CORRELATION BETWEEN WEALTH AND HEALTH OF THE NATION
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Abstract
Protecting and restoring the health and quality of life of every citizen are basic functions and concern of the state. Two-way relationship exists between health and wealth. Welfare creates directly material conditions. Indirect impact is expressed through social and psychological effects. On the other hand, there is evidence of the influence of income on health.

Key words: wealth, health, quality of life

PROSPERITY – ECONOMIC THEORY
Prosperity is a complex economic category that reflects the interrelation between the living conditions and the degree of satisfying the needs of the individual, the groups and the community in general. This is the opportunity for the economic system to create a multitude of goods; their consumption will contribute for achieving certain degree of satisfying the needs. (21) In the framework of this broader notion, prosperity is firstly objective function of the public production and secondly criterion for the degree of achieving this objective – satisfying the continuously reproducing and developing needs. In the hierarchy of the European economic and social objectives prosperity is defined as a broad objective with the following components: maturity, fair distribution, social security and sustainable environment; the narrower objectives are related to the improvement of productivity, incomes and economic growth. (14) The expansion of the prosperity indicators’ scope exceeds the traditional (GDP, incomes, wealth) and the inclusion of the ones about inequality, social inclusion, scope of the healthcare and social protection, protection and reproduction of the environment logically reflects the abovementioned multilayered character of the phenomenon.

L. Yotova remarks that there is no ideal model of prosperity distribution between the groups and individuals in a society. The particular model is normatively predefined by the selection of replacement between equality and effectiveness, it is included in the legislation and its contents is realized in the operations of the institutions at various levels. (21)

The basic elements of the objective prosperity include the living conditions of people and their capabilities to achieve their potential – opportunities that as a rule should be fairly distributed between all people without any discrimination whatsoever. The equal chance for health is a part of the real prosperity (WHO/EURO, 2012).
DEFINITION OF HEALTH

“Health” is a complex and multilayered category. In 1961 The World Health Organization (WHO) defined health as follows: “A condition of full physical, psychic, and social welfare, and not only as the absence of disease or disability” (3). This almost utopian definition highlights the positive side of health (of health and of the healthy ones, not only of those with diseases), as well as the three health aspects – the physical side (somatic health), the spiritual side (psychic health) and the public (social) side. While the physical and psychic health are considered as the conventional contents of this notion, the social aspect is somehow harder to grasp and difficult to achieve criterion for good health. The social side of human’s health depends on the public relations in which the individual participates, on its social environment. Social welfare is related to such health components that make it possible for the individual to study, work and take part in the social life, to have a home and a family. It is not by chance that poverty and unemployment are considered as important social health determinants and risks. Namely the social side of our health reveals the bilateral relation between economy and health. (9)

Human health depends on a complicated complex of endogenous (internal) and ethogenic (behavioural) factors. For example individual’s heredity and own biological potential predetermine or influence the occurrence and the progression of numerous diseases and conditions. The exogenous factors in turn are divided into environmental (related to the environmental condition and changes), and social (for example the healthcare system, the educational system, work, income, family). It is well-known that in the case of many health problems the healthcare system’s share in generating health improvements (for example mortality rate decrease) is not more than 15-20%, but each well-organized state invests significant resources in its healthcare system that has emerged as an individual branch in the last one hundred years.

Health has always ranked among the top places in the value system of the Bulgarian citizens. Special value is also attributed to the security and safety related to nation’s health in the prosperity context, according to the National Health Strategy (2014-2020).

State’s main function and care is to preserve and restore the health and improve the life quality of every Bulgarian citizen. Health is not only right of each citizen, ensured by state’s Constitution, but an obligation of everybody related to the conformity with the legislation and the maintenance of healthy lifestyle that result in higher prosperity. (16)

HEALTH AND MATERIAL WEALTH

Health is a category that is integrally related to the human factor for economic reproduction. Health’s relatedness to population’s strength or “energy” – “physical, mental and moral” (according to the wording provided by A. Marshall), defines labour productivity and society’s material wealth depends on it. On the other side, the main significance of the material wealth (if reasonably used), is improving mankind’s health and strength. The proximity of these two phenomena – health and strength results from the uniformity of the factors influencing them. According to Marshall these are: climate, primary means of living such as food, clothing, housing, heating; relaxation; optimism, freedom and change of the way of life; profession; urbanized way of life (15). At this stage (the end of the XIX century) healthcare was not extensively included in the set of factors that influence human health, hence state’s economy. Later on, with the institutional development of the healthcare services and medical technologies, health became more capable of more intensively influencing the economy through a well-maintained and restored workforce.

