

Formation of Economic-managerial Knowledge System within Training of Healthcare Workers

Olga KUDELINA

Siberian State Medical University, Tomsk, Russia
koudelina@ngs.ru

Abstract – Medical personnel are the most important part of resource maintenance of healthcare system, they make the defying influence on structure developments’ implementation in healthcare reforming. High number of medical staff characterizes personnel structure of Russia. However, there is imbalance at comparison of rate in regions of federation, in urban and rural areas that cannot allow delivering qualified medical care widely. That is why specialists who have economic-managerial skill and able to organize and plan healthcare system development, are necessary. Medical universities during lifelong education must give attention to forming of managerial and economic knowledge of healthcare in their programs. The programs that have been developed in Siberian State Medical University are intended to a wide range of healthcare specialists: physicians, head physicians, managers and nurses.

Index Terms –healthcare system, medical universities, personnel potential, programs of physicians’ training, staffing.

Main causes of unfavorable dynamics of development of healthcare and public health are caused by absence of strategic planning and personnel administration, imperfection of financing and legal regulation. Shortage of the medical personnel in many countries is the deterrent factor of the provision of high-quality medical care [1]. Problems of staffing demand the complex approach to their decision, and also analytical developments and scientific support.

In previous years Ministry of health and social development of the Russian Federation gives great value to planning of health manpower, professional and career development, creation of acceptable working conditions, especially in primary health care. The structure of staffing in Russia is characterized by the expressed imbalance at comparison of indicators in subjects of federation (fig. 1), thus frequency ratio of such disparities reaches 1,5-3 times [2,3].

The rate of density of physicians in Tomsk oblast throughout the last decade increased and has made 66,9 per 10 thousand population in 2009, exceeding average all-Russian indicators (fig. 1). However, average density of nurses and midwives steadily decreases: from 105,6 in 2003 to 102,7 per 10 thousand population in 2009 [4].

Thus, despite of increase of quantity of medical workers in countryside, level of medical staff’s provision in rural hospitals differs from city’s health care facilities in times [5]. Average age of a physician in Tomsk is 48,3±2,31 years, in oblast areas 54,8±3,14 years, and of nurses - in Tomsk - 54,3±2,95 years, in areas - 58,2±4,12 years.

The ratio of nurses to physicians in our country is much lower, than in the majority of the developed countries of the world: 1 doctor on 2 nurses whereas world experience shows that an optimum ratio is not less than 3-5 nurses on 1 doctor [1]. The rate of medical workers’ multiple job holding in Tomsk oblast on the average is 1,3 lower, than the all-Russian (1,5), a ratio of nurses to physicians - 2,1. Deficiency of medical staff in area reaches 13,4 %, nurses - 22,1 %. This imbalance limits possibilities of development of system of medical care, especially services of aftercare,

home nursing, and rehabilitation.

In these conditions, the organization of economists-managers training is a necessary component of strengthening and development healthcare sector.

Existence of medical institutions that are various not only on the organization, but also by the form properties, leads to requirement for competent specialists, both for public healthcare, and for economy and management sphere. Graduates of faculty of economy and management in healthcare of the Siberian State Medical university (SSMU) became such experts.

