Analysis of Factors Influencing the Health-saving Behavior of Employees

Tatiana L. Lepikhina and Yuliya V. Karpovich

Perm National Research Polytechnic University, Komsomolsky ave, 29, Perm, Russian Federation.

DOI: http://dx.doi.org/10.13005/bbra/1680

Under conditions of the growing importance of human capital in the processes of Russia’s sustainable development, the role of health-saving behavior that provide the expanded reproduction of human capital becomes more and more significant. Analysis of health-saving behavior of employees at industrial enterprises in Russia is presented in the issue, including identification of the key factors; a need to improve the management mechanisms of their interaction with the aim of improving the socio-economic performance of the human capital.

Keywords: Human capital, Health capital, Health-saving behavior, Factors of health behavior.

In contemporary Russian studies in the field of macroeconomics two priority areas are focused on: the need to increase investments in human capital and the formation of new ways of transition to the innovative type of development. For the first time in recent years in the state strategy priority to the development of human capital is given, an essential role in maintaining the state of human capital is played with the health care system and investments in the life quality of citizens, in education, in health care (Caftan, 2011). Preservation of health capital as an important part of human capital is among the determinants of national competitive advantages of Russia in the XXI century. In modern conditions however conflicts between a relatively high level of education, professional qualities of people, their intellectual capacity and health are often observed. This situation inhibits the positive dynamics of economic development of the country. Public health is one of the important components of national wealth. Health is a special economic resource, determining the effectiveness of socio-economic development. Health is studied at the junction of several interrelated disciplines: medicine, sociology, psychology, anthropology, economics (Lepikhina & Pepelyaeva, 2012).

Theoretical background

State of health of the people depends on their ability to work with the greatest efficiency, to get the best result, which leads to the well-being of society as a whole (Kiseleva, 2011). The value of health as a resource experienced a radical change in the post-Soviet period. In market conditions, health has turned into a scarce and valuable resource – to the individual as well as the country in general (Silis, 2010).

Health capital is a bearing construction, the basis of human capital. Base and acquired capital are allocated in the concept of “capital health” developed by I. Ilyinsky. Base capital is defined by a set of physiological characteristics of
a person obtained by hereditary. Acquired capital is generated in the process of formation and consumption of the person’s physical properties in terms of industrial activity. Capital of education acquired by a person and the level of his or her culture ultimately determine how extensively the processes of base and acquired parts of the health capital depreciation are, and, as a consequence, the state of aggregated human capital (Ilyinsky, 1996).

On the other hand, the quantity and quality of human capital are largely determined by the state of other components: capital of education and capital of culture. It is human nature to treat health not as the highest good, given by nature and an important factor in the realization of abilities, but as a permanent property of an organism. Health for the individual becomes important only if there comes a threat to his or her life, ability to work and lead an active lifestyle.

Joel Mokyr explores the relationship of the knowledge growth, which has been the key dynamic element in economic and social history of the world for two centuries, with the health of households. Different academic level of survival, in his opinion, will eventually lead to the extinction of the failed and harmful recipes, because badly managed households applying them will have higher levels of mortality and will eventually die out, like inefficiently managed firms. If vertical transmission of useful household knowledge is more important than horizontal or indirect transfer, the children who grew up in badly managed households are more likely to become poor householders. If by “ineffective management” we mean the adaptation, i.e. survival or life expectancy, then natural selection will eventually give the advantage to those “individuals” who use a better home technologies (Mokyr, 2012). Thus, concludes J. Mokyr, knowledge contributes to higher investment in health is not only directly but also indirectly creating a positive feedback.

Over the past 30 years, economists have mounted an imperialist invasion of the other social sciences, including behavioural medicine. What we are seeing now is the empire striking back, with ideas from other social sciences invading the core of economics, welcomed by some, and fiercely resisted by others (Dayton, 2009). Comprehensive investigations of the causes that determine the health status as an object of economical studies suggest the leading role of lifestyle in health formation and preservation which is confirmed by numerous studies (Yakovleva, 2013).

It is known that health is one of the elements of human capital as a whole and human capital of the company in particular. Human capital of the enterprise is the sum of creative abilities or human capital of all members of the workforce (Dobrynin, 1999). The specificity of human capital of the enterprise and its difference from such category as human capital, in general, is that in the framework of the human capital individual qualities of the employee are multiplied by the number of their holders(Karpovich & Lepikhina, 2012).