THEORY OF HUMAN CAPITAL

After the 30’s of the XX century the scientists established and developed the theory of the effective management of human factor. The economic theory follows the managerial theory and relies on the neoclassical perception of the “human capital”. The theory created by G. Becker in 1964 includes
health for the first time (in addition to education) as the inducing stocks of human capital (9). It mainly highlights the economic return of education, but the more recent works of Becker use specific health indicators when surveying the relation of human capital with economic growth (10). According to Becker’s theory the investments in human capital increase the individual labour productivity expressed in the production of market and non-market goods. The essence of this theory is about measuring the economic contribution of education and health through the workforce productivity and the quantity of the produced product. Education is perceived as component that increases the volume of human capital, and health – as a factor that extends the term for capital use. (9, 10, 11)

The best development of health’s economic function could be found in the model of M. Grossman (1972), based on the perceptions of Becker. Grossman categorizes health as consumer and investment good. In the capacity of consumer good it is included in the function of individual’s consumer utility, and in its capacity of investment good health decreases the number of days lost because of illness and death and increases the number of days for the production of market and non-market goods during the business hours and the leisure time (12, 13). Despite the extensive criticism concerning the limited nature of Grossman’s model, its role for health’s contribution in the economy and the updating of the economic perceptions of healthcare is indisputable.

The more recent notions of human factor’s role in the economic growth take into account health’s effect on the quality of life. The reports of the Roman club are sceptical concerning the limited quantitative approach for measuring the economic growth. Since the end of the 80’s according to the UN methodology health is included as one of the fundamental measurers of the human development index. Additionally, it (via the indicator “longevity”) is perceived as one of the most significant components of the quality of life. The international strategy “Health for everyone” where Bulgaria participates as well, significantly reflects these modern perceptions that expanded the notion of “economy” in the aspects of human development and quality of life (19).

HEALTH AND WELFARE – MUTUALLY INFLUENTIAL

According to Ts. Vodenicharov and S. Popova the influence of healthcare systems for improving society’s health and welfare is about the following:
- they have positive impact on the decrease of mortality rate and the disease outcome;
- they lower the health inequality with the rendered medical assistance and the implementation of healthcare programmes.

The healthcare systems contribute for the social welfare in three main ways:
- they contribute for the health and welfare directly and indirectly with influencing the process of prosperity creation;
- they contribute for the economic growth;
- they directly increase the welfare of the various communities since they keep at high esteem the presence and accessibility of the healthcare services and are satisfied with them. (20)

Health contributes for the prosperity and welfare in the following manners:
- directly – health is the critical dimension of welfare and the international conventions and the national legislation perceives it as fundamental human right;
- indirectly – via health’s role in increasing economic productivity and prosperity at individual and social level.
There are two-way relations between health and prosperity:

- prosperity directly creates material prerequisites and indirectly – through its social and psychological effects;
- prosperity is an important social determinant of health at individual and social level;
- there are evidence for income’s influence on health and health’s influence on prosperity. (20)

**ON ONE HAND, ECONOMY’S INFLUENCE ON HEALTHCARE THANKS TO ITS SYSTEM OF COMPONENTS**

On one hand, economy influences healthcare in two ways. The first is about the resources dedicated to the healthcare system. The second is related to the direct influence of the economic growth on the health status of the population, hence on the needs of medical assistance. The human being is socially adapted. The economic results influence not only directly through the living conditions, but also indirectly – through the emotions presented as adaptation to the loss and/or success. In this light the best example is the disease rate among the unemployed people.

Table 1. presents the changes in the unemployment coefficient and the annual inflation rate of the Republic of Bulgaria for the period 2009-2011.

<table>
<thead>
<tr>
<th>Table 1. Unemployment coefficient and annual inflation rate</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unemployment</strong></td>
<td>6.8%</td>
<td>10.2%</td>
<td>11.3%</td>
</tr>
<tr>
<td><strong>Annual inflation rate measured with the CPI</strong></td>
<td>0.6%</td>
<td>4.5%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

*Source: National statistical institute*

* Consumer price index

The data contained in the table show that during the reviewed period of the global economic crisis, the unemployment rate in the Republic of Bulgaria tended to increase. The highest inflation rate was in 2010 – 4.5%, then dropping to 2.8%.

