

Public Health

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წარმოდგენილ ნაშრომში ასახულია საქართველოს ჯანდაცვის სისტემის დღევანდელი გამოწვევები და მათი გავლენა მოსახლეობის ჯანმრთელობასა და კეთილდღეობაზე. შეფასება ჩატარებულია 2008-2010 წლის პერიოდში და ასახავს თუ რამდენად აკმაყოფილებს ქვეყნის დღევანდელი ჯანდაცვის სისტემა მოსახლეობის მოთხოვნას ხარისხიან ჯანმრთელობის სერვისებზე, რამდენად ეფექტურად განკარგავს არსებულ რესურსებს და რაოდენ წარმატებულია ჯანმრთელობის დაცვისა და სოციალური უზრუნველყოფის ინტერსექტორული თანამშრომლობა. ნაშრომში ასევე ხაზგასმულია პარალელები მოსახლეობის ჯანმრთელობის მდგომარეობას, სოციალურ კეთილდღეობას და ჯანდაცვას შორის.

Georgian Health System and its Recent Impact on Health and Social Well-being

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Health systems throughout the world are very different but in all countries they share the same goal or outcome as improving health. Health, as defined by WHO, is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Herewith social well-being is a good or satisfactory condition of existence, what means a state characterized by health, happiness, prosperity, welfare. Popular use of the term well-being usually relates to health. It's very difficult to reflect the health contributions by quantitative indicators in the social welfare, because the definition of health itself is very complex and at the same time due to the fact that the value categories of health could not be reflected like other services in the monetary category. However, there is evidence and it is undoubtedly that there are direct connections between health and social well-being (Figueras J., et al., 2008).

Health and wealth reinforce each other. Citizens draw satisfaction from living longer and healthier lives and value health regardless of whether or not they are economically productive. Wealth has a major effect on health in its own right, both collectively and individually. Its impacts are direct, through the material conditions that improve biological survival and health, as well as indirect, through its effects on social participation and people's control over their life circumstances.

Health care systems have a most important and effective impact not only on health, but also on wealth. Health systems are a catalyst for both. Better health improving economic performance and better economic performance improving health. However, Health Systems and social well-being (as good health and wealth) have a complex and dynamic relationship. This approach offers an opportunity for a fundamental reassessment of the role of health systems in society. Over the years, health care system's role contribution in the process of improvement of the public

health is changing. If just 50 years ago, scientists argued that health services made little meaningful contribution to population health, a few years ago medical services contribution was defined as 15% (Rechel, B., et al., 2009)

Since then the scope and quality of health care have changed almost beyond recognition, as it has defined more significant impact on health. Data on “avoidable mortality” or “mortality amenable to health care” can help to separate out the scale of the impact that health services alone have on health. This measure captures “unnecessary untimely deaths”, arising from conditions from which death should not occur in the presence of timely and effective health care. There are data’s of different states concerning some current researches about assessment of the effectiveness of health care systems. For example, statistical dates a study in USA show that about half of the total gain in life expectancy in the country could be attributed to curative services (Curry, N., Ham, C., 2010)

A study in New Zealand argued that 42% of the decline in deaths from ischemic heart disease could be attributed to advances in medical care . (Tollen,L., 2008).

A study in the Netherlands claimed that decline in mortality could be attributed to specific medical interventions. Overall, there is broad agreement that between 40% and 50% of the decline in ischemic heart disease may be attributable to improvements in health care. (Swayene, L.E., Duncan, W.J., Ginter, P.M., 2006)

Eliminating variation in the delivery of care services, according to evidence for best practices across health care systems, could save thousands of lives each year in Georgia.

To define health care exact quantitative contribution there are methodological difficulties, as these approaches have some limitations, but the approaches is extremely valuable as a tool for capturing how health system impact on health and social well-being.

According WHO approaches, a well functioning health system responds in a balanced way to a population’s needs and expectations by improving the health status of individuals, families and communities and

defending the population against what threatens its health

protecting people against the financial consequences of ill-health

providing equitable access to people-centred care

Making it possible for people to participate in decisions affecting their health and health system.

