THE NEW ARMENIAN
MEDICAL JOURNAL
Vol. 2 (2008), N.2, pp.51-66

www.ysmu.am

Discussion Paper

POVERTY REDUCTION STRATEGY PAPER: PROCESS OF IMPLEMENTATION IN HEALTH CARE SYSTEM IN ARMENIA

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There are only two families in the world, as my grandmother used to say: The haves and the have-nots...

Sancho Panza in Don Quixote de la Mancha, Miguel de Cervantes

Society is better off only when it makes its least well-off people better off...

Rawls's Difference Principle

Abstract

This paper addresses issues that are fundamentally a matter of social justice and although the last decades have brought to substantial reduction in general mortality, infant mortality, infectious disease morbidity, etc., as a whole, the gap in health status in our extremely polarized society, between those at the top and bottom of the social scale has dramatically widened.

At the same time, if the Government of the Republic of Armenia (RA) would be able to define and to provide an appropriate prioritized agenda of policies, many inequalities are remediable.

In the process of preparation of this analysis, a number of widely well-known international expert opinions and papers have been analyzed scrupulously and most of our ideas and recommendations are built on the work of those, who have done the similar job before us.

As we worked through expert report preparation process, it has become clear that the range of factors influencing inequalities in health and addressed namely to the RA Ministry of Health (MoH) are far beyond of this organization and that a strong response by the Government as a whole will be needed to deal with them.

We believe that areas for further development of policy and assessment indicators, which we have identified from the available evidence and practice, comprise a future agenda for more efficient and thoughtful action.

Keywords: health, equity, poverty, MDG

A kid born today in Armenia is 5 times more likely to die before reaching one year and 4.7 times more likely to die before reaching the age of 5 years than a kid born in the United Kingdom. If a kid reaches his/her fifth birthday, he/she looks forward to a life, in which he/she has a 2.6 times greater chance of contracting tuberculosis than his/her British counterpart and a girl is 4.4 times more likely to die during pregnancy or childbirth.

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Although average mortality and infant mortality in Armenia has been fallen over the past 50 years, unacceptable disparities in health persist.

These differences we estimated based on RA National Statistical Service (NSS) annual reports and Millennium Indicators database country profiles (UN Statistics Division: http://unstats.un.org/unsd/). They are typical of the health gaps between rich and non-rich countries, where contributing factors are such numerous and complex (poverty, low levels of education, limited access to health services, etc.)

For many measures of health, inequalities either have remained the same or have even widened in recent decade. These inequalities affect not only deprived population, but they also affect the whole of society. Usually, they can be identified at all stages of the life span from pregnancy to older ages.

Nevertheless, there are some areas, which we regard as crucial:

- Policies likely to have an impact on health should be directed towards reducing disparities in the less well off groups;
- Introduction of differentiated poor communities-based health indicators survey;
- Further steps should be taken to disaggregate Poverty Reduction Strategy Paper (PRSP) basic health indicators and analyze them by targeting the less well off quintiles of population;
- A high priority should be given to enhancing the accessibility of basic health care services by encouraging new innovative types of services and medical/preventive care settings;
- Re-configuration and improved governance and accountability of healthcare institutions, especially in rural areas and in primary health care.

These areas, in fact, form the basis of our recommendations.

In order to come up with the meaningful and informative review, we managed to agree on and to formulate precisely the following fundamental research questions for this analytical report:

1. What are gains in implementation of the PRSP to reduce poverty in healthcare sector?
2. Whether or not targets set forth in this field for 2003-2004 have been reached?
3. What are core trends in pro-poor healthcare systems development policy and service delivery, and how we should recognize positive changes?

Economically, "post-soviet" time Armenia remains in a state of flux [*Common Country Assessment, 2000; Poverty Reduction Strategy Paper, 2003*]. Unfortunately, the hardships of the economic transition are disproportionately borne by the most vulnerable elements of society, at the very time that most support and safety mechanisms have collapsed.

Over 53% of the Gross Domestic Product (GDP) per capita income generated in the country is consumed by 10% of the population, with the poorest 10% getting only 0.3%. Being in transition and experiencing quite a disappointing average standard of life due to low national income per country's citizens, not everyone in this country has an equal chance to healthy life [*Social Snapshot, 2002*].

The consumption of health services in 1999 by the richest 20% was three times higher than the consumption by the poorest 20%. (Figure 1)

In the case of hospital services, the discrepancy was even larger (3.2 times), while outpatient services seemed to be more equally (1.8) distributed and accessible to the poor [*Common Country Assessment, 2000; Poverty Reduction Strategy Paper, 2003*]

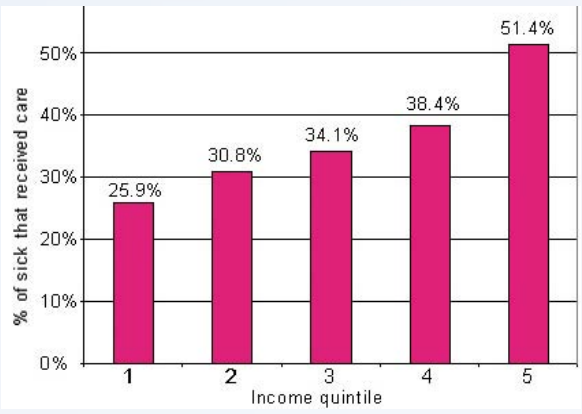

Figure 3. *Lack of equity of access to care: Republic of Armenia (Source: Public Expenditures Review).*

Citizens of many countries suffer from poor health, too many people have chronic-stage diseases, and too many people die at early age from preventable disease.

In particular, coronary heart disease and stroke, cancer, as well as tobacco-related illnesses and accidents claim too many lives; predominantly those who might enjoy their life for many more years and could have an impact to national capital production and pace of social developments [*Health Care in Armenia, 2002*].