Health as an element of human capital is influenced by a range of socio-economic, environmental, climatic conditions of the country and its regions, etc. Different indicators should be used to measure its scale and to distinguish potential health from the real state of man and society. State of the health can be influenced only in case of knowing the system of factors that represent a kind of “cascade”. The first (highest) level includes factors affecting the population’s health (as well as the health care system); the second one incorporates the most large aggregates, acting not so much on the population, but rather on individuals; on the third level separate units are detailed on the individual components; the fourth level identifies specific pathologies.

Direct determinants of health-saving behavior include various interactions. Opinions or belief act as behavioural variables, through them external parameters (norms, attitudes, socially-demographic factors) influence behaviour. The behaviour, according to the given theory, is defined by attitudes and subjective norm. Attitude (relation) is own opinion of the individual on possible consequences of behavior and an estimation (positive or negative) of results of such behaviour. The subjective norm is an opinion about possible reaction of other people on similar behaviour and personal motivation of conformity to such expectations (Ajzen & Fishbein, 1980).

The most known definition of health behavior (health-saving behavior) belongs to S. Kasl and S. Kobb (Kasl, Kobb, 1966). By this kind of the behaviour we understood any activity of the person directed towards preservation of health,
prevention of illness or revealing an illness in the absence of clinical symptoms. D. Gohmen suggests to divide all kinds of behaviour connected with health into preventive and protective, united by a uniform preventive value (Gochman, 1988). J. Ivanevich and M. Mateson also consider the behaviour connected with health as elements of patterns of vital style, but stress the sensibleness of decisions accepted by the individual. Decisions are subdivided in connection with health by criterion of health-responsibility of the person. The public health services are considered as one of health resources (Ivanevic & Matteson, 1989). People are inherently driven by the need to form and maintain relationships, and these affiliation goals can influence health behaviors in two ways: (a) indirectly, by increasing a person’s attention to others and subsequently leaving them more likely to emulate the health behaviors of others (social contagion); (b) directly, by leading people to be more likely to engage in health behaviors they perceive as helping them to form and maintain relationships with others (self-initiated behavioral engagement) (Brady, 2005).

The study presented in this paper is devoted to the analysis of the middle level, the level of the enterprise, where health saving behavior of its employees is formed (or not formed) at a certain combination of factors.

Among the factors and functions of health we should focus on the immediate behavior aimed at its preservation, enhancement, improvement, implementation of a healthy lifestyle in general. The concept of “health-preserving behavior” (health behavior), which is closely associated with a healthy lifestyle, characteristics of which also contain significant discrepancies in the scientific community emerged in the 1970th.

According to a position given by V. Popov the concept of “health-preserving behavior” must include the following components: refraining from destructive addictions (tobacco, alcohol, drugs other psychoactive substances); balanced diet; system hardening activities; high level of personal hygiene; the ability to produce and accumulate positive emotions. The concept becomes more actual taking into account that a system of curative medicine and surgery is universally available and encourages people to be less careful about preserving their health. Tolerance and acceptance are extended to harmful products, practices and lifestyles, and providing knowledge about the consequences of such products and behaviours is not given priority because the system is there to take care of whatever ailments develop (Berghofer, 2005). Many thinkers in health-care provision across disciplines attribute poor health-care outcomes to factors that are beyond the control of care providers—namely, on peculiar, individual, or largely inaccessible cultural systems of value. Others, having witnessed the ramifications of such thinking, argue that all health-care provision should, rather, be made more culturally sensitive. Yet others declare merely that multiculturalism has failed and the concept should be abandoned, citing its divisive potential. "State multiculturalism has failed, says David Cameron. http://www.bbc.co.uk/news/uk-politics-12371994; Feb 5, 2011. ((accessed Oct 17, 2014).)

See all References

Irrespective of who is blamed, failure to recognize the intersection of culture with other structural and societal factors creates and compounds poor health outcomes, multiplying financial, intellectual, and humanitarian costs.

However, the effect of cultural systems of values on health outcomes is huge, within and across cultures, in multicultural settings, and even within the cultures of institutions established to advance health. In all cultural settings—local, national, worldwide, and even biomedical—the need to understand the relation between culture and health, especially the cultural factors that affect health-improving behaviours, is now crucial (Napier et al., 2014).