The structure of health system in Georgia

Health systems comprise all organizations, institutions, resources, people devoted to producing actions whose primary purpose are to pro-

mote, restore or maintain health. This definition incorporates “selected intersectoral actions in which the stewards of the health system take responsibility to advocate for improvements in areas outside their direct control, such as legislation to reduce fatalities from traffic accidents” (ChanturidzeT.,at al.,2009).

Most national health systems include public, private, traditional and informal sectors.

Ministry of Labour, Health and Social Affairs of Georgia implements state governance and state policy in the fields of labour, health and social affairs. The mission of the Ministry is to promote the population’s good health and functional capacity, promote healthy working and living environments, ensure that there are sufficient social and health services. Activities of the ministry include: to provide medical services and public health to the population; to regulate medical and pharmaceutical activity; to manage state pensions; to provide targeted social assistance to the population; to provide safe environment for living and working; to implement the function of guardianship and care, also the issues related to adoption and protection of rights and interests of child.

The structure of the Georgian health system also comprise Health and Social Projects’ Implementation Centre, Agency for State Regulation of Medical Activities , National Centre for Disease Control and Public Health, Social Service Agency, State Fund for the Protection and Assistance to Victims of Trafficking in Persons, State Care Agency, Health Insurance Mediation Service, Public and Private Hospitals, Public and private PHC providers, Public Health Services, Municipal health administration, Professional Associations, Nongovernmental organizations, Private Health Insurance Companies, Pharmacies, Parliament, Ministry of Economic Development, Ministry of Finance, Ministry of Education and Science, other Ministries, Medical Education Schools, Research centres.

The health system building blocks are defined by WHO. They are:

Health Service Delivery

Health workforce

Essential medical product, vaccines and technologies

Health systems financing

Health information systems

Leadership and governance

We will overview Georgian Health system’s two dimensions’: Health services Delivery system and Health workforce.

Health Service Delivery System in Georgia

Health services are the most visible functions of any health system. Every day health systems deliver services be they prevention, treatment

or rehabilitation that maintain or improve the health of individuals or their communities. In any health system good health services are those which deliver effective, safe, quality personal and non-personal health interventions to those that need them, when and where needed, with minimum waste of resources. Health services may be delivered in health facilities in the home or the workplace.

The system of services delivery in Georgia for public health services is represented by a central agency, the National Centre for Disease Control, which is subordinate to the ministry. Local bodies called Public Health Centres have been abolished in most of the local constituencies of the country. Past and present problems in health system performance, along with the deterioration in the social and environmental determinants of health, have had a long-lasting, negative effect on the health status of the Georgian population.

The Infrastructure of Georgian health Service delivery system included as in-patient as well out-patients health care facilities.

Polyclinics and ambulatories provide primary health care. The primary health care network includes polyclinics, ambulatories, nurse-midwife health posts and dispensaries-specialized outpatient clinics.

Polyclinics may be stand-alone facilities or associated with the outpatient departments of hospitals. People with specific diseases and population groups such as: children and women of reproductive age are "served" by dispensaries providing primary care services. Dispensaries are specialized in treating people with specific conditions, such as tuberculosis, drug addiction, etc. Specialized care is provided in municipal hospitals, specialized hospitals, research institutes and dispensaries. Municipal hospitals provide inpatient and outpatient care and the most basic specialist services, including emergency services. Research institutions provide more complex mostly diagnostic services, such as radiology.

The private sector is strongly involved in providing services. There are several registered private pharmacies and pharmacies. Nearly all dentistry practices are private.

