SITUATION AND DEVELOPMENT OF HEALTH SUPPORT SYSTEM IN UKRAINE

Anna Sokolenko

The department of Tourism and Hotel business
O. M. Beketov National University of Urban Economy
Str. Revolution, 12, Kharkov, Ukraine, 61000
anna.smile.4you@mail.ru

Abstract

Human health is the most important social good and at the same time productive economic capital (health capital) that guarantees the state and development of economic system at all its links from the separate enterprise to the country as a whole. That is why the modern organizational and economic structures (enterprises, corporations, regions) necessarily include in its strategy of innovative development the programs of ensuring the healthy conditions of productive activity and spend money for sanitation of its workers on holidays or in the case of current necessity. Care for health is intrinsic to the person itself and forms as the attitude to its health as to the first-rate human value. Improvement of health, guaranteeing the professional and creative growth of the workers of productive system and service sector must be considered as a main factor of scientific and technical, social and economic development of every country, effective resource of development of society and the state as a whole. Human being is an active productive force whose labor activity ensures the production of material resources of life and provision of the necessary services. Human capital and economics is a certain unity: human needs cause an appearance of new productions and services, and economics influences on the development of person and society. Taking into account that population number, qualification and level of its able-bodied part, health state, are the factors that cause the labor resource possibilities of economic development one can distinctly detect that health and labor must occupy the leading position in the state policy of forming mechanisms of management of the country development. There are given the results of the study of economic problem of worsening of the health status of able-bodied part of population. There was determined that health is a component of human capital and this fact must be taken into account in the regional policy of health improvement. There were cited the data concerning structure of costs for health, state of health protection system, factors of negative influence on population health. From the foreign experience there were emphasized the arrangements for development of sanitation system in Ukraine.

Keywords: human capital, health protection, influence factors, health potential, earning capacity, market economics, losses, sanitation effectiveness.

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1. Introduction

The modern processes of economic development are more and more based on aim sets and on needs of society. And the main need is health protection. “The social prosperity is not only the sum of individual usefulness, it is something more. This “something” is the public health as characteristic of functioning and development of social organism. That is why regardless of economic model that health protection of one or another country gravitates to, the state is objectively present in this field much more than in the most of others” [1].

Thus it is needed the revaluation of the results of economic development of society from the point of view of improvement of population health. From the positions of influence on human health it is also necessary to assess the formed structure of national economy of the country, its material and technique base, social infrastructure, natural and technological state of environment.

The state by all means must influence on reduction of enterprises that “eating” the health resource, must make decisions on reduction of harmful productions, hard working conditions with high traumatism risk and so on. For today both health status of Ukrainians and state of the system of its support and protection cause rather grounded criticism and anxiety in society and scientists [2]. The life conditions and labor activity determine economic successes of the country. Different factors influence on these successes and the health is a main one.
2. Study of situation and development of the health support system

The health protection system deals with the problems of population health and in its store are a lot of parameters and methods for evaluation of such problems. But economic science and the applied economics itself recognized the necessity of health evaluation considerably later and the only at present time forms the set of instruments that in necessary for this task. Now economists pay attention to the problem of detection of losses caused by diseases of able-bodied part of population, evaluation of the needs of investments in development of health protection field, evaluation of sanitation effect, prognostication of profit from investments in health.

The specific approach of economists to health forms from the standpoint of its assessment as the component of human capital. Human capital in regional cut is mainly evaluated using parameters of the number of able-bodied population, professional level (profile of activity, knowledge, experience), GNP volume. On such characteristics regions are placed on the grade scale on the number of population but it is not sufficiently grounded. We offer somewhat another conceptual formula of evaluation of human capital for regions:

$$H'_k = f \{p, \alpha, \beta, z \} * 3, \Delta z*I_1, I_2,$$

where

- $H'_k$ – potential of the human capital in region (able-bodied population);
- $p$ – general population number in region;
- $\alpha$ – part of able-bodied population;
- $\beta$ – employment level;
- $z$ – professional level (knowledge, skills, experience);
- $3$ – health level (integrated value on the different characteristics);
- $\Delta z$ – state of the regional medical service system, recreation and sanitation;
- $I_1$ – innovative activity of the human capital in region (integrated value on the different characteristics);
- $I_2$ – volume of health investments.

As it follows from the given functional human capital (potential) of the region in the modern conditions of its use for economic development of region necessarily must include not only the number of able-bodied population and professional level but also the “loading” of the part of population that is not involved in economic and production process on the working people, health status, innovative activity of the stuff involved in production, potential of the regional health support system including SCU, other sanitation and recreation institutions.

