Financing System Performance Indicators were analyzed: the share of the government spending on healthcare in the overall state expenditures, the share of government healthcare expenditures in overall healthcare spending, state healthcare spending in the Gross Domestic Product (GDP), private expenditures incurred on health care.

#### **Healthcare Financing System**

**Georgia.** To collect healthcare payments and funds for the state insurance program, Georgian government created the State Medical Insurance Company. Health insurance mandatory contributions ("3+1") were the major sources of state healthcare financing in Georgia until 2005.

In theory, the basic healthcare, and the primary and essential hospital care could be covered by the state funded programs. But in reality the reform failed because of the state's weakness. Formal and informal out-of-pocket payments constituted a large part of the total healthcare Expenditures [1].

The main causes that led to the failure of the health reform were identified as follows: a) widespread corruption in the country, b) failure of the country's economy [1].

The second health reform was started in 2006. The main goal for the second health reform in independent Georgia was to ensure financial accessibility to the Medical services especially for the vulnerable population. Health insurance mandatory contributions were replaced by mandatory government taxes (general taxes). Tax Department of the Ministry of Finance of Georgia is responsible for collection of taxes. While determining the annual budget, the Ministry of Finance allocates a certain part of state budget to the Ministry of Labor, Health and Social Affairs, which in turn, distributes the amounts per categories [2].

The Government of Georgia decided to give the Health voucher to vulnerable populations or to those

who could not afford the payment for the healthcare themselves. The recipient of the voucher could select a private insurance company and give them the voucher in exchange for health insurance. Many people soon became insured by private insurance companies. The country paid insurance premium for voucher holders. Accordingly, the vulnerable persons became the most attractive customers for private insurance companies. They soon started to compete to gain the vulnerable population as customers. Insurance companies that had been receiving health insurance premiums from the government invested money in the health facilities.

The second health reform encouraged: a) more rapid privatization of health care infrastructure, b) targeting of the most vulnerable population groups with comprehensive health insurance coverage, c) channeling of public funding to targeted vulnerable groups through private insurance companies, d) reduction of health sector regulation to an essential minimum, and e) retaining the most essential public health functions as governmental responsibility [1]. But the main disadvantage of that time was that a large part of the population was left without insurance. The private insurance companies that invested their money into health facilities became monopolists.

Since 2013, the Universal State Healthcare Program has been enacted. The goal of these reforms was to provide all citizens of Georgia with basic benefit package. In the initial stage of this program, it intended to give the beneficiaries only minimal package of health care. This minimal package involved family doctor care, consultations, and the urgent need satisfaction of secondary and tertiary care. From 1 July of 2013, the program extended to planned surgeries, urgent ambulatory care, urgent stationary care and limited medical analyses. The program allows the beneficiaries themselves to choose the health facility [1].

The program financing has rapidly increased. All citizens of Georgia are provided with basic medical services through unviersal healthcare or private in-

surance programs. Among them, 3.4 million people are covered by universal state healthcare program, 560 thousand are beneficiaries of the private insurance.

Armenia. General tax revenues is the main source of state healthcare financing in Armenia. Since 2013, the income and social taxes are merged into a single income tax. Funds accumulated for State Health programs are being accumulated in the Agency for Social Services, i.e. there operates a single-payer system of state healthcare financing in Armenia. The municipal bodies can finance certain types of medical services within their own capacity; however this is not a common practice. In 1997, the government introduced a "Package of Basic Benefits".

Certain types of basic package are universal for the whole population and covers primary health care services, sanitary-epidemiological services. More services are defined for various groups of population (disabled persons, veterans, persons below the poverty line, pensioners, and children under 18). The patients get medication through free coupons in ambulant clinics. Basic package services and population groups are assessed on a regular basis according to budgetary and political requirements of the government.

**Azerbaijan.** Healthcare system in Azerbaijan is largely similar to the old Soviet Semashko Model, according to centralized planning of resources and the personnel, first of all, with health care facilities left in state ownership, with no clear split of provider and purchaser functions [3].

According to the Law on Health and Healthcare Provision of Azerbaijani Republic, the healthcare sector is free of charge. Since 2008, a state-guaranteed Basic Benefits Package is operating in Azerbaijan. However, in most cases the availability of services guaranteed by the state is a formality. In fact, patients have to pay unofficially for such services. State health care is financed by general tax revenues. 63% of state health expenditures are funded by the Ministry of Health, and 37% - by municipal authorities.