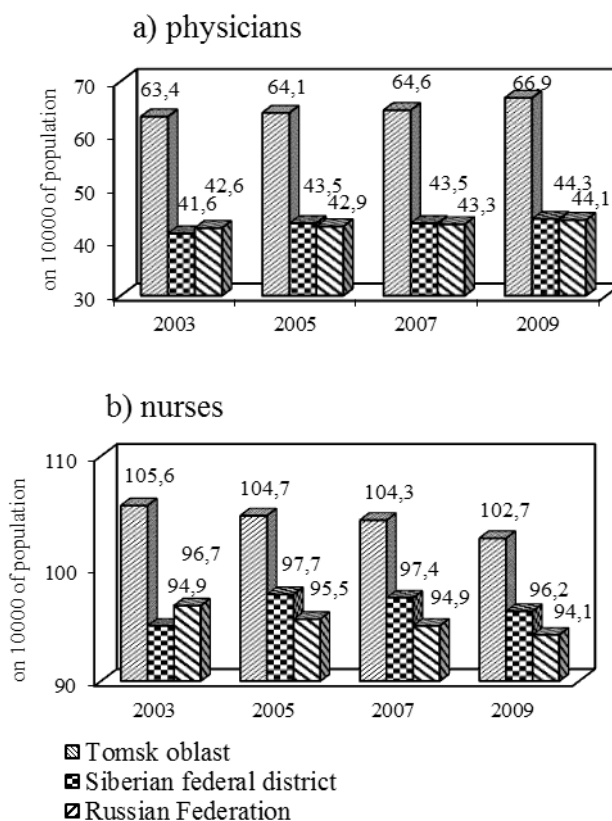


Fig. 1. Dynamics of medical staff provision in 2003-2009 years

The specialty 080502.65 - economy and management at the enterprise (in healthcare) has been opened in 2003. For a small interval of the activity faculty of economy and management in healthcare has carried out 12 graduations, having prepared more than 200 experts. Thus for the majority of them the new specialty was the second, and training and reception of qualification "economist-manager" was necessary for reception of the systematized economic-administrative knowledge and desire of the further career growth in healthcare field. It is no secret that training process passes with high return, under condition of the expressed motivation of trainees who already have some operational experience in health care facilities and other medical organizations.

The faculty of economy and management in healthcare conducts training on the basis of secondary education on internal (5 years) and the correspondence form (6 years), on the basis of the higher or untermiated higher education on internally-correspondence (3 years) and correspondence (4 years). Now on a specialty about 300 foreheads are being trained, including on a budgetary basis on a full-time course of study. Educational process is realized on all modes of study as well on a paid basis, and the approach for payment educational services the differentiated.

Graduates of faculty are prepared for the professional work that provides rational management of economy at the enterprise of social sphere taking into account branch specificity, and for work on scientific and pedagogical posts, in bodies of the state and local management.

In territory of Siberia, only SSMU has obtained the corresponding license and the certificate on the registration, giving the right to realization of educational programs of the higher vocational training, including economy and management at the enterprise (in healthcare) by the results of complex check (License A №227772 from 19.02.07, cert. №0616 from 04.05.07).

The curriculum on a specialty 080502 - economy and management at the enterprise (in healthcare) in 2006 has been confirmed by the Information-methodical center on certification of the educational organizations (Shakhty city) and includes all traditional blocks of general and special disciplines.

The cycle of general professional disciplines reflects all palette of knowledge and the skills that are necessary for support of economic, accounting, administrative and communicative activity of any enterprises. In the block of special disciplines, the subjects reflecting specificity of management of healthcare and medical institutions are presented. For example, medical care quality management, technology of the outpatient and stationary help, legal regulation in healthcare, management of medical expenses, forecasting of healthcare development, etc. Many disciplines are unique; they are developed only for preparation of experts in the field of economy and management of healthcare. In addition, the disciplines of specialization, which allow students to define in a concrete direction of the future professional work, are presented: strategic planning at the enterprise, financial management, organization and economy of general physician practice.

On study disciplines working programs and corresponding methodical support are developed.

For practical skills acquisition and fastening of theoretical knowledge all kinds of practice in conformity with the

existing state educational standard on a specialty are provided.

Considering necessity of the exact and systematic economic account and a substantiation of activity of the medical organizations in conditions of healthcare modernization and at realization of the pilot project, the requirement for professional economists-managers is rather high. By approximate calculations only in territory of Tomsk oblast, it makes more than 100 experts in a year as economists and the accountants who do not have an overview about technology of rendering of medical care and the organization of medical process work in healthcare system.

Prominent aspect is the development of system of lifelong medical education, which means constant updating of knowledge, skills of the physician. Obtaining of new economic-administrative knowledge opens additional possibilities for continuous professional training and improvement both in the field of the basic specialty, and in other allied fields. Primarily, all this can be offered by medical high schools.