Over the past few years, however, according to data available [*Human Development Report, 2005*] Armenia's absolute level Human Development Index (HDI) is 0.759, up by 5 points. Now Armenia occupies the 83rd place among 177 countries and the fifth place among CIS countries (behind Russia, Belarus, Ukraine, and Kazakhstan).

By acceding to the Millennium Declaration, Armenia committed to incorporating Millennium Development Goals (MDG) in national long-term policies and plans and introducing sustainable strategies and programs for integrating economic growth and human development. With the support from international organizations, Armenia launched Poverty Reduction Strategy mechanism in 2000, further to a respective Government Decree [*MDG: National Report Draft, 2005*].

In August 2003, the Government of the Republic of Armenia approved the Poverty Reduction Strategy Paper (PRSP). The same decree set PRSP monitoring indicators with due consideration given for localized MDG indicators and defined monitoring benchmarks. Inasmuch PRSP incorporated almost all of the Millennium Development Goals, these were neither localized nor made sufficiently country-specific yet.

Therefore, the process, unlike the PRSP related one, did not evoke certain national interest, although PRSP, in essence, serves as a mechanism for achieving MDG.

By itself, the possibility of progress toward the MDG targets for health does not significantly benefit the disadvantaged people whom the MDG are intended to serve.

Even in the USA, the health inequalities kill annually 84.000, more than the equivalent of a *Katrina* every week [*Reuters Health Information, 2005*].

The possibility simply arises because the MDG health targets, unlike most other prominent MDG targets, are stated in terms of improvement in societal averages rather than in terms of gains among poor groups within societies. Since improvements in any group, including the better off, would produce improvements in societal averages, progress toward targets expressed in those terms does not necessarily reflect improvements in conditions among the poor.

The gap between the rich and poor in Armenia has never been so wider, and this is not due to chance or "bad luck", but most apparently to man-made influences.

According to the NSS data and PRSP projections, the income of the country's poorest quintile of population, as percentage of incomes of the rich, was as low as 5.9% in 2001, 6.9 % in 2003, and 7.4% for the year of 2004.

Both theoretical understanding and empirical evidence suggest that poverty and poor health are strongly associated, and that health improvements and poverty reduction influence each other through several channels: physiological, behavioral, and psychological.

The research literature shows that improving health indicators, especially among the poor, has in the medium-long term a strong positive effect on economic growth. In other words, according to this view, the achievement of improved health outcomes among the poor (together with improved education indicators) tells us that some fundamental improvement is occurring within a community or country, and that improvement is most likely to herald more robust economic growth in the future.

Health inequalities are increasingly recognized as an important public-health issue throughout Europe. There are three useful ways of distnguishing between the different approaches to health inequality currently in place in member states of the EU [*Judge K. et al., 2005*].

The first one is a "Legislative approach" that requires to pass laws that make specific references to health inequalities (Greece, Germany).

The second one presumes setting up "General goals" that is clear documentary evidence of policy commitment to health equity, which is expressed in a variety of ways, but does not include commitments to qualitative targets (Denmark, France, Hungary, Italy, Norway, Poland, the Slovak Republic, Sweden).

The third group (7 EU members) assumes several quantitative health inequalities targets set.

These seven seem to fall into three distinct groups. The first group comprising Czech Republic, Latvia, and Lithuania broadly follow the WHO recommendations, while countries of the second group have one or two general quantitative targets. For example, in the Netherlands the aim is to bridge the gap of health inequalities by extending the healthy life expectancy of the lower social income groups by 25% of the current difference (=3 years) in 2020.

In Finland, which has had commitments to health inequality targets since 1986, the aim is: by 2015 to reduce mortality differences between genders, groups of different educational backgrounds, and different vocational groups by 20%.

In group three (Ireland, the UK) we may find much more wider range of targets, but the key targets are expressed as to reduce the gap in the premature mortality between the lowest and highest socioeconomic groups by at least 10% for circulatory disease, cancers, and injuries and poisonings by 2007, then to reduce the gap in low birth weight rates between children from lowest and highest socioeconomic groups by 10% until 2007, and reduce health inequalities by 10% till 2010 (England), as measured by infant mortality and life expectancy at birth.

As obvious, there is a considerable variation in the public policy goals and targets being set in different countries.

A number of EU countries have not formally articulated principles or goals to guide their actions at the national policy level in relation to promoting population health equity or reducing health inequalities. Nevertheless, the lack of national level policy statements does not necessarily mean that concerns about health inequalities are absent within a particular country.

MDG target indicators and their compatibility with the PRSP: Building up and strengthening health systems is vital if more progress is to be made towards the Millennium Development Goals (MDG).

There are two alternative scenarios for progress toward the MDG ***under-five*** mortality target: a "top-down" scenario, with gains highly concentrated among the better-off; and a converse, "bottom-up" scenario, under which gains flow primarily to the poor [*Gwatkin D., 2002*].

The specific characteristics of the two scenarios are as follows:

- A "top-down" scenario is favorable to the better off. All benefits from improved overall health conditions accrue first among the better off, and begin flowing to the poor only after the better off have attained the most favorable level possible. In particular, as overall societal mortality declines toward the MDG goal, the rate among people below the poverty line is held constant until the rate among people above the line reaches the low level currently prevailing in the industrialized world. Only then does the rate among people below the poverty line begin to fall.
- A "bottom-up" scenario is favorable to the poor. This is the converse of the scenario just presented. Using the same definitions of the lowest attainable mortality rate and of the proportion of people living above and below the poverty line, it features a pattern under which all gains go initially to those below the line, with the better-off starting to benefit only once the poor have reached the best possible level.

Unless significant and sustainable investments are made in health systems, current rates of progress will not be sufficient for the country to meet most of the Goals.

The MDG do not directly address inequality. Key recommendations of health in the MDG include:

- Strengthening health systems and ensure they are equitable;

- Prioritize health within overall development and economic policies;
- Develop health strategies that respond to evolving needs of population;
- Mobilize resources available to target the poor;
- Improve the quality of health data collection and analysis.