In 2008 the total number of health care facilities were 1876 (independent 1020 and dependent, functioning together with other health providers-856) (NCDC, 2008)

The structure and distribution of independent health care network was: in-patient facilities-25,9%, dispensaries-6,8%, polyclinics-16,8%, dental polyclinics-6,8%, women's consultancies-1,9%, ambulance stations (providing emergency care by phone call, the service is chargeable)-6,8%, doctor (in rural ambulatories)-21,5%, blood transfusion stations-0,58%, infant nurseries-0,19%, scientific research institutes-1,6%, health centres -4,0%. The structure and distribution of dependent health care network was: rural doctor ambulatories-55,4%, nurse-midwife health posts-

35,1%, co-social with hospitals- 8,4%, doctor health posts-1,1%. (see table №1)

Table №1 *Health Care Network structure, Georgia, 2005 and 2008*
(NCDC, 2005,2008)

Type of Health facilities	2005	Type of Health facilities	2008
In-patients facilities	269	In-patients facilities	269
Dispensaries	77	Dispensaries	72
Independent:		Independent:	
Policlinics	180	Policlinics	171
Dentist Clinics	100	Dentist Clinics	79
Ambulance stations	72	Ambulance stations	73
Rural ambulatories	312	Rural ambulatories	220
Nurse-midwifery posts	1	Nurse-midwifery posts	X
Blood transfusion stations	2	Blood transfusion stations	6
Scientific-Research Institutions	20	Scientific-Research Institutions	19
Medical Centres	51	Medical Centres	47
Dependent:		Dependent:	
Medical doctor's Posts	11	Medical doctor's Posts	9
Rural doctor ambulatories	373	Rural doctor ambulatories	474
Nurse-midwifery posts	385	Nurse-midwifery posts	301

Primary care is characterized over-capacity. In 2008 616 independent and 72 working within hospitals out-patients facilities have reported to the National Centre for Diseases Control and Medical Statistics. These

out-patients facilities are represented by 241 independent polyclinics, 47 medical centers, 79 independent dental clinics, 20 women consultative, 72 dispensaries, 220 independent ambulatories. There are 474 dependent ambulatories and 301 dependent nurse-midwife posts in the structure of ambulatory-polyclinic associations.

All out-patient facilities working registered 1809208 cases of diseases which is more than in 2005. There were registered 807497 new cases of diseases; this indicator is 13, 5% more than in 2005.

In 2008 general an incidence and prevalence increased both in total population and children. In 2008 the average number of visits to the primary health care facilities was per person per year 2, 1. In 2008 the out-patient facilities the total number of visits per person per physician per year was 724, 5, which is less than in 2005. The average number of ambulatory visits per capita is still markedly below the rates of almost all other European countries.

In 2008 there were registered 651381 routine inspections of children and adolescents. During preventive inspection cases of low hearing (0, 12%), low vision (0, 53%), speech disturbance (0, 41%), scoliosis (0, 61%) and disorders of bearing (0, 47%) were revealed. 27426 surgical operations were conducted at the surgical department of the out-patients facilities. This is more than in 2004. In 2008 there were 22 day time hospitals with 408 beds, where 20534 patients were treated, including 11727 children.

The level of the usage of the capacity of the out-patient network is only 38,3%. It is to be mentioned that in 1988 the out-patient network was loaded by 84, 7% and in 2001- 26,3%.

In 2008 in-patient health care facilities provided totally 14069 hospital beds (320.9 hospital beds for every 100 000 population).

In 2008 in the comparison with 1991 the total number hospital beds was reduced by 73, 5 %. Nevertheless, the total number of hospital and hospital beds in Georgia the supply is still much greater than in the WHO European Region (NCDC, 2008)

Despite these reductions, the numbers of hospital beds remain high compared to European countries, approximately twice. As a rule hospital beds are used to indicate the availability of inpatient services. It's clear that in the case of Georgia Health care facilities are very largely.