### **Overall Healthcare Expenditures**

The share of total health care expenditures in Gross Domestic Product (GDP) is a measurement of share allocated on healthcare from the general revenues of the state, being composed of state, private and donor sources. The percentage of GDP spent on health care is the best standard measurement of public well-being. It varies according to different countries, ranging from 2% to 17%. Law percentage of GDP spending on healthcare shows that there are not enough resources mobilized for healthcare, therefore, medical service accessibility and the quality of services are low. High percentage of GDP spending on health care demonstrates that medical high-technologies are widespread in this field [4].

In compliance with WHO, the share of total GDP spending on healthcare shall be at least 5%. According to the data, overall GDP expenditures on healthcare amounted to 7.4 % in Georgia, 4.5% - in Armenia, and 6% - in Azerbaijan. Over the last 20 years, it ranged from 3.7% to 6.4% in Armenia, from 4.4 to 7.9% in Azerbaijan, and from 5.1 to 10.2% - in Georgia. (Table 1).

Thus, in the South Caucasus, the share of total healthcare expenditures in GDP is getting similar to the average rate of developed countries. The abovementioned indicates that these countries spend almost the same amount on healthcare as the developed countries. Such indicators of healthcare funds allocated from GDP can be conditioned by the factors, such as high prices of new technologies and treatment medications, and therefore, high medical inflation, rapid growth of chronic disease prevalence at the cost of the increase of the number of older population.

#### **Government Spending on Healthcare**

One of the supreme values of the state is human health. Human health condition is significantly influenced by health care commitments of the state. The amount and spending of funds allocated by the state for healthcare largely depends on values and priori-

Table 1. Health Financing System Performance Indicators in the South Caucasus Countries: Georgia, Armenia, Azerbaijan

	Year	Georgia	Armenia	Azerbaijan
The share of overall healthcare expenditures in GDP (GDP %)	1995	5.1	6.4	5.8
	2000	6.9	6.3	4.7
	2005	8.6	5.3	7.9
	2010	10.1	4.6	5.3
	2016	7.4	4.5	6.0
The share of state spending on healthcare in overall expenditures, %	1995	5.2	31.1	24
	2000	17	18.2	18.6
	2005	19.2	36.3	11.2
	2010	22.8	42.1	21.9
	2016	20.9	43	20.4
The share of government spending on healthcare in GDP, %	1995	0.8	2	1.4
	2000	1.2	1.1	0.9
	2005	1.6	1.9	0.9
	2010	2.3	1.9	1.2
	2016	1.6	1.9	1.2
The share of government spending on health care in the state budget, %	1995	2.5	8.3	6.9
	2000	6.9	5.3	5.4
	2005	6.2	10.2	5.2
	2010	6.6	7.0	4.2
	2016	5	7	3.9
The share of private expenditures on health in total	1995	94.8	68.9	76
healthcare costs, %	2000	83	81.8	81.4
	2005	80.8	63.7	88.8
	2010	77.2	57.9	78.1
	2016	79.1	57	79.6
The share of out-of-pocket expenditures on	1995	94.8	66.2	66.4
healthcare in total healthcare costs, %	2000	82.5	77.3	63.3
	2005	76.8	61.6	82.4
	2010	69.1	55.9	69.2
	2016	58.6	53.5	72.1
The share of out-of-pocket expenditures on	1995	100	96.1	87.3
healthcare in private healthcare costs, %	2000	99.4	94.5	77.7
	2005	95	96.7	92.7
	2010	89.5	96.6	88.6
	2016	74.1	93.9	90.5

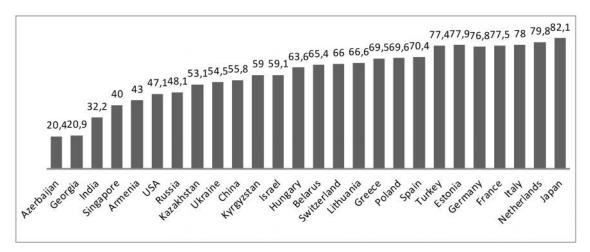
The data are taken from the WHO. The Global Health Expenditure Database. 2017. http://apps.who.int/nha/database

ties existing in the society, on the level of state's economic development, political will and budget capacity. The more the state spends on health, the less the patient will have to pay from his/her own pocket, the more financially secure he/she will be. The government of such a state is interested to have a healthy population. The lack of state health expenditures can be conditioned by financial and political reasons, in particular, healthcare is considered as economically inefficient field by the authorities of such countries [4].