Progress made is measured by aggregating and averaging change at a national level. In theory, the MDG could be met even if households with low incomes were falling behind on the income, poverty, and health targets, or if the rate of reduction in child deaths among boys was sufficient to compensate for a slower rate of reduction among girls. The distributional blind spot of the MDG is a weakness on two counts.

First, the MDG are rooted in ideas about global justice and human rights. They are universal entitlements, not optional or discretionary allowances. It follows that progress should be for all, regardless of economic status, gender, parents' wealth or location in a country. Yet the MDG do not remind governments that success in advancing towards the MDG should be measured for all of society, and not just in the aggregate, as in this latter case progress among the poorest 20% of the population is far below the national average.

The PRSP Armenia proposed human poverty reduction indicators in the field of health care seem fully compatible with the following targets envisaged in the MDG paper.

Those are:

- **Target 5** – to reduce by two-thirds between 1990 and 2015 the ***under-5*** mortality rate;
- **Target 6** – to reduce maternal mortality by three quarters between 1990 and 2015;
- **Target 7** – to reverse the spread of HIV/AIDS;
- **Target 8** – to reverse the incidence of malaria and other major diseases.

Meantime, and unfortunately, many other common health-related conditions remain marginal to the mainstream of global action towards better health, and chronic diseases are amongst these neglected conditions [*Horton R., 2005*].

In Armenia, for instance, chronic diseases represent a huge proportion of human illness, especially amongst the poor, and can no longer afford to ignore.

PRSP Indicators Monitoring Analysis: According to chapter 13 of the PRSP, the monitoring indicators formed define "roles and functions of all parties" as well as "levels and responsibilities relating to the collection of data on indicators", which different governmental bodies and organizations should provide to monitor and evaluate indicators relevant to their own spheres of responsibility.

In more general aspect, approaches to monitoring and evaluating policies developed in several European countries to reduce health inequalities include different type of systems or tools in order to measure progress towards achieving health inequalities targets [*Judge K. et al., 2005*].

In one group of countries, only limited or less comprehensive systems of monitoring are introduced (such as register-linkage, national health interview surveys, research, etc.).

Other countries have found and implemented comprehensive frameworks to assess the progress on health inequity targets.

These systems typically include four key elements: an indicator program, a research program, a monitoring system, and a review/revision process.

However, we found that with few exceptions, there is little evidence that European governments have developed systematic and comprehensive evaluation of programs or policies to tackle health inequalities. Even if some relevant activity is reported, the impact of findings on subsequent policymaking is highly variable. In some countries the impact is non-existent or negligible [*Judge K. et al., 2005*].

The 2004 RA Ministry of Health report includes monitoring and analysis of 32 program activities and their indicators in the healthcare system out of 43 activities recognized for implementation in 2003-2006. Out of this number of program activities, 14 activities are not reported at all.

Therefore, certain number of various challenges and limitations have been observed and dealt with during the process of preparation of this independent expert report.

General PRSP Goals in the health sector: There are two groups of goals set by the PRSP as targets to reduce human poverty and meet Millennium Development Goals (MDG) by the year of 2010.

Those are:

- **To upgrade the quality of care and,**
- **To enhance the access to healthcare services, especially for the poor.**

Under that context, quite a clear-cut objectives and expected results (target indicators) are set for the national government, such as:

*Objective 1.Expected decrease in mortality rates (**under-5**, maternal, infant mortality)*

In compliance with the PRSP and MDG objectives, the Government has prepared a number of regulatory and directive documents.

In particular, in 2003 the Government has approved "Mother and child health care improvement strategy for 2003-2015", which stipulates 33-35% decrease of infant mortality and 50% of maternal mortality [*Medinform, 2005*]. In 2003, maternal mortality rate in the country was reduced to 18.0 per 100.000 live births compared with 8.8 European average values and is much less than CIS countries average (40. 0 per 100.000 live births).

Unfortunately, the 2004 RA Ministry of Health PRSP report does not address specific achieved results in ***under-5*** and infant mortality rates, except general indication on twofold higher infant mortality rate in the country, as compared with European average. It is indicated in the report that favorable tendencies in reduction of infant and maternal mortality are evident and most obviously the MDG targets set will be met.

At the same time, the process of registration of those indicators is still facing a number of statistical challenges.

Objective 2. Poverty and inequality reduction policy priorities in health care sector as of enhanced accessibility to health services, re-distribution of public funds, optimization and administrative reforms to increase efficiency

Poor people shoulder the greatest burden of disease, but receive a smaller share of health care resources than do the healthy and better off. In other words, health care resources are distributed inversely in relation to need. This phenomenon is known as "the inverse care law." It holds true from country to country and within countries across socioeconomic groups. The notion of the "inverse care law" was coined in the United Kingdom by Tudor Hart (1971), but the most striking examples of its existence today are seen in poor countries.

Preventable infectious diseases predominate among the poor, and there is an obvious mismatch between the distribution of the avoidable burden of disease and the distribution of highly effective preventive services — often provided free of charge — to deal with them. Even in the distribution of overall health care spending across income strata, there is an ample evidence of the "inverse care law" at least in low- and middle-income countries.

Usually, morbidity in the poorest quintile is typically 2.5 times higher than in the richest, while the proportion of care allocated to the poor is the inverse — the richest quintile gets 2.5 times as much as the poorest.

This means that the richest quintile relative to need receives more than 6 times more care. To achieve an allocation of health care resources proportional to need, following principles of horizontal equity, more than 25 percent of the health care budget will have to be shifted from the richer to the poorer quintiles.

However, even if public health expenditures are strongly pro-rich, the poor still rely on the public sector more than any other socioeconomic group.

The comparison of the public and private sector hospitalization rates or distribution of institutional deliveries per 1,000 births in public and private facilities by income quintile in developing countries showed that 20% of the poorest still get 61% of care from public sector and the richest 20% gain more than the poorest 20% [*Mahal A. et al., 2001*].