In whole the labor resources potential is a connective link between economic growth and human development. But this “connective link” must be high-quality, progressive, reliable, healthy.

In Ukraine labor resources is near 30 millions of persons, the part of able-bodied population is in 46 – 60 % diapason in different regions, in Kharkov region – 52,8 % [3].

This powerful productive resource is now too much deformed – there take place the processes of depopulation, health worsening, growth of death rate just in able-bodied age, raise of social tension and decline of motivational factors that have a negative influence on the results of activity and lead to the recession of economic indices. It is well-known that the decrease of working ability is an integral result of the factors of different nature that are placed on coordinates “health – result of labor” according to the law of descending succession of the influence power (Fig. 1).

Health losses, tiresomeness, stress states form the negative attitude to the work, to its results, to situation in collective and region. At the present time in Ukraine the theory and practice of regional policy in sanitation field are not properly elaborated. There is not properly used an account of medical and demographic problems and region state in its connection with economics, analytic and prognosis assessments of loss from the low health quality and population illness are not calculated, the computational indices of costs for health improvement are not determined [4].

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Fig. 1. Factors of human working ability and useful contribution in economics

The deficiency of analytic and normative information about factors of health influence on economics in regions is a one of the causes of this disregard. One of the first tasks of health management is creation of the modern information system. The several blocs can be separated in this information system: state (potential), problems (its character and acuteness), influence factors, resources, structural reconstruction (cluster forms), management of the development processes in sanitation institutions including SCC.

We can separate three tasks in the regional policy of health protection: evaluation of benefits from sanitation, solving subsidy problems (from budgetary resources), reconstruction of sanitation system with forming mechanism of management of the reconstruction process [5].

We note that the benefit from the rise of population health level (B) can be presented in expression:

\[ B = B_1 - I, \]

where

- \( B_1 \) – increase of gross output connected with the rise of population health level;
- \( I \) – amount of investments in health protection and social sphere necessary for attaining the health level.

The subsidies for regions must be directed not so much on DCE or technical and productive base but on renewal and qualitative improvement of the human capital.

It is also necessary to acknowledge that modern state control over the arrangements directed on labor and health protection is ineffective. It is necessary to note that in last decades the work on professional diseases prophylaxis is insufficient what is caused by the heavy conditions of the national health protection.

In Ukraine situation connected with population health is rather complicated. And it is necessary to assess this situation more precisely and deeply than on the data of national statistics. In international practice it is used to assess health situation and potential on several groups of parameters (indices) [6].

First group – earning capacity indices.
Second group – risk factors of health worsening.
Third group – society pay (price) for stabilization of health reserve.

According to situation in sphere of population earning capacity we note the next positive changes:

Last years in Ukraine diminishes the number of lost time due to disability after accidents: in 2001 year – 1029 thousands man-days, in 2005 – 769 thousand man-days, 2010 – 492 thousand men-days, 2013 – 364 thousand men-days. But on the other side – on the health risks – there are great problems that tend to complication. According to WHO data 60 % of human disease con-
connected with taking the water of bad quality. In Ukraine 60% of drinkable water does not correspond to the valid standards of the country [4].

According to recommendations of WHO and corresponding EU structures the general costs on health protection must be no less than 10% from GNP. But in Ukraine it is within 5–7%, in 2012 – 2013 – decreased to 3.4%. At the same time the state part is 57.6% (in Great Britain 81%). General costs on health protection in Ukraine +108.9 milliard hryvnias (2012 year). This sum consists of state support - 57.2%, private moneys of households – 42.6%, international organizations – 0.2% [4]. General costs in % from GNP in 2013 year – 7.7%. As to the other countries of the world it is a significant part, because Poland spend 6.7% of GNP, Estonia - 6.0%, Russia – 6.2%. But the allotted sum are obviously not enough because the GNP volume in Ukraine is on the rather low grade level comparing with other countries including Russia. The distribution of the monetary costs for medical support functions is presented in the next proportions:

- For medicaments and medical equipment – 29.4%;
- For hospital treatment – 27.8%;
- For out-patient treatment – 18.5%;
- For rehabilitation (mainly for sanatorium treatment) – 3.8%;
- On attendant services and prophylaxis – 6.5%;
- Other costs – 14.0%.