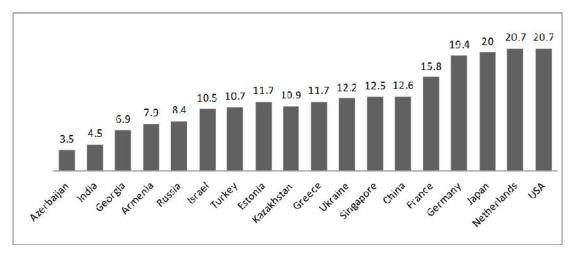
The share of government spending on health care is an important indicator for healthcare financing in

the country. According to World Health Organization, state health spending should comprise more than 40% of overall health care expenditures; in the countries, where this indicator is lower than 40%, the state has a limited responsibility for resolving the problems facing the healthcare sector [4].

According to the data, government healthcare spending in the overall health care costs comprises 20.9% in Georgia, 43% - in Armenia, and 20.4% in Azerbaijan. During the last 20 years it ranged from 18 to 52% in Armenia, from 11 to 24% - in Azerbaijan and from 5 to 23% - in Georgia (Table 1). According to this indicator, in the region of South Caucasus only Ar-



**Fig. 1.** The share of government healthcare in total healthcare expenditures (%). (The data are taken from the World Bank Open Data 2016).



**Fig. 2.** The share of government healthcare on overall public expenditures (%). (The data are taken from the World Bank Open Data 2016).

menia managed to implement WHO recommendation since 2006. The abovementioned indicates that despite significant growth of government spending on healthcare in Georgia and Azerbaijan, its share in overall costs is rather low and far behind the limit envisaged by WHO recommendation.

According to the data, compared to Azerbaijan and Georgia, the limit recommended by WHO was overcome by the following countries: Armenia, Kazakhstan, Ukraine (54.5%), and Kirgizstan (59%).

According to WHO's recommendation, the share of government spending on healthcare in GDP should be at least 5%. This indicator amounts to 2.2% in Georgia, 1.9% - in Armenia, 1.2% - in Azerbaijan (Table 1).

The state's attitude towards health sector is also demonstrated by government spending on health care in the total public expenditures. As per World Health Organization, the share of government spending on healthcare shall comprise minimum 15% of total public expenditures. According to the data, government spending on healthcare in the overall public health expenditures amounts to 5% in Georgia, 7%-in Armenia, and 3.9% in Azerbaijan (Table 1). Over last 20 years, this indicator ranged between 5.3% - 10.2% in Armenia; between 3.9% - 6.9% in Azerbaijan and 2.5% - 6.9% in Georgia. Thus, irrespective of significant increase of government healthcare spending in the South Caucasus countries, its share in the

state budget is quite law compared to the indicator recommended by WHO.

In Europe, the share of government spending on healthcare in overall state expenditures ranges from 4 to almost 20%. It is notable, that the priority of health expenditures in the state budget is being increased along with the national revenue growth. In South Caucasian countries, the government spending on health care in overall public expenditures is low compared to the following countries: Kazakhstan (10.9%), the Ukraine (12.2%), Kirgizia (13.2%), and Belarus (13.5%) (Fig. 2)

Accordingly, in the countries of the South Caucasus, government spending on health care in total health expenditures is significantly lower than the indicator recommended by WHO.

### **Private Health Expenditures**

Due to the lack of state financing, in the Georgia, Armenia, Azerbaijan the population has to pay for medical care from their pocket [5]. In many cases they cannot afford service, respectively, they have to refuse necessary medical care. Furthermore, the studies confirm that, catastrophic costs paid on medical services play a big role in impoverishment of the population [6]. According to the data, private health expenditures in overall expenses amounts to 79.1 % in Georgia, 57% - in Armenia and 79.6% in Azerbaijan -(Table 1). Over last 20 years, this indicator was ranging between 82%-to 48% in Armenia, 89-76% - in Azerbaijan and between 95 – 77% in Georgia. Quite a significant part of healthcare costs of Georgia and Azerbaijan (approximately 79) is comprised of private expenses paid by the population. Private healthcare expenditures make relatively less share in Armenia. According to such a big share of private expenditures in overall healthcare costs, Georgia and Azerbaijan are among the countries, as Sudan (75.8%), Yemen (74%), Afghanistan (73.8%), Nigeria (69.3%), Venezuela (65.8%).