In Armenia, however, there are several well-documented evidences of inequalities in health [*Health Care in Armenia, 2002*].

.The list of such evidences includes but is not limited to such differences as:

♦ Gender differences and gender/behavior barriers in health: gap in life expectancy between men and women (69.2 for men and 75.6 for women, with expectation to live additional 14.3 years at the age of retirement for males and 21.3 years – for females) [*Economic Policy, 2004*], higher mortality rates in males or higher HIV/AIDS and STDs morbidity risk for them due to excessive migration to outer labor markets, injury/violation deaths, and underused family planning opportunities, especially in the country-side;

♦ Regional differences and tremendous "islanding" of a number of villages and rural districts from qualified general and specialty care.

♦ Social changes and differences, caused by quite a new phenomenon in the country, that is formation of highly-polarized societal classes, as a result of unfair and unequal distribution of the national income.

As a result of privatization processes in health care, a system is created in which wealthy people can buy easy access to high quality services in the private sector, whereas others are having difficulties in getting even basic services and in obtaining medicine.

Types of access to health care services: The current PRSP Armenia document acknowledges the priority for the healthcare sector to fight against the inequalities by increasing the accessibility of health services, with an emphasis on the primary health care.

Socioeconomic inequalities in health were found in many contemporary and past societies. They exist whether measured in terms of mortality, life expectancy, quality of life, and health status, whether categorized by socioeconomic measures or by ethnic groups or gender [*Acheson D., 1998*].

When addressing the health care access issues, it is important for the RA Ministry of Health to differentiate various types of it in order to better understand diverse character of this phenomenon and its policy purpose (what we want to achieve?) and appropriately design its policy.

There are 6 types of access to health care services:

1. Potential access: health care system characteristics and enabling resources that influence use of health services — policy purpose: to increase/to decrease health services use;
2. Realized access: use of health services – policy purpose: to monitor/to evaluate policies to influence health services use;
3. Equitable access: use of health services is determined by demographic characteristics and need – policy purpose: to ensure health services distribution is determined by need;
4. Inequitable access: the use of health services is determined by social characteristics and enabling resources – policy purpose: to reduce the influence of social characteristics and enabling resources on health services distribution;
5. Effective access: use of health services improves health status or satisfaction – policy purpose: to improve the outcomes (health status, satisfaction) from health services use;
6. Efficient access: minimize the cost of health services use and maximize health status or satisfaction – policy purpose: to minimize the costs of improving outcomes from health services use.

The existed health gap between socioeconomic groups can be considered also in both relative and absolute terms.

An example of a relative inequality would be the ratio of the death rate in the lowest social class to that in the highest class. Death rates (especially, infant mortality) could be, for example, twice as high in the lowest quintile as in the highest quintile [*World Vision, 2004*].

The equivalent absolute measure would subtract the death rate in one group from that in another to give the rate difference. This could be expressed as, for example, the death rate in the lowest quintile is specific number of deaths per 100,000 of population greater than the rate in the highest quintile.

The way to enhance accessibility seems to be possible through the increased public funding, appropriate re-distribution of resource allocation, strategic purchasing and payment system reforms in health sector, as well as overcoming barriers to health services access by influencing not only reducing supply (which has been always a focus of national and local decision-makers), but also on demand-side barriers (information on health care choices/providers, education, provision of emergency transport services, lower user charges, culturally sensitive health care delivery, etc.), which is likely to be more important for the poor and vulnerable groups.

According to UNDP database, 2003 and recent analytical data [*Aristakesyan M., 2005a; 2005b*] the reduced access to health care services in Armenia was caused mainly by 3 types of inequities:

• ***Physical inequity***

To reduce the influence of physical (geographic) inequity to access the health care services, the RA MoH has managed to purchase medical equipment for health care institutions.

The utilization of primary health care services at the Primary Health Care (PHC) level was improved just by authorizing around 80 ambulatories equipped with the medical ambulance vehicles (provided within the World Bank project), to render emergency services to the population under the state-order provision, i.e. with no out-of-pocket charges.

The well-developed network of health care institutions inherited from former years, surplus of medical workforce (physicians and nurses) diminish the negative influence of physical inequity in the country. On the top of that, a number of rural ambulatories and health centers have been re-stored and/or completely renovated with the active support of various NGOs and donor organizations. The NHDS data shows 1.0 to 1.8% did not see a doctor due to geographic remoteness.

At the same time, due to high level of material poverty in rural areas [*Mirzakhanyan. A., 2004; Jrbashyan N., 2004*], which exceeds that of urban centers by 1.2 times, both financial and geographic access to services and medicine in Armenia is quite complicated, especially in rural communities.

About 90% of the 170 rural communities surveyed within the framework of the NHDS, either did not have pharmacies or had pharmacies, which were non-operational.

According to OXFAM Armenia survey [*Monitoring and assessment, 2004*], in four marzes absence of pharmacies in rural area forced around two-thirds of residents to purchase pharmaceuticals in nearby towns, while from 10 to 25% of them had to travel to Yerevan to buy necessary medicines.

• ***Time inequity***

According to the same survey, from 1.2 to 6.4% of all responders had time limitations in health care services utilization.

Evidently, the time factor, as type of inequity, is more prevalent amongst the rural population than in metropolitan locations, but in cities medical care is more inaccessible due to lack of time.

Lack of time to get medical services appears 3 times more influential when accessing the health services, compared to physical/geographic accessibility.

• ***Financial inequity***

The NHDS survey shows that before physical and time inequity, healthcare services are mostly inaccessible for the population due to financial constraints, i.e. inability to pay costs involved, no matter of gender, place of residence, level of poverty in a given region.

In the NHDS report, the lack of access to health for those who were sick, but did not see a doctor because of inability to pay costs reached 92.0 in Yerevan and was 87.5 to 93.6% in marzes of RA.

Another feature of financial inequity has appeared as limited access to affordable essential drugs.

High pharmaceutical market prices with no regulatory mechanisms, along with other types of financial constraints, have become a serious limitation for healthcare services utilization.