Table 2. reflects the dynamic fluctuations of the employment coefficient in the age group from 15 to 64 considering the comparativeness of the data about Bulgaria and the European Union countries and the monitoring of the performance of the objectives defined in the EU Strategy “Europe 2020”.

<table>
<thead>
<tr>
<th>Table 2. Employment coefficient (aged between 15-64)</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bulgaria</strong></td>
<td>62.6%</td>
<td>59.7%</td>
<td>58.4%</td>
</tr>
<tr>
<td><strong>EU</strong></td>
<td>64.5%</td>
<td>64.1%</td>
<td>64.3%</td>
</tr>
</tbody>
</table>

*Source: Employment agency “Annual book 2012”*

Country’s economy is stagnating and this impacts the labour market condition. During the reviewed three-year period we noted the trend of continuous decrease of the employment coefficient among the people aged above 15 in Bulgaria. We observed higher values of the employment coefficient in the age group from 15 to 64 for the European Union countries.

The unfavourable economic indicators influence the health status of the Bulgarian population.

Bulgaria remains among the European Union countries with one of the highest standardized death rates (932.87‰). In most of the developed European countries the standardized death rate is lower than the EU average (591.66‰), according to Appendix 1 “Health and healthcare – current condition” of the National Health Strategy (2014-2020).
The standardized death rate per 100,000 people of Bulgaria’s population exceeds the EU average one because of 17 reasons. Bulgaria ranks among the first when it comes to the standardized death rate resulting from diseases of the circulatory system; other cardiac diseases; brain-vessel diseases and some conditions that occur during the perinatal period (table 3).

The standardized death rate because of diseases of the circulatory system for our country is 3.8 times higher compared to the one of the European Union.

Table 3. Health status indicators. Bulgaria and comparable countries
(2009 and the last about which we have available data)

<table>
<thead>
<tr>
<th>Country</th>
<th>Longevity at birth (years)</th>
<th>Longevity decrease in the case of death before turning 65</th>
<th>Infant mortality</th>
<th>Standardized Death Rate (SDR) resulting from all causes per 100,000</th>
<th>SDR cardiovascular system</th>
<th>SDR malignant formations</th>
<th>SDR, chronic diseases of liver, cirrhosis</th>
<th>Tuberculosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>80.6</td>
<td>4.1</td>
<td>3.8</td>
<td>563</td>
<td>213</td>
<td>158</td>
<td>15</td>
<td>5.3</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>73.4</td>
<td>6.9</td>
<td>8.6</td>
<td>995</td>
<td>611</td>
<td>172</td>
<td>18</td>
<td>35.4</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>77.5</td>
<td>4.8</td>
<td>2.9</td>
<td>744</td>
<td>357</td>
<td>197</td>
<td>16</td>
<td>6.0</td>
</tr>
<tr>
<td>Greece</td>
<td>80.3</td>
<td>4.0</td>
<td>3.2</td>
<td>577</td>
<td>245</td>
<td>154</td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td>Romania</td>
<td>73.6</td>
<td>7.2</td>
<td>10.1</td>
<td>959</td>
<td>549</td>
<td>181</td>
<td>47</td>
<td>97.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>74.3</td>
<td>6.3</td>
<td>7.2</td>
<td>945</td>
<td>509</td>
<td>208</td>
<td>25</td>
<td>8.1</td>
</tr>
<tr>
<td>Slovenia</td>
<td>79.3</td>
<td>4.6</td>
<td>2.6</td>
<td>632</td>
<td>235</td>
<td>202</td>
<td>25</td>
<td>9.1</td>
</tr>
<tr>
<td>EU</td>
<td>79.6</td>
<td>4.6</td>
<td>6</td>
<td>622</td>
<td>234</td>
<td>173</td>
<td>14</td>
<td>13.5</td>
</tr>
<tr>
<td>New member-states</td>
<td>75.1</td>
<td>6.6</td>
<td>6</td>
<td>873</td>
<td>436</td>
<td>199</td>
<td>27</td>
<td>35.9</td>
</tr>
</tbody>
</table>

Source: Database “Health for everyone” (August 2012)

HEALTH AND ECONOMIC GROWTH

New highlight of the efforts aimed at achieving uniform healthcare policy is the perception of investments in healthcare as an economic growth factor and competitiveness. “Europe needs to change its paradigm of perceiving the healthcare costs as costs instead of healthcare policy being an investment”, says the commissioner David Byrne (7). On many other occasion Byrne underlines that health is the “engine” of economic growth, sustainable development and improvement of life quality in the EU (5,6).