Socio-economic values at this level are a high level of industrial development, workers’ health and a high level of health care culture, formed both at the enterprise level and at the level of the individual worker. Therefore, the ability to achieve these results need to be considered in dialectical unity. In other words, it is advisable to talk about the parity between health workers and the requirements of the production process. The provision of such parity requires special measures in the production processes in order to preserve the workers’ health without disrupting production technologies.
RESULTS

A study conducted in January-March 2014 at the number of industrial enterprises of the Perm region, the purpose of which was a study of prerequisites for the formation of employees’ health-saving behavior with the subsequent development of recommendations for introduction of health technologies, showed the following results. On the question of “what it means to be healthy?”, 85% answered that it means to be active, energetic, successful in business. 12 % said that being healthy means to them not to seek medical care, and 3% suppose that it means not to have chronic diseases. 35% of respondents believe that they lead a healthy lifestyle, 45% were undecided and 20% of respondents gave a negative answer.

In case of illness workers use the services of traditional medicine, however, 15 % have resorted to alternative one. 73 % of respondents rated their health as generally good, but noted that sometimes they feel themselves overload, fatigue, others consider themselves to be healthy and physically strong. However, 85% of respondents reported poor health at the end of the working shift. While 58% link such unwell with a large amount of work, 19% believe that it is caused by their own lack of discipline. 31% of the respondents considered regular and good food as the basis for good health, 43% thought that good relations in the working group is the basis for good health, 35% gave the first place to a good rest.

When estimating the main parameters of their working activity, all respondents noted that they are completely satisfied with the profession, the work performed and the mode of operation. 88,5 % of respondents like the position they hold. 73% are satisfied with the relationships in the team, 61,5% - the relationship with the direct supervision. But at the same time, only 74% of the respondents are quite happy with career prospects. Half of the respondents are not fully satisfied with wages and mode of operation, 46% not completely satisfied with the working conditions, 20% are not satisfied at all.

By ranking the importance of core values, employees ranked first material wealth - 80.7% of the respondents. Second place was taken with the normal working conditions (69,2 %), the third was occupied with the trust and respect of management (50 %), fourth place was shared by a fair distribution of duties and good health, interesting work was noted by 38,5% of respondents, harmonious relations in the family – by 30,8 %, and only 11.5% of respondents are aware of the need to improve their cultural level.

A healthy diet and work schedule are considered as the most important factors in maintaining the health state by 65,4% of workers, the relations in the team (healthy moral and psychological climate) were noted by 53,8 % of respondents, labour conditions - by 50%, high wages was considered important by 46% of interviewees. But at the same time 62% of employees talk about the lack of money to maintain a healthy lifestyle, from the point of view of 15.4% of respondents such factor as laziness has a negative impact on health.

40% of respondents would like to have the opportunity to receive medical care at the enterprise. The family as the most important factor of health-saving was chosen by 31% of respondents. 34.6% mentioned unfavorable ecological situation (drinking water, air) as the most important factor affecting health. 26 % of respondents said that regular physical exercise is the most important in maintaining health. But when this regularly sports none of the respondents engaged in it, 15.3% of them exercise from time to time, 38.5 % of interviewees exercise rarely and 42.3 % do not go in for sports. 73% do not smoke, and 19.2% smoke regularly, but moderately (from the point of view of the respondents). 19.2 % of respondents not drink alcoholic beverages, 42.3 % drink alcohol rarely, only on holidays, and 34.6 % to about 1-2 times a month.

The study revealed that awareness of the employees about the activities of the administration of enterprises in the field of labour protection is very low. 70 % of respondents noted that they did not know anything about the activities in the field of labour protection, 19% know that activities in the field of labour protection are contained in collective agreements. The study showed that industrial workers have sufficient time to recover their strength, about 70% of respondents sleep 6-8 hours per day, and 27% even more than 8 hours. In the analysis of work and rest modes it was found that 65.4 % of the respondents have standard work day, 42,3 % work more to get extra payment or
compensatory time off, 26% of respondents have the opportunity to plan its vacation time and split it up.

Describing the quality of the workplace, only 8% of respondents noted that the working place is equipped with everything necessary, from the point of view of the rest - the workplace is not provided timely with raw materials, due to which the workers are forced to stand, are not equipped with individual protection and the necessary resources. So, most of the workers noted the lack of illumination at the workplace.

From the point of view of respondents 58% of working places do not meet sanitary standards. 34.6% of respondents explain poor health with the unsatisfactory working conditions.