Using the NHDS database, a number of indicators, which characterize lack of access to health care, have been identified [*Aristakesyan M., 2005a; 2005b*]. (Figure 2).

Table 1.

Affordability of healthcare services: share of state expenditures by consumer quintiles in %
(Source:Aristakesyan M., 2005a; 2005b)

Medical Facilities	Consumer quintiles					Total	Coefficient of concentration	5 th quintile/ 1 st quintile)
	1	2	3	4	5			
Hospitals	13.4	12.2	13.4	18.4	42.7	100	0.276	3.2
Ambulatories and Policlinics	15.6	18	17.9	20	28.5	100	0.114	1.83
Diagnostic Centers and other Institutions	8.2	22.4	14.3	12.3	42.8	100	0.276	5.22
TOTAL	13.3	14.8	14.6	18.1	39.2	100	0.18	2.95

Particularly, 1/3 (35%) of all responded households were "almost" or "entirely" unable to meet the health needs of the families

Analysis also show that affordability of services for certain groups of population widely differs depending on the service provider (in-patient, outpatient) and type of services (Table 1).

Regardless the important role of financial inequity in unbalanced utilization of healthcare services in Armenia, the MoH 2004 PRSP report does not have any meaningful reflections on or highlights of this subject.

Neither the PRSP monitoring and evaluation indicators address financial accessibility issues.

Based on the mentioned 2004 monitoring report, it becomes evident that the country's primary health care, as a system, is still low efficient. Services provided at the ambulatory level remain overall at unsatisfactory level, and outcomes are far below international standards, especially when it goes to specialty care.

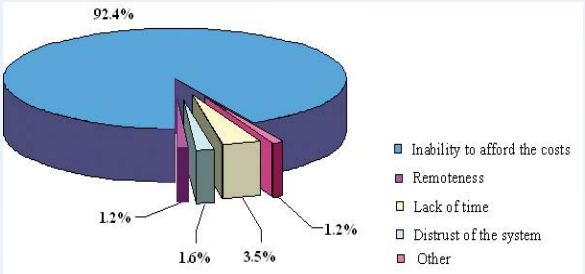

Figure 2. *Accessibility of medical care (Source: Aristakesyan M., 2005a; 2005b).*

Even though a big share of the 2004 health care money was channeled to the primary health care, doubling the cost of an outpatient visit from 450 Armenian drams (AMD) to 900 AMD, utilization of ambulatory care services, both clinic and home visits, was reduced significantly and in 2003 it was five times less than in 1980.

Average number of annual outpatient visits per person over the last years has remained steadily very low – just 2 visits per year.

In 2004, compared with 2003, the ratio between outpatient and in-patient state financial expenses was improved and made 1:1.6 versus 1:2 in 2003 and then was driving towards perfectly balanced 1:1 ratio by the end of FY 2006.

There is no evidence, which could be sourced from the MoH 2004 report, that the family physicians have received or are receiving any features of independent status or independent practices, relevant to changes in financing mechanisms, management of resources and decision-making, as it is envisaged and programmed by the PRSP.

Financing and re-distribution of public funds: The imperfectness of the financial access to healthcare services is first and foremost linked to non-adequate financial resources to pay for

services, provided by the physically accessible health care institutions (hospitals and policlinics). Pro-poor policies need adequate, sustainable and multifaceted in-flow of financial resources to provide affordable services to the most part of population who has very limited abilities to pay for it when facing health problems, and in each single case households and families are enforced to turn to so-called "opportunity costs" arrangements to cover costs by selling their own assets and/or other tangible and non-tangible values.

In case one wants to have a real look on the structure of sources of healthcare services finance, then it is quite clear to understand that such a composite structure would hardly serve interests of poor, if even intended to (Figure 3).

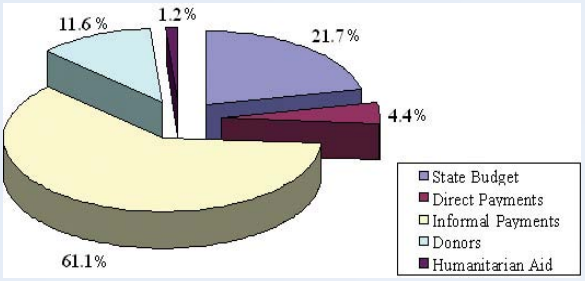

Figure 3. *Structure of health care financing by sources in the end of 2003 (Source: M. Aristakesyan, 2005a; 2005b).*

As stated in various official papers and documents, the health care as a system is recognized an issue of national security and people's well-being.

Data reported by RA Ministry of Health and Ministry of Finance and Economic Development (part 8. Health Care) in 2004 showed substantial increase of public expenses in the field, along with the implementation of health care system improved governance and efficiency. The programmatic priorities were selected as of mother and child health care (MCH), infectious diseases and HIV/AIDS prevention.

As the report shows, unlike the Gross National Product (GNP) increased statistics over the last years, the dynamic analytic review of the financial allocations from the state budget reveals quite an unfavorable tendencies, such as slow down pace of public funds (as a % of GNP) spent as a health care budget.

Expenditures on health from the state budget (as % of GNP) have been reduced from 1.8% in 1995 to 0.8% – in 2000, and to 1.5% – in 2004.

In 2004, the state health care expenses from the budget totaled 24.7 billion AMD, which is a raise of 26.5% when compared with the previous year.

Only part of these funds was directed to finance primary health care projects that boosted up the cost of an ambulatory visit from 450 AMD to 900 AMD, while a substantial flow of resources was directed to cover costs and daily expenses related to the expanded volumes of the state-guaranteed care in hospital settings.

In 2004, hospital care consumed 13.0 billion AMD, i.e. 52.5% of all budget expenses, while primary care spent only 8.0 billion AMD, achieving the more favorable for ambulatory care expenses ratio of 1:1.6 between PHC and hospital care, compared with the same type ratio of 1:2.5 in 2002 and projected balanced ratio 1:1 – by the year 2006.