While analyzing private healthcare expenditures, the attention is paid to what is the share of out-ofpocket costs and private health insurance, since prepayment schemes (such as, private health insurance) reduce catastrophic costs of medical care [7]. In this respect, the highest share of out-of-pocket expenditures on healthcare in private health care costs is observed in Armenia -94%, which is followed by Azerbaijan – 90.5%, and Georgia – 74% (Table 1). High share of direct out-of –pocket expenditures has a negative impact on the accessibility of medical care and often leads to impoverishment of the patients due to catastrophic healthcare costs [8; 9].

Relatively lower indicator of out-of-pocket expenses in Georgia indicates to the growing development of private health insurance, which is a positive development among the countries of the Caucasus region. The share of private health insurance in private health care costs comprises 24.2% in Georgia, 6% in Armenia, 0.7% in Azerbaijan.

During the analysis of direct, out-of-pocket healthcare expenditures, attention needs to be paid to the share of unofficial payments, contributing to catastrophic costs of medical care as well. The studies confirm that one of the serious problems in healthcare system of Azerbaijan is informal payments [3]. Due to poor state funding and improper management of medical facilities, the medical staff salaries are very low, which, in itself, creates a risk of serious corruption. It needs to be considered, that the billboards on treatment and basic medications are posted in every medical facilities, in addition, the law forbids to take money from patients, however, under the condition of very low salaries of medical staff, it is very difficult to resist the temptation and not to get involved in corruption. The same problems are facing the healthcare system of Armenia.

## Conclusion

An apparent progress is observed in healthcare sector in the Georgia, Armenia, Azerbaijan government spending on healthcare increases from year to year, however, despite this, the share of government spending on healthcare in overall healthcare expensions.

ditures is significantly lower compared to not only the limit recommended by WHO, but also to the indicator of many low-income, poor countries. Therefore, the population has to cover a considerable amount of costs on medical care itself.

Deriving from all the above-mentioned, it is rea-

sonable to make healthcare a budgetary policy priority in the Georgia, Armenia, Azerbaijan and take the recommendations of WHO on minimum limit of state healthcare funding into consideration. It is important to educate citizens and raise the level of their information, defend their rights of access to health care.

ეკონომიკა

# ჯანდაცვის დაფინანსების პოლიტიკა სამხრეთ კავკასიაში: საქართველო, სომხეთი, აზერბაიჯანი

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(წარმოდგენილია აკაღემიის წევრის ლ. პაპავას მიერ)

დამოუკიდებლობის მოპოვების შემდეგ, განვლილი 25 წლის მანძილზე სამხრეთ კავკასიის სამივე ქვეყანამ (საქართველო, სომხეთი, აზერბაიჯანი) ჯანდაცვის სისტემის რეფორმირების თავისებური გზა გაიარა. რეფორმების მთავარ მიზანს შეადგენდა სისტემაში თვისობრივად ახალი ურთიერთობების დამკვიდრება, რომელიც შესაბამისობაში იქნებოდა ქვეყნის პოლიტიკური და ეკონომიკური განვითარების მოთხოვნებთან. ამ მხრივ, საინტერესოა სამხრეთ კავკასიის სამივე ქვეყნის ჯანდაცვის სისტემის დაფინანსების შედარებითი ანალიზი. კვლევისათვის გამოყენებულ იქნა კავკასიის რეგიონში ჯანდაცვის რეფორმირების საკითხებზე არსებული ლიტერატურა, ჯანდაცვის მსოფლიო ორგანიზაციის კვლევები და ანგარიშები. კვლევის შედეგად დადგინდა, რომ სამხრეთ კავკასიის ქვეყნებში (საქართველო, სომხეთი, აზერბაიჯანი) ჯანდაცვაზე სახელმწიფო ხარჯების ზრდის მიუხედავად, მისი ხვედრითი წილი ჯანდაცვის მთლიან ხარჯებში მნიშვნელოვნად ჩამორჩება არამარტო ჯანდაცვის მსოფლიო ორგანიზაციის რეკომენდაციით მოწოდებულ ზღვარს, არამედ ბევრი დაბალშემოსავლიანი, ღარიბი ქვეყნის მაჩვენებლებსაც. შესაბამისად, სამედიცინო სერვისებზე მნიშვნელოვანი ხარჯების გაღება თვად მოსახლეობას უწევს. ამ მხრივ, მიზანშეწონილია, ჯანდაცვა საბიუჯეტო პოლიტიკის პრიორიტეტად იქცეს და გათვალისწინებულ იქნეს ჯანდაცვის მსოფლიო ორგანიზაციის რეკომენდაციები სახელმწიფოს მიერ ჯანდაცვის დაფინანსების მინიმალური ზღვარის შესახებ.

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