So more than half of costs is directed on medicaments, equipment and hospital treatment, whereas prophylaxis and sanatorium treatment take less than 10% of the general costs for health protection. There are a lot of deficiencies in health protection system [7]. For example the very unsatisfactory fact that 72.4% of all costs directed on hospitals is spent for payment of stuff work, 9.8% – for communal payments and only 16.5% for services production [8]. Enterprises of retail trade of medicaments and medical goods receive 99.7% of money from people. In developed countries 30 – 60% of the monetary costs from state and region authorities are directed on treatment and prophylaxis arrangements including medicaments. In 2012 year the general costs for health protection in Ukraine constituted the significant part of GNP – more than in Poland, Romania, Estonia. But this “high percentage” in absolute figures was in 2012 year - 299.3 dollars for person per year that is significantly lower than mean European value – 3340 $ for person per year, In Poland - 854 $, Romania – 420 $.

Now it is planned to cancel the budget financing of NAMS that is orientation on privatization of medical institutions. Gradually state and its medical system more and more displace the load of health financing on population itself. “The private costs on health protection in Ukraine already in 2012 year was 42.3% from the general costs on health protection or 3.2% of GNP and were one of the highest in EU and countries of Eastern Europe”, 78% of the general amount of budgetary expenses on health protection form of payments from the local budgets, 22% - from the state one [7].

Relying on the budgetary figures on health protection (4–7%) we try to convince ourselves that the deficiency of financing is a main cause of all our troubles with health. It is rather difficult to dispute with. But we must not to consider the budgetary figures from the one side only. It must be taking into account that budget contain a lot of other components that work for health: dotation and subsidies on HCS, expenses on sport and culture development, reforms – and this is rather considerable state support. But the other side that must be assessed as a bad one it is extremely overestimated prices of medicaments. If we compare it with other inalienable part of population life support such as water, warm, dwelling (HCS field) the situation seems illogical. All communal system of HCS in Ukraine is unprofitable, with minus return but medicaments, operations, staying at hospital provide the double profit on costs: so we have imbalance between the proportions of costs that must be regularized.

The general amount of health protection financing from the state and local budgets is 41.07 billions hryvnias (2010 year). But the structure of spending these means is ineffective. “Only 4–5% of costs that is necessary for medicamental support of health sphere are covered at the expense of budget, all other costs lie down on patients even in the conditions of hospital treatment” [7]. Patients pay the large part (more than 80%) of medicaments costs whereas the third part of general HPS costs is directed on medicamental support”. The volume of sale of the medicaments of native production 24.5% and 75.5% of it are imported.

Ukraine has the surplus of hospital beds fund – 9.73 for 10 000 people that in 1.7 times exceeds analogous indices in European countries. It is worth to bother also about the high rate of population aging: in 1991 – 19%, in 2013 – 22% of people are older than 60 years [9].
The assessment of life and health of Ukrainian population must be also added with the data concerning indicators of human life development (Table 1). The situation with health in Ukraine that is presented in statistics is not complete without paying attention to the branch economics, health protection sphere, individual assessment of the people and sociological surveys. Specialists notice that the general economic condition (it is crisis one), market mechanisms and conditions, social infrastructure, natural and technological environment condition, way of life, mentality, traditions influence on national health.

Table 1
Several indicators of human development (Ukraine)

| Indicators                              | 1990 | 1995 | 2000 | 2005 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-----------------------------------------|------|------|------|------|------|------|------|------|------|
| Health protection costs of consolidated budget in% from: |      |      |      |      |      |      |      |      |      |
| GNP                                     |      |      |      |      |      |      |      |      |      |
| General sum of taxes from budget        |      |      |      |      |      |      |      |      |      |
| Mean life expectancy at birth, years *  | 70,7 | 67,2 | 67,9 | 68,0 | 69,3 | 70,4 | 71,0 | 71,2 |      |
| General mortality coefficient,%         | 12,1 | 15,4 | 15,4 | 16,6 | 15,3 | 15,2 | 14,5 | 14,5 | 14,6 |
| Mortality coefficient of children up to 1 year old,% | 12,8 | 14,7 | 11,9 | 10,0 | 9,4  | 9,1  | 9,0  | 8,4  | 8,0  |
| Population number in calculation for one doctor, (persons) | 228  | 222  | 218  | 209  | 204  | 203  | 203  | 209  | 208  |

* Indicator of life expectancy at birth till 2011 is calculated for two conterminal years.