Statistical data's reflect that despite the abundance, there is inequality in distribution of the medical institutions by the regions. (see Table №2)

Table №2 *Health Care facilities distribution by region, Georgia, 2008*
(NCDC, 2008)

Region	Policlinics	Dispensaries	Medical Centres	Independent ambulatories	Hospitals
Tbilisi	84	11	24	4	77
Ajara	16	8	3	0	17
Guria	7	6	2	2	6
Racha-Lechkumi and Kvemo Svaneti	3	0	0	12	4
Samegrelo	18	6	3	2	25
Imereti	36	14	4	105	25
Kakheti	21	7	3	10	35
Mtskheta-Mtianeti	3	0	0	30	25
Samtkhe-Javakheti	16	56	0	11	5
Kvemo Kartli	13	6	2	21	12
Shida Kartli	12	7	0	21	11

During last years the total number of hospitalizations was increased. In 2008 the level of hospitalizations per 100000 was 7204, 5. In 2008 in comparison with 2005, the level of hospitalizations was increased by 17, 1%. At the same time, total number of bed-days by patients in hospitals was increased by 158830 bed-days and equalled to 2183714 bed-days.

In 2008 a hospital bed occupancy rate was 156,1 days, with average length of stay of 6,8 days, which is lower than in 2005 (7 days) and in 2004 (8,7 days). Reduction in the average length of stay means that more hospitalizations can be achieved without significantly increasing resources (NCDC, 2008).

The highest bed occupancy rate and average length of stay in Georgia in 2008 were registered for patients with tuberculosis, ontological and mental health problems. (See Table №3)

Table №3 *Hospital beds by profiles and their utilization, Georgia, 2008* (NCDC, 2008)

Profiles	Number of beds	Occupancy Rate (days)	Average length of stay	Bed rotation
General Medicine	2007	130.4	5.1	26.5
Paediatric	1438	181.7	6.9	26.8
Surgery	3453	125.1	5.5	23.1
Oncology and Radiology	403	278.4	15.4	18.1
Infectious Diseases	878	108.4	6.2	17.7
TB	580	253.0	42.3	5.2
Obstetric-Gynaecology	2775	128.7	4.3	30.0
Neurology	319	180.1	8.3	22.2
Psychiatry and narcology	1341	261.7	74.0	3.6
Otolaryngology	184	52.1	1.5	36.0
Ophthalmology	184	79.2	3.0	26.2

The average length of hospital stay has decreased over the past few years, but is still much higher than in the WHO European Region. The bed rotation rate was increased from 15, 2 (in 2005) to 22, 9 in 2008.

In 2007 Georgia had one of the lowest acute care hospital admission rates in the WHO European Region, at just 6.3 per 100 population, when the average for the EU was 17 per 100 (2006). The average length of stay in acute care hospitals in Georgia was 5.7 days in 2007, which is below the 2006 EU average of 6.5 days.

Following independence, there has also been a sharp decline in the hospital bed occupancy rate, largely linked to a lack of affordability combined with excess capacity in the hospital sector. The acute care hospital bed occupancy rate is now among the lowest in the WHO European region, at just 34.4% in 2007. The average for countries of the EU was 76.3% in 2006. The average length of stay has been falling since 2003, and was 5.7 days in 2007 in acute care hospitals.

By the end of 2008 315829 patients were discharged from hospitals in Georgia, including 6140 patients died. The total case fatality rate equals to 1,9, like in 2005. In 2008 121189 operations were performed in hospitals, 55,9 % of surgical operations were made under general narcosis. 19% of the operations were urgent. The total post operational case fatality rate is 0,5%.

The reported occupancy rate of 40%, however, still represents very low utilization of existing inpatient facilities.

The excess capacity in the health system is a remnant of the early Soviet Union model based on normative planning which at one point in the early 1980's required Georgia to have 60,000 hospital beds to serve its population. Although there have been significant reductions in health service delivery capacity over the past 10 years, existing hospital bed capacity is still more than in WHO European countries. There are a problems of over-capacity of hospitals, their equipping and they are costly to maintain, that's why

The Hospital Development Master Plan "100 New Hospitals for Georgia" was developed and enforced by the government from January 2007.

Efficient allocation of resources is an important aspect of effective performance and supports improvements in health system productivity and accessibility.

Health workforce in Georgia

Effective health service delivery depends on having some key resources among them require a skilled well performing and motivated workforce. Health workers, as defined WHO in World Health Report, are "all people engaged in actions whose primary intent is to enhance health" and to protect and improve the health of their communities (WHO, 2000).