11.5% of respondents noted that the administration of the enterprise is regularly engaged in the improvement of working conditions. Only a quarter of respondents noted that the company has equipped the first aid medical center. However, about 50% of the respondents are not satisfied with the quality of medical services provided at the facility. 61.5% of respondents said that companies do not carry out any preventive inspections and if the periodic health examinations are held, the management has not taken any action on the results of these examinations with the purpose of improvement of workers’ health (was noted by 93% of respondents).

96.2% of workers do not know how much money the enterprise spend on programs associated with maintaining the health of workers.

Half of the interviewees have an occupational disease. 23% of them were identified endocrine system diseases, disorders of nutrition and metabolism, 15.4 percent have diseases of the musculoskeletal system, the same quantity of respondents has diseases of the respiratory system and the nervous system, 8% have mental disorder and conduct disorder, the same quantity of the interviewees suffer from diseases of the ear, skin and subcutaneous tissue, 8% reported the presence of injuries, poisoning and other consequences of external causes at the enterprise. 42.3% believe that their job relates to the professional risk group, 27% do not know whether their work is connected with professional risk or not.

Assessing working conditions at the enterprise, the respondents noted that they are not satisfied with the sanitary and hygienic conditions of work (46.2%) and first aid medical stations (26.9%).

The workers of industrial enterprises in the Perm region rarely seek medical care at medical organizations. 19.3% of respondents visit health facilities once every six months, 42.3% of them do it once a year, and 34.6% did not remember when they sought medical help the last time. And only 3.8% visit health institutions (organizations) for treatment of chronic diseases, and the rest come to the doctor because of random ailments.

**DISCUSSION**

Health-saving activities are aimed at the reproduction of individual vital resources necessary for the development of personality living space. In its structure it is possible to detect traditional activity components: the motive, the purpose, the action system, the control result. At the same time, health-activity specific properties can be selected: primary, integrity, system optimality. On the basis of the extended position of parity between the requirements of the production process and health of workers, it is important to emphasize again that, in accordance with the needs of society, serious attention to ensuring the joint development of these properties in a person in the production process should be paid. Evaluating the results of production, it is necessary to bear in mind not only the current level of production, but also established trends in the health status of workers. In other words, workers’ health in health-saving production, along with their performance, should be considered as a result of the implementation of production processes.

Effective public health, health promotion, and chronic disease management programs help people maintain and improve health, reduce disease risks, and manage chronic illness; they can improve the well-being and self-sufficiency of individuals, families, enterprises, and communities. Usually such successes require behavior change at many levels, (e.g., individual, organizational, and community ones) (Glanz and Rimer, 1995). Not all health programs and initiatives are equally successful, however. Those most likely to achieve
desired outcomes are based on a clear understanding of targeted health behaviors, and the environmental context in which they occur. Practitioners use strategic planning models to develop and manage these programs, and continually improve them through meaningful evaluation. Health behavior theory can play a critical role throughout the program planning process.

**CONCLUSION**

The results of the study allow to draw some conclusions:

1) almost all companies showed low level of awareness of employees about ongoing management activities in the field of health preservation;
2) the majority of workers notes deterioration of health at the end of the working day, which may indicate irrational modes of work and rest at the enterprise;
3) workers correctly identify the factors affecting health: nutrition, psychological well-being, healthy lifestyle, regular rest, but in the process of life do not pay proper attention to them;
4) the majority of workers are satisfied with the profession, mode of operation and team leader, but are not satisfied with their career prospects;
5) less than half of the employees have the possibility of receiving medical assistance at the enterprise;
6) more than half of the respondents think that their working places do not meet sanitary and hygienic standards;
7) half of the employees have occupational diseases.

All of these findings indicate that modern Russian industrial enterprises have created all the prerequisites for the formation of health culture. To strengthen this process it is necessary:

1) to raise awareness among workers about the ongoing enterprises programs health;
2) to pay more attention to the activities associated with maintaining the health of workers: to use sustainable modes of work and rest, to arrange rooms for psychological relaxation;
3) to create medical centers at the enterprises to provide a preventive orientation of medical services;
4) for the administrations of the enterprises to implement programs to maintain a healthy lifestyle;
5) recognize the use of health risk assessment as a strategy to maintain health;
6) provide for risk (wellness) assessment and create action plans based on them.

**REFERENCES**