On the other hand, diseases are heavy economic burden. 50% of the differences in the economic growth between poor and rich countries are due to the differences in health status and longevity.

Until the society realized that the health of each and every of its members is not only individual but a public problem, people had to walk a long way. They walked some more distance until realizing the idea that each society is responsible for the health of its members and should fund the activities of whatever volumes for its preservation and maintenance. Since around the XVIII century this responsibility was institutionalized and became a problem of the state. (3)
Health has always ranked among the top places in the value system of the Bulgarian citizens. Special value is also attributed to the security and safety related to nation’s health in the prosperity context.\(^{(16)}\)

After Bulgaria’s EU accession in 2007 our country turned into one of the numerous democratic countries with open market economy that started being influenced by the general globalization processes – financial, economic and social-political.\(^{(16)}\)

Without the fundamental value – namely health – many of the rights such as freedom, right to work, expression of will and others become partially or fully senseless. In the light of health debates are held on various issues related to the internal market, environment, consumer protection, social activity that includes occupational safety and health, development policy, research activity and many others. Some newly emerging threats for population’s health require new strategic approach.

The proposed third action programme of the EU in the healthcare area (2014—2020), called “Health for Growth”, further highlights the relation between the economic growth and the good health status of the population. The programme states that health is not a value by itself – it is a growth factor and only population with good health could fully achieve its economic potential.\(^{(16)}\)

We registered general longevity increase from 1900 to 2000 with about 30 years as a result of the technological development, the progress of the medical science, healthcare and lifestyle improvements as well as decreasing marginal utility of the common economic resources.\(^{(49)}\)

The effects of health and healthcare on the economic growth could be not only positive, but also negative. The economic burden of the diseases and population aging (that contains not only direct medical costs and costs for the families, of the social insurance institutions, of the employers, losses borne by the state because of non-produced product, value of the unperceivable costs etc.) are perceived as many-fold exceeding the share of the healthcare costs of the Gross Domestic Product (GDP).

The changes of the absolute amount of Bulgaria’s GDP and its relative share devoted to healthcare are defined in Table 4.

| Table 4. GDP amount and GDP relative share for healthcare |
|----------------|-------|-------|-------|
|                | 2009  | 2010  | 2011  |
| GDP (in mln. BGN) | 66 256 | 70 474 | 76 606 |
| GDP relative share for healthcare | 4.0 | 4.2 | 3.9 |

*Source*: State Budget Act and the Annual statements of the National Health Insurance Fund for the period 2009-2011.

Concerning the healthcare funding in Bulgaria we outlined the following significant problems:

1. Notwithstanding the significant increase of the absolute amount of the healthcare funds from the state budget, the relative share of these funds in the Gross Domestic Product, with small fluctuations is positioned around 4%, thus ranking among the last in Europe.

2. While the European governments fund on the average three-fourths of their healthcare with public resources (France and Germany – between 77-79%, Poland and Hungary – between 70-72%), in Bulgaria this indicator is between 55-60%. Considering the unofficial, non-regulated payments or the
payments below the counter that are not reflected in the official statistics, the relative share of the public costs of the total healthcare costs in our country will go down to and below 50%.

3. In view of the people insured by the state, the latter pays three times less and it would be fair to do the opposite. Since the average costs for the treatment of a pensioner is around 85% higher than for the other insured people. The approximate calculations show that the revenues of the National Health Insurance Fund result from around 2.5 million working people whose contributions amount to 1.6 billion BGN, and for 4 million people insured by the state, the contributions amount to 940 million BGN. This means that the working people pay on the average 53 BGN per month, and the state pays 19 BGN for the people it insures. (16)

CONCLUSIONS

1. The healthcare system should promote the efforts of the citizens and the society to achieve higher health level and better quality of life thanks to all its diagnostic, clinical, organizational-methodological and scientific methods, expert assessments and development of the particular programmes. It is society and politicians’ obligation to enforce the decisions and the necessary behaviour.

2. No market economy (irrespective of the model followed by it) achieved its high public and personal prosperity without the increase of the public product and the national wealth and without purposeful policy for the creation and maintenance of the market rules, competitiveness incentives and ensuring common prosperity that is a social investment with high current and future return.

3. There is a proportional relation between the healthcare costs and nation’s health. The more resources dedicated to health – the better health indicators of the population – the improved health of the individual.

4. Diseases are heavy economic burden. 50% of the of the differences in the economic growth between poor and rich countries are due to the differences in health status and longevity.

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