In any health system a "well-performing" health workforce is one which is available, fairly distributed, competent, responsive and productive. And whose actions are adequately to the needs and expectations of people.

Georgia traditionally has the highest density of health workers, particularly physicians. However, although there are a large number of

trained doctors in the country, they are very unevenly distributed. There is a concentration of doctors in capital city where there are approximately three times as many doctors as there are in other regions. Among Georgian regions the lowest indicators are in Samtkhe-Javakheti (203,0) and Qvemo Qartli (232, 8).

Utilization of physicians for both inpatient and ambulatory care services is very low. On an annual basis, there are approximately 29 patients per full-time hospital physician; but this ratio varies significantly across regions. Although this is an improvement from 25 patients per physician in 2004, physician productivity is still the lowest among WHO European countries.

The low productivity of physicians raises concerns regarding quality of services, salary levels and low levels of motivation in the health care workforce.

In Georgia, the number of nurses is the lowest in Europe. The number of middle medical staff has decreased dramatically since independence; in 2008 the number of nurses per 100000 population was 19593. Its comparison with WHO recommendation on the balance between the number of doctors and nurses (1:4) in Georgia. In the recent years, this ratio is practically 1:1.

It is known that nursing services play a vital role in improving health service delivery and achieving national health goals and the health-related Millennium Development Goals.

Nurses represent the basic unit of the Health care. Population Health is depends on their knowledge and skills and professional relation with the patient.

We think that Georgia should pay attention not only to the improvement of balance indicators of doctors and nurses, but also to the improvement nursing education. The International Council of Nurses recommends that system of nursing education should ensure that study are regularly updated to satisfy the needs of a changing environment and that they are probably applied and address the need for lifelong learning, in accordance with the specific historical context of each country. For its part, the WHO recommends, for development of science and education in nursing, that particular attention be paid both to the macro determinants and to the needs and demands of health and the services the serve.

Health needs of society, public interests and social expectation, labor market, global trends on nursing field, the recommendation of WHO European strategy for nurses' and midwives' education, Bologna process, Tuning Methodology – these are the factors proving the necessity of the reform in the educational system for nurses in Georgia.

The existing system of nursing education in Georgia does not satisfy nurse activity requirements as an independent profession and scientific discipline.

Access to quality medical services is one of the main prerequisites for improving the health and well-being of the population. Resources should be well-trained and sufficient. In order to improve this goals the government should assure the equal distribution of medical staff, implementation of system of continuous professional education for health workers and Higher Education for nurses. Program of transformation of nurses' and midwives' education is a complex strategy of government's actions in order to provide adequate number of well-skilled nurses prepared for professional activity for the improvement quality of health services and benefit of health of our country's citizens.

The contribution of the health system to Georgian population health

The key indicators of life expectancy and mortality are used to assess overall health status and to measure progress in a number of targeted areas, such as reducing the incidence of major causes of mortality and morbidity and reducing rates of infant, child and maternal mortality. There has been substantial improvement on a number of these indicators since the mid-1990s.

Life expectancy at birth has increased for both men and women, and rates of infant and maternal mortality have decreased. According to the official statistical data provided by the Department of Statistics in 2008 life expectancy at birth in Georgia was equalled 74.2; for men- 69.3 and for women- 79,0. So, in 2007 a sex difference for average life expectancy was 9, 7 years, while in 2002 the index was 7, 7 years.

Table №4 *Life expectancy at birth, Georgia, 1990 – 2008 (NCDC, 2008)*

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total	71,4	70,3	71,3	71,6	71,5	72,1	71,6	74,0	74,3	75,1	74,2
Male	67,5	66,3	67,5	68,1	68,0	68,7	67,9	70,0	69,8	70,5	69,3
Female	75,0	74,2	75,0	74,9	74,9	75,3	75,1	77,6	78,6	79,4	79,0

An increase in aged population (75-85) of the elderly population is connected with the increase of average life expectancy; however, they (60-75) constitute the largest age group. In the structure of 60-years-old and over age group, alongside with the age interval increase, the share of the mentioned group decreases. For example, in the structure of 60-years-old and over, the highest share has population of 60-64 years age groups (5,9%), the lower – the population of 100-years age group and over (0,01%).