In 2004, the salary amount paid to medical staff working in the primary healthcare settings reached 36,000 AMD for physicians and 26,000 AMD for nurses.

Unfortunately, no indications were made on how it corresponded with increased expenditures on food, non-food products, school education, and out-of-pocket expenses to get health and public services.

Optimization and administrative reforms to increase efficiency, transparency, and system accountability:

The concept of modernization or optimization of the national healthcare system was adopted by the Government of Armenia in 2001.

The Government accepted that the healthcare system of Armenia should be established and developed according to the aims and values of the World Health Organization (WHO) [*Health for all, 1998*].

This policy is based upon the fundamental principles of equity, solidarity, accessibility, transparency, legality, and control of quality of healthcare. It requires that governments exercise

a stewardship role over their health systems to ensure that their systems are managed according to these fundamental principles.

In 2004, the Decree N-1395-U on the Adoption of the Action Plan to Improve the Republic of Armenia Hospital Oversight/Governance was put in place involving a time table and action plan to improve the hospital oversight and governance process to be executed in upcoming 5 years (until 2009). The Decree covered 3 areas:

1) the oversight/governance functions of public hospitals,
2) State Health Agency contracting with public and private sectors, and
3) regulation of public and private sectors.

The expected impacts from optimization and administrative measures, envisaged by the Government are:

- Re-configuration of some healthcare institutions to form integrated networks and to achieve improved performance and productivity;
- Improved managerial and financial accountability;
- Increased potential flow of resources and funds through more efficient use;
- Improved primary health care performance and efficiency.

Accountability issues of the Armenian health care usually lack extensive coverage either in the PRSP documents, or in the Ministry of Health report.

At the meantime, even when public healthcare services are available, poor people especially in rural area do not often use them.

It is not unusual:

- Ambulatory and health centers are closed when they were supposed to be open;
- Lack of professional staff members on site.

Apparently, developing more accountable health systems can dramatically improve the access.

Implementation plan of the PRSP policies and objectives (150, 151, 152) in 2004-2005 includes enhancement and strengthening both efficiency and accountability of the system.

There are very few references in the presented report to highlight these issues.

At the meantime, movement towards efficient, accountable, and productive healthcare services reduces the corruption risks in the sector, especially in respect of "shadow" market and "informed" and "non-informed" corruption at all levels of healthcare institutions governance, finance and services provision [*Aristakesyan M., 2005a; 2005b*].

Materials from 2001-2002 ArmStat analysis, based on results of the survey of organizations and individual entrepreneurs in the health care, as well as households, showed that the volumes of consumption of health care services, indicated by households were 6.65 times higher than volumes of the same services provided by the healthcare organizations and private practices. In accordance with the households' survey, the indicator of the number of employees in health care sector 1.49 times exceeds the respective indicator of the survey of organizations and individual entrepreneurs.

The volume of purchasing pharmaceuticals has exceeded the volumes of their sales 10.0 times, while the number of employees in this sector (retail trade of pharmaceuticals), according to the households survey was 1.77 times more than the number evaluated by the survey of organizations and individual entrepreneurs.

Therefore, the volumes of consumption of healthcare services and purchased pharmaceuticals, indicated by the households exceeded respectively almost 4.5 times (6.65: 1.49 = 4.47) the volume of services provided at the expense of population and 5.65 times (10.0: 1. 77 = 5. 65) the volumes of pharmaceuticals sales, indicated by health care organizations and individual entrepreneurs.

These last two indicators, apparently, could be considered as quite outspoken indicators of "shadow" economy in the country's healthcare sector.

It is well understood that creation of intrasectoral monopolies and utilization of primarily authoritarian approaches in decision-making process in health care services accompanied by very little or no accountability mechanisms provide a fertile soil for corruption and "shadow" behavior [*Klitgaard R., 1999*].

According to experts [*Aristakesyan M., 2005a; 2005b,*] non-official "shadow" payments in the health care sector in 1977–2003 were estimated from 60% to 70% (61.1% - in 2003) of total health expenditures, topping 100 mln USD in 2003 (that merely means daily in-flow of 273.9 thousand USD, or 11.4 thousand USD – per hour!).

The human poverty reduction strategy and HIV/AIDS, malaria and tuberculosis in Armenia

As the PRSP has stated, poverty is closely related to such socially important diseases as tuberculosis, sexually transmitted diseases, as well as malaria and HIV/AIDS.

Beyond the effect all these measures will have directly on the number of people protected from, diagnosed and treated for the three diseases, in the long term, they will also have strong impact as the so-called "system-wide-effect" enhancing country's ability to improve the health of population in general.

Due to various socioeconomic reasons, an unprecedented 53 new cases of HIV infection were registered in 2004 and experts believe that the estimated number of HIV carriers probably reaches 2800-3000. Even without taking for granted, the tendency of growth in HIV/AIDS cases in Armenia makes this epidemic a real threat for the country [*World Vision, 2004*].

According to data [*The Global Fund, 2005*], since 2003 more than 3 200 people, individuals from key groups have benefited from the projects supported by the grant from Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM).

In 2004, World Vision working through the UNDP procured 5.000.000 USD worth medical equipment for testing lab at the National Center for AIDS prevention.

As key highlights of 2003, due to strong commitment of all partners, including Ministry of Health and NGOs, 6 laboratories were renovated in Yerevan, Goris, Gavar, Artashat, Idjevan, and Vanadzor, and Voluntary Counseling and Testing (VCT) was provided at 107 VCT sites, including 45 prenatal clinics, where services were provided.

More than 2700 young specialists and 700 key group specialists underwent training in HIV prevention.

In addition, 715 teachers and lecturers were trained to provide HIV/AIDS prevention educational programs, which consequently seek to be incorporated in the school curriculum.

All of these data were acquired from the Global Fund and World Vision Armenia sources, but unfortunately, the RA MoH report does not concentrate enough on these quite important facts.