Educational strategy of medical universities should reflect real requirements of the branch. Forecasting of oblast's healthcare modernization's requirements area has laid down in a basis of designing of various interdisciplinary educational programs in SSMU.

The department of organization of healthcare and public health takes an active part in education and retraining of personnel. Training of healthcare organizers within the limits of internship is conducted. Subjects of postgraduate training are expanded; new programs with attraction of foreign experts are developed. The department has the settled collaboration on medical informatics with German partners within the within the bounds of work of e-Health section of the Koch-Mechnikov Forum (Berlin) headed by professor H. Hann. For example, in theme «Information technology in healthcare» materials of lectures kindly given by the professor of R. Engelbreht (Germany, Munich) and manuals on medical informatics of Institute of medical informatics of University of Braunschweig are used. Within the limits of the international cooperation with the Koch-Mechnikov Forum, there is an academic exchange that allows inviting German experts for lecturing and carrying out of seminars. Simultaneously with it, employees of the department can exchange experience with German colleagues, improve the qualification during participation at conferences and seminars in the leading medical organizations of Germany.

More than 150 people are passing thematic and general improvement on the department annually; from them 30-40 % are head physicians of various establishments and oblast healthcare organizations. Therefore, training of economy and management in healthcare is an obligatory component of educational curriculum.

Now for accreditation an educational program of preparation of bachelors in a direction «Industrial management» is presented, work on the program «Innovative activity», which should be started in 2011-12, is finished.

The economists-managers prepared at our faculty receive not only full volume of economic knowledge, but also study the organization of healthcare and public health, plunging thus into environment of medical traditions of one of the oldest medical universities of Siberia. Besides, it has been

noticed that our graduates in private healthcare (drugstores, including rural, stomatology clinics, medical associations, etc.), and in administrative structures of city and regional healthcare where new innovative approaches are most actively used at economic activities conducting.

New educational standards not only meet the level of modern medical and biologic knowledge and guarantee quality of given medical care, but also are economically proved. Thus, at a stage of high school training of the future expert the correspondence of educational standards with standards of rendering of medical care is necessary.

In the nearest future, it is necessary to pass to personnel selection planning in each subject of the Russian Federation based on the Federal register of medical workers and developed standard documents, including documents, concerning a target enrolment of students. Therefore, development of the innovative program of professional training in territory of Tomsk oblast is priority for SSMU and the department of healthcare of the oblast.

The medical high school should become an active participant of healthcare developments and initiator of innovative projects in the branch.

It is necessary to restore and expand the lost traditions of interaction of medical high schools of the post-Soviet territory. Exchange of experience, joint development and adaptation of the educational programs based on the all-

European approaches to the decision of problems of healthcare staffing, undoubtedly, will allow to accelerate integration of high schools within of Bologna Accords, and finally to improve public health and economic efficiency of management of the entire system of healthcare as a whole.

REFERENCES

- [1] Handbook on Monitoring and Evaluation of Human Resources for Health with special applications for LOW - and middle-income countries, Geneva, WHO, 2009, 188 p.
- [2] Svetlichnaya T.G. The actual problems of the professional personnel supply for regional public health, Problems of social hygiene, healthcare and history of medicine, no. 3, 2008, pp. 38-41.
- [3] Mikhailova Yu V., Son J. M., Sokhov S.T., Danilova N.V., Shestakov M.G., Sasina N.S., Takhtarova Yu. N. Development of the health care personnel potential: state-of-the state and prospects. Healthcare of the Russian Federation, no. 1, 2008, pp. 52-54.
- [4] Healthcare of the Tomsk region in 2010. The statistical collection. Tomsk: OSIH «Bureau of medical statistics», 2011, 67 p.
- [5] Oreshin A.A., Kudelina O.V., Khlynin S.M. Prospects for development of medical care in the Tomsk Region. Healthcare of the Russian Federation, no. 6, 2009, pp. 48-50.