In Georgia life expectancy in 2005 was three years higher than in Armenia and six years higher than in Azerbaijan, which suggests that the health status of the population is generally better. While there have been improvements, life expectancy are still lower in comparison with life expectancy in other countries of Europe.

According to the World Health Organization data (WHO, 2002), expected healthy life expectancy for the Georgian population is 58, 2 years, which is 13, 3 years less than the expected average life expectancy. For women this index is 60,2 years, this is 14,6 years less than expected average life expectancy in women, for men the index is 56,1 years, this is accordingly 11,9 years less than the expected average life expectancy in men. Sex difference in healthy expected life expectancy was 4, 1 year.

In 1989-2000 share of those aged 60 years and over in the whole population increased from 14, 3% to 18,6%. During the period of 2002-2008, the number of children under 15 years of age reduced to 3.4 percent, whereas the population over 65 years old rose to 1.6 percent. By 2030, an estimated 21% of Georgia's population will be 65 years old and older. (WHO, 2006; OSGF, 2007)

As the length of life increases, older people can respond with lifestyle changes that can increase healthy years of life. Correspondingly, health care systems need to shift towards more geriatric care, the prevention and management of chronic diseases and more formal long-term care. Since people are living longer, measures to improve health and prevent disease need to focus on people of working age.

In Georgia the mortality rate reached a maximum in 2004 and was equalled 11.3. In 2008, 43011 cases of death had recorded. 63.5% of all death cases had accounted in urban areas and 36.5% - in rural areas. Mortality rate in males is greater than in females: 11.2 and 8.5 accordingly. In the structure of cause of death very high share have disease of the circulatory system and neoplasm. In 2008, the mortality structure, according to the ICD-10 classification, had distributed in the following way: diseases of the circulatory system accounted for 64.1 percent; neoplasms - for 10.8%. The third place occupies a class 'Symptoms, signs and abnormal clinical and laboratory findings' (8.5%), which is not used for mortality coding (according to the WHO criteria).

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improvements in the population's health status but also demonstrate the challenges facing the Georgian health care system. Unemployment and poverty cause many problems to the society and its well-being.

One of the key strategies for improving in next decade Georgian population health and social well-being is to strength of the health system, to increase the productivity of health care providers and facilities, to improve the effectiveness and the quality of medical care services. In addition, addressing major health challenges and working to improve health status and well-being of all Georgian is not as exclusive responsibility of the MoLHSA, but rather is the task of the entire government.

References

- Chanturidze, T., et al. (2009). Georgia health system review. *Health Systems in Transition, European Observatory on Health Systems and policies*, vol.11, #8. 23-31
- Curry, N., & Ham, C. (2010). *Clinical and service integration; the route to improved outcomes*. King's fund.
- Figueras J., et al. (2008). Health systems, health and wealth: Assessing the case for investing in health systems
http://www.osgf.ge/data/file_db/Publications/jandacva2_7gB9Sn07WM.pdf
- National Centre for Disease Control - Statistical Yearbook. (2005). Health and Health Care in Georgia
- National Centre for Disease Control - Statistical Yearbook. (2008). Health and Health Care in Georgia.
- Open Society Georgia. (2007). The Georgian Health Care System
- Rechel, B., et al. (2009). *Capital investment for health*. http://www.euro.who.int/InformationSources/Publications/Catalogue/20090908_1
- Swayne, L. E., Duncan, W.J., & Ginter, P.M. (2006). *Strategical development of health care organizations*, 24–310.
- Tollen, L. (2008). *Physician organization in relation to quality and efficiency of care: a synthesis of recent literature*.
www.commonwealthfund.org/usr_doc/Tollen_physician_org_quality_efficiency_1121.
- WHO (2000). Health Systems: Improvement of actions (WHO Report)
- WHO (2009). Health system performance assessment - Georgia
- WHO. (2005; 2006) Highlights on health in Georgia