Amongst the risk groups, the MoH 2004 report presented 7% of HIV prevalence amongst intravenous drug users (IDU) and 3% amongst female sex workers (FSW).

As to malaria national program implementation results towards the eradication of cases and reduction of imported morbidity, the MoH presents a dozen of administrative (e.g., organization of working groups), pharmaceutical supply and laboratory activities, along with preparation of guidelines, staff education and training, etc.

As an outcome, the report has declared the drop of malaria incidence rate (down to 1.4 per 100,000 population in 2004), with no analytical reference to dynamics and trends of malaria morbidity compared with the previous years.

The human poverty reduction strategy and vaccination in Armenia

The PRSP gave a special attention to vaccination programs aimed to prevent the most common childhood infections.

Within the frameworks of the national program of disease immunological prevention and funded by the Global Vaccine Initiative (GVI) 65 refrigerators were purchased and distributed to rural ambulatories in all 10 marzes (regions of Armenia) to keep sustainable "cold chain" requirements for vaccine safe transportation and use.

The MoH report presented quite a high level of vaccinations against diphtheria (84.1%), pertussis (79.4%), measles (91.5%), and tuberculosis under the age of one year (95.8%).

According to the report, no manageable infections mortality cases were reported in 2004.

Summary

1. Reduction of ***under-5*** mortality and infant mortality, as well as maternal mortality rates, as indicators of PRSP expected results, are commonly used target indicators, fully compatible with the MDG targets, but…
   - They are very much "averaged" for a given population and are usually used as representative indicators of health and social well-being of total population, but not social subgroups;
   - At the same time, these mortality indicators are measures of central tendency and do not address realities existed in various layers of society and its least better off quintile;
   - Still serving for general purposes to characterize the level of population health, they may have limited significance as valuable parameters to assess the in-depth mortality indices in the poorest communities;
   - The same PRSP indicators would provide as poverty reduction outcomes the information that is more useful, if evaluated in deprived communities.

2. Innovative and comprehensive approaches in health care delivery and provision towards bringing health services closer to possible users in deprived and poor communities are required (see Annex).

3. According to the MoH 2004 report, certain steps in healthcare services allocation have been taken to reduce physical and time inequity, but financial inequity and demand-side barriers still hold the gap between the needs and utilization of basic health services, especially for poor and rural population.

4. Proved accountable and effective governance systems need to be implemented that improves the access and efficient utilization of hospital and outpatient healthcare services.

5. Currently adopted system of indicators to monitor, evaluate, and to report on the PRSP implementation process in health care sector does not completely and accurately disclose the dynamics of poverty-induced constraints in access to health, especially in least better off doing groups (poor and deprived groups) and people living in rural area.

6. New and well-thought specific indicators should be put in place for better understanding and appropriate evaluation of changes in pro-poor policy and reduction of poverty level in country.

7. Due to closed nature and specifics of health services provision and delivery, as well as strictly established rules, professional legacy, and corporative behavior, more active participation of civil society, along with users of healthcare services and other development partners is necessary to keep pro-poor policy in health care system accountable, transparent and efficient.

Recommendations

We propose three basic types of recommendations that are aimed to tell the Government on further steps on how to decrease more effectively the negative influences and disparities in the healthcare sector.

The realization of following sets of recommendations and close follow-up of the implementation process on annual, mid-term, and long-term timetable would allow the Government and civil society to recognize more accurately the poverty reduction dynamics in the healthcare sector.

1. Initiate innovative and comprehensive practical steps that increase the physical and time accessibility of primary health care (PHC) services.

2. Introduce policies aimed to increase efficiency and accountability of the healthcare systems by:
   - Implementation of corporate governance of public hospitals as a tool to transparent, effective and corruption reduced-risk management;
   - Constituting Supervisory Committees linked directly and indirectly to improved quality and high-performance management;
   - Strengthening the regulatory and oversight functions of the RA Ministry of Health, municipalities and marz (regional) departments of health and social security;
   - Shifting of oversight concepts from only financial and administrative control to clinical standards and governance/performance improvement;

Table 2.

Selected and recommended indicators for deprived groups/districts

Policy	Objectives	Selected Indicators
To meet target mortality rate indicators declared by the UN within the MDG frame-ork	To reduce mortality rate particularly amongst the poor population	Mortality in 20% quintile of poor
		Maternal mortality in 20% quintile of poor women, as % of all maternal mortality
		Under–5 mortality in poor families
		"Economically-Active Population" mortality
To stop negative trends in utilization of health care services and enforce people's constitutional right to health	To reduce the influence of social characteristics and enabling resources on health services distribution to increase access to PHC	Number of tooth extractions/tooth filling procedures as % of all dental care visits
		% of adults in the community with tooth loss
		% of children in the community with untreated tooth decay
		Number of high-tech procedures utilized by the vulnerable groups as a preventive care intervention
		Number of newly organized Ambulatory Surgical Centers (ASCs) in deprived districts
		Number of "One Quick-Stop" laboratory outlets
		Number of persons anonymously tested for HIV/AIDS in laboratory outlets
		Kessner Index (number of women obtaining adequate care)
Improved governance at all levels aimed to eradicate poverty	To increase efficiency and accountability of health sector in order to improve the outcomes (health status, satisfaction) from health services use	Number of public hospitals, where corporate governance was introduced
		Number of hospitals with hospital-based ambulance services
		Number of family medicine centers in selected regions/districts
		Number of hospitals governed by Supervisory Committees (SC)

- Establishing the system of community hospitals exclusively for poor and socially vulnerable population.

3. Introduce new specific indicators and consider them in the PRSP guidelines for in-depth analysis of mortality indicators in the most poor and socially vulnerable clusters (Table 2):

- Maternal mortality rate in 20% quintile of poor women, as a % of overall maternal mortality;
- "Economically-active population" (EAP) annual mortality rate;
- Level of mortality amongst the 20% quintile of poor;
- ***Under-5*** mortality in the poor families;
- Infant mortality rate in the poor families;
- Number of health care institutions turned over to corporate governance system (to reduce corruption risks);
- Number of health care services outlets (mobile diagnostic units/teams, anonymous testing units, "One Quick-Stop" blood test units, etc.);
- District-by-district (urban and rural) maternal, ***under-5*** and infant mortality rates;
- Number of tooth extraction/tooth filling procedures as % of all dental care visits (selected districts);

- Percent of adults in the rural community with complete tooth loss;
- Percent of children in rural community with untreated tooth decay;
- Use of certain procedures and instrumental technologies (mammography, prostate ultrasound, regular colonoscopies, etc.) that are available in secondary and tertiary care institutions, and, importantly, might be extensively and purposely used by the poor for chronic illness prevention, especially for those under the risk.

ANNEX

Recommended innovative approaches to enhance the access to basic health care services

1. Ambulatory Surgical Centers (ASC) – A newly introduced concept of rendering range of surgical services in specially designed and appropriately equipped outpatient/ambulatory settings to perform same day surgery and related service procedure (orthopedics, plastic, gastroenterology, eye, urology, etc.).

Advantages: standardized community-oriented highly cost-effective single specialty, multi-specialty, and limited multi-specialty care with extended direct access for policlinic referrals and self-referrals. Also, reduces wasted overbuilt space and recognizes economies from "Just-In-Time" inventory.

Limitations: provides predominantly limited type of services.

2. Mobile Diagnostic Units (MDU) – Vehicle-based diagnostic units to perform standardized range of diagnostic services/procedures, cardiac screening and treadmills, limited laboratory testing, limited imaging, etc., supported by consultation and counseling services.

Advantages: easy and effective remote and deprived communities penetration, bringing basic diagnostic work-up to large numbers of service users.

Limitations: Only limited nomenclature of tests and services could be offered.

3. "One Quick-Stop" Units/Outlets – Laboratory tests units/outlets to perform standardized nomenclature of blood-screening check-ups. Such units are located typically in busy and highly populated metropolitan areas (shopping malls and centers, places of mass-events and gatherings, fairs, etc.).

Advantages: offers direct (no referrals required), quick, and easy-to-reach (one-stop) set of quantitative and qualitative laboratory tests (blood sugar, hemoglobin, other blood counts), vitals check (blood pressure, pulse, weight, height, etc.), skin care and healthy life-style/nutrition/anti-smoking information to population.

Limitations: Time-bound restrictions in performing certain tests, services, etc.

4. STDs/HIV/AIDS Anonymous Blood Drawing Stations/Laboratories –

Opportunity to use anonymous blood check-ups to reduce spread of STDs/HIV/AIDS morbidity.

Advantages: Such type of blood drawing stations/labs are suitably placed in the downtown area to unlock safe and undisclosed access to all those seeking these services and secure direct referral of positive cases to specialized services when necessary.

Limitations: behavioral and psychological boundaries, problematical identification, and follow-up of positive cases.

References

1. *Acheson D.* Independent Inquiry in Inequalities in Health Report published by The Stationary Office, London, 1998. www.archive.official-documents.co.uk/document/doh/ih/ih.htm
2. *Aristakesyan M.* Human Poverty and Pro-Poor Policy in Armenia. Yerevan 2005a, 23p.
3. *Aristakesyan M.* Pro-Poor policy specific features in health care sector. Report. 2005b, Yerevan.
4. Common Country Assessment. Republic of Armenia. UNDP doc. 3333, Yerevan, 2000, 73p.
5. Economic Policy and Poverty (periodical). Yerevan, 2004, p.9-10
6. *Gwatkin D.R* Who Would Gain most from Efforts to Reach the Millennium Development Goals for Health? An Inquiry into the Possibility of Progress that Fails to Reach the Poor. December 2002, 30p.
7. Health Care in Armenia in 2002. Ministry of Health Official Statistical Report. Yerevan. 2002.
8. Health For All in the 21st Century. WHO. Geneva 1998.
9. *Horton R.* The Lancet, 2005, 366: 1985-1987
10. Human Development Report. 2005, 49 p.
11. *Jrbashyan N.* Rural poverty in the regions of RA; Deprivation index of Armenia's rural population (Based on NHDS data). #4181. 2004. Yerevan. 96 p.
12. *Judge K., Platt S.,* Costongs C., Jurczak K. Health Inequalities: A Challenge for Europe. 2005. htto://www.dh.gov.uk
13. *Klitgaard R.* International Development and Security. RAND Graduate School, 1999.
14. *Mahal A., Yazbeck A., Peters, D.* The Poor and Health Service Use in India. Draft. The World Bank, Washington, DC. 2001. 29 p.
15. Medinform Information Agency, #2 (2), 2005, 6p.
16. Millennium Development Goals. United Nations Millennium Declaration 55/2, September 2000, 9p.
17. Millennium Development Goals (MDG): Localization and progress. National Report Draft 2005. 32p.
18. *Mirzakhanyan A.* Rural poverty in the regions of RA. Rural Poverty is in stagnation, UNDP report, 2004. # 4181. Yerevan. 96p.
19. Monitoring and assessment of PHC and irrigation water in Shirak, Vajots Dzor and Syunik marzes. OXFAM. Yerevan. 2004.
20. Poverty Reduction Strategy Paper, Republic of Armenia. Yerevan, 2003. 190p.
21. Public Expenditures Review (PER) for Armenia, World Bank Report No. 2434-AM, June 27, 2002.
22. Republic of Armenia Government Decree No. 1395-Ա, 30 September 2004 "On adoption of the action plan to improve Republic of Armenia hospital oversight/governance". Yerevan.
23. Reuters Health Information, 2005.
24. Social Snapshot and Poverty in Armenia Statistical Analysis Report. Yerevan. 2002. 182 p.
25. The Global Fund and World Vision Armenia News Bulletin, June, 2005. Yerevan.
26. World Vision Annual Review, Armenia, 2004. Yerevan.