Health forms on interaction of psychophysical, economic, environmental and social factors so institute of health and healthy way of life must be based on account and calculation of this interaction. And the first question that must be answered to what extent “health” is a national good and the driving force of economic growth?

The answer partially depends on the role of market in forming and protecting health. In market conditions takes place the transition to the paid medicine, “brakes” of prices (medicaments, medical equipment) are released, medical insurance strengthens its positions. But the market is permissible in society that is relatively healthy biologically, economically, socially.

The transformations realized in Ukraine resulted in extreme impoverishment of population, crisis situation in economics, insufferable stratification for “poor and reach”, decline of spirit and inadequate relation to health. Paid services became practically inaccessible to the most population that feels the great financial loading solving the problems with health. According to the opinion pool of families carried out by SCS of Ukraine in 2010 year more than 90 % of respondents spent their own money for medicaments, food, placing in hospital. [10].

The most powerful factor of “health” it is self-consciousness, self-organization, self-development. And the culture of this “self” must be cultivated, educated, propagandized. This task also cannot be solved on state or regional levels.

The deficiency of attention to their own health acknowledged 46,9 % of respondents of the mass of interrogated (10 000), one third part of sick persons (31 %) is not satisfied with their social environment, the signs of depressive condition were detected in 33 % of thick persons. Perhaps it is no coincidence that the last years scientists became to use the term “health economics” instead of “public health” accentuating the growing role of economic components in the mechanism of health management and we are completely agree with it. For assessment of factors that influence on people health we offer to pay attention to its diversity and complexity (Fig. 2).
Without entering into detailed analysis of the influence force of concrete factor (it depends also on individual features of person) we mark those that are verified by specialists: among the all factors— the way of life taking into account life conditions gives 60 % of influence on health, heredity gives 15-20 % of influence and the state of medicine and medical services influence only on 10-15 % [1].

The special features of Ukraine in the sphere of health condition and effectiveness of sanitation arrangements are worth to be determined also in the aspect of international comparison. And the first point of comparison is the situation in Russia. In Russia the state costs for health protection are 59,2 % of the general sum, it is social component. 39-40 % of this sum is spent on therapeutic and prophylactic arrangements (TPA) “The Russian TPA in such conditions are inclined to ideology of consumption instead of policy of income earning”. That is why TPA do not plan profitability it is not interested in income earning. The factors of costs increase at the expense of private assets” from population and employers “also not favor the development of the market component of health protection and dynamics of its financing” [11]. The part of population payments growth rapidly but the part of employers payments decreases.

The system of voluntary medical insurance (VMI) does not develop. The question of proportionality remains a problem in CIS countries: state → health ← market: “for an optimal combination of social and market regulators in the Russian model of health protection it is necessary to reveal if there are economic stimuli for investments in health…” [1]. Some characteristics with health situation in Russia can be demonstrative also for the model of the native system of health protection. Thus in Russia the level of satisfying financial needs for sanitation is 20 % of its computational value, the part in GNP – 3 %, almost one third part of population cannot provide itself with accessible and qualitative medical help, birth rate tends to decrease.

The scientific approach to health form tasks and offers of the real arrangements directed on improvement of situation in this sphere.

In opinion of the foreign scientists [12, 13]. “In economics it is necessary the national strategy of increasing human capital and active life. And the system of indicators for realizing this
strategy. And the health resources must be included in the notion of national good and be presented in GNP”.

Between the offers of foreign scientists [13] we note recommendations about the necessity of the following arrangements:

– creation of “Institute of health examination”;
– development and introduction of the health management system;
– transition from the normative costs distribution to the “income policy” what gives a possibility to plan the profitability of therapeutic and prophylactic arrangements (market-plan component);
– creation of conditions and regulators to increase the social responsibility in business.

Limitations: all reforms and changes in sanitation system and transition to privatization policy (market relations development) must be organized in the way that social and protective state functions are not decreased because the level of such protection is on the critical boundary of humanitarian and economic safety.

3. Conclusions

The reformation model of health protection is determining in Ukraine now and this fact attracts an attention of the Cabinet of ministers and public. We emphasize that it is timely and correct step to change the situation in health sphere. But let us note one more time the all MHP system it is only 10% of influence on the national health. So reforms must deal also with other 90% of branch, economic, social and administrative influence on health and this is a more complicated task and its solving needs not vector inrush but balanced mechanism of “health matrix” support. From our point of view the scientific vision of this mechanism is a task number one on agenda of Ukrainian society and national